DESTINY 4100

Installation Instructions

K1106 3/98

Dear Dealer/Installer:

We appreciate your decision to use the Destiny 4100 for this installation. As a division of the Pittway Corporation and member of the ADEMCO Security Group, we are proud to provide you with equipment made by ADEMCO, the world's largest alarm manufacturer. The manufacturing facility is ISO 9001 certified and contains the most modern automated manufacturing and testing equipment in the industry.

The most important design resource for **apex** is our dealers. Our technical support staff (800-272-7937) is always anxious to hear feedback. After all, most of the ideas for features in **apex** panels come from our dealers.

While keypad programming has become simplier in this latest **apex** control panel, we strongly recommend using the FREE upload/download software that can be obtained from your distributor, downloaded from the **apex** BBS at (919)954-0318 or download from our web site (*www.ademco.com/apex/apexhome.htm*). The software reduces the amount of time necessary to program a system and provides built in safeguards that reduce the possibility of incorrect programming. Remember the system can be computer programed both off and on site.

Thanks again for choosing **apex** . We are confident you will agree that you have made an excellent choice.

Sincerely,

Jim Filer
President

Software Revisions

Current software at time of printing:

Control Panel:	1.00
Bridge (Gate):	1.02
EXP-8:	1.01
RK36 LED Keypad:	4.01

Panel Software Revision History

Table of Contents

Specifications

Electrical:	Voltage Input: 16.5 VAC 40 VA from supplied transformer
	External Speaker: 10 Watt minimum, 8Ω horn type - Ademco 713 or equivalent. Total speaker load must be between 4Ω and 16Ω.
	Internal Speaker: Speaker supplied in all compatible keypads. For stand-alone operation 10 Watt minimum, 8Ω - Ademco 747 or equivalent. Total speaker load must be between 4Ω and 16Ω. For UL installations use a UL residential fire listed speaker.
	Auxiliary Power Output: 13.5VDC, 1.85 AMP max - Not to be used in a UL installation
	Switched Fire Output: 13.5VDC, 1.85 AMP max
	Two Wire Smoke Detectors: Up to 12 per system **Note: Switched Fire Output and Two Wire Smoke Detectors are not to exceed 10 mA in a UL installation**
	Back-up Battery: 12VDC, 7AH gel cell. YUASA NP7-12 or equivalent. For UL installations use 2 - batteries with SA5140-1 cable assembly
	CAUTION: Total current draw of Auxiliary + 4 wire bus power is not to exceed 2 Amps. Test installation for 1 minute in alarm to ensure sufficient power.
Dimensions:	15.1" L x 13.05" W x 3.5" D w/ door.
Nonvolatile Memory:	Maintains programming options with no power to the control.
Communicator:	Supports: 3/1, 4/1/1, 4/2 extended, Ademco Contact ID 45 report codes DTMF and pulse dialing DPDT line seizure Two telephone numbers and two account codes, dial both numbers Split reporting of selected codes Alternate number dialing if primary number fails Programmable number of dialing attempts Programmable to enable or disable the communicator
Two-Way Voice:	Microphone inputs: 3 separate, individually controlled channels. Microphone: 5V shielded 2 conductor omnidirectional electret condenser microphone. Frequency response 50-10K. -64db sensitivity, TWM-25K or equivalent.
System Zones:	16 - programmable fully supervised wireless alarm points 8 - programmable fully supervised hardwire inputs on the control panel 1 - 2-wire smoke loop 1 - keypad alert 1 - local phone activation 1 - remote phone / phone line monitor activation 1 - AC loss / control low battery / communicator
Auxiliary Outputs:	1 - Form C 10A 24V system relay 4 - Pull to ground, 12 volt, 100mA outputs, not to exceed 500mA total. Not to be used in a UL installation

Speaker Output:	10 Watt internal siren driver with full speech 10 Watt external siren driver with full speech Designed for use with 8Ω, 10 watt minimum speakers. Total impedance for either driver not to drop below 4Ω For UL installations use a UL residential fire listed sounder.
Smoke Detectors:	System Sensor 2112/24B - 4 wire Photoelectric System Sensor 2112/24BT - 4 wire Photoelectric with heat sensor System Sensor 2100 - 2 wire Photoelectric System Sensor 2100T - 2 wire Photoelectric with heat sensor
System Keypads:	Fully spoken enunciation of zones and system status 6 Programmable manual activations 3-way Monitor mode - Speech, Silence, Chime Dimensions: 7" x 4 3/4" x 1" deep
Keypad Wiring:	4-wire bus - red and black - power - green and white - data 2-violet - audio No smaller than 24 gauge, up to 50', 22 gauge over 50' Microphone wire- 22 gauge, 2 conductor shielded
Transient Protection:	Multiple level surge filters are on all zone inputs, power supply, keypad connection, siren outputs, auxiliary power supply, and the telephone interface. The circuit board is designed to provide spark gap protection to catch high voltage impulses at the wiring terminals. Protective ground planes surround sensitive areas preventing the spread of damaging voltage surges. Metal Oxide Varistors (MOV's) are in all critical areas to further reduce surges. Sidactors and PTC Thermistors protect the phone line input. Transient protection is most effective when the panel is earth grounded.
System clock:	Time-of-day clock with a backup circuit designed to deliver continuous power for two weeks on a full charge.
System Watchdog:	All precautions have been taken to prevent spurious operation of the control caused by voltage surges, however, temporary disruption of the microprocessor can occur, leading to improperly processed routines. The system is equipped with a watchdog circuit that watches processor operation and resets the microprocessor if an error should occur.
Supervision:	The following trouble conditions are always monitored: Loss of AC power Backup battery low voltage Communicator failure Phone line loss Receiver or bridge board failure (panel supervises bridge, bridge supervises receiver(s)) Transmitter supervision signals - trouble indication within 6 hours (if programmed)
Advanced Features:	Phone access for both installer and end user Speech synthesis Alert memory in activation order Event log memory in activation order Audible RF test mode with serial number identification Unattended upload/download programming Temporal fire notification tones

Items Included With the Control Panel:

Please examine the contents of the shipping box for the following items:

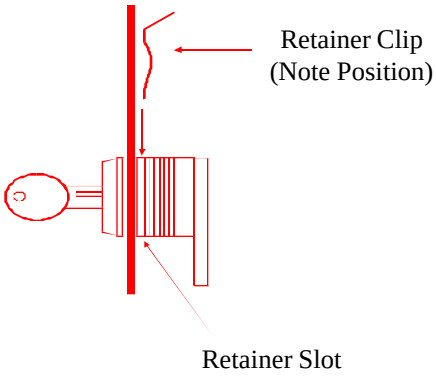
1 - Control Panel	1 - Lock, key, and retaining clip
1 - 16.5 VAC 40 VA Transformer	9 - 4.7KΩ 1/4 Watt Resistors
1 - Auxiliary Output Harness	3 - Plastic mounting clip
1 - Microphone Harness	1 - Package of 4 mounting clip screws
1 - Installation Manual	1 - Back up battery leads
1 - Owners Manual	2 - Wallet End User Instruction Cards

Inserting the Cabinet Lock

1. Remove the cabinet door

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.

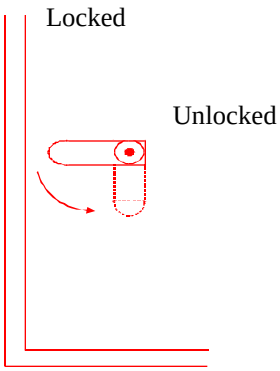


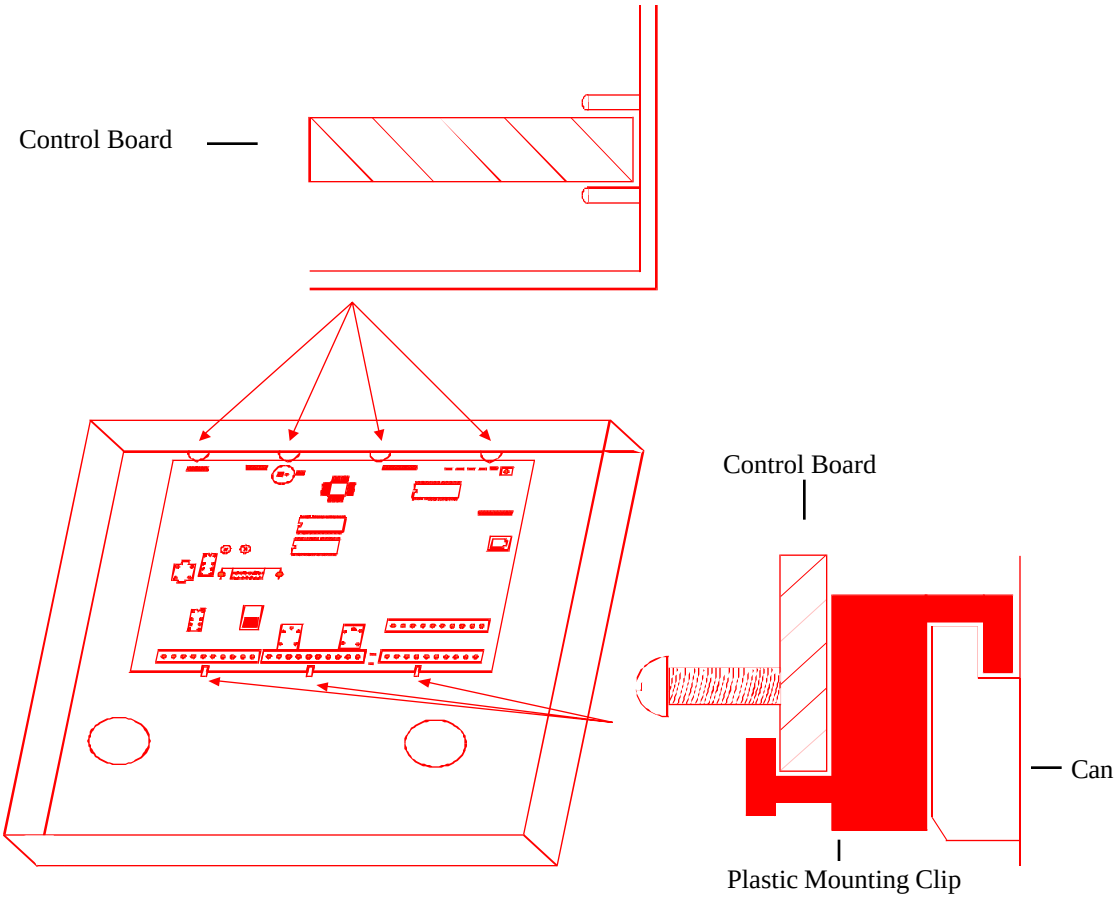
Mounting the Control Board

1. Hang the three (3) mounting clips (provided) on the raised cabinet (see below).

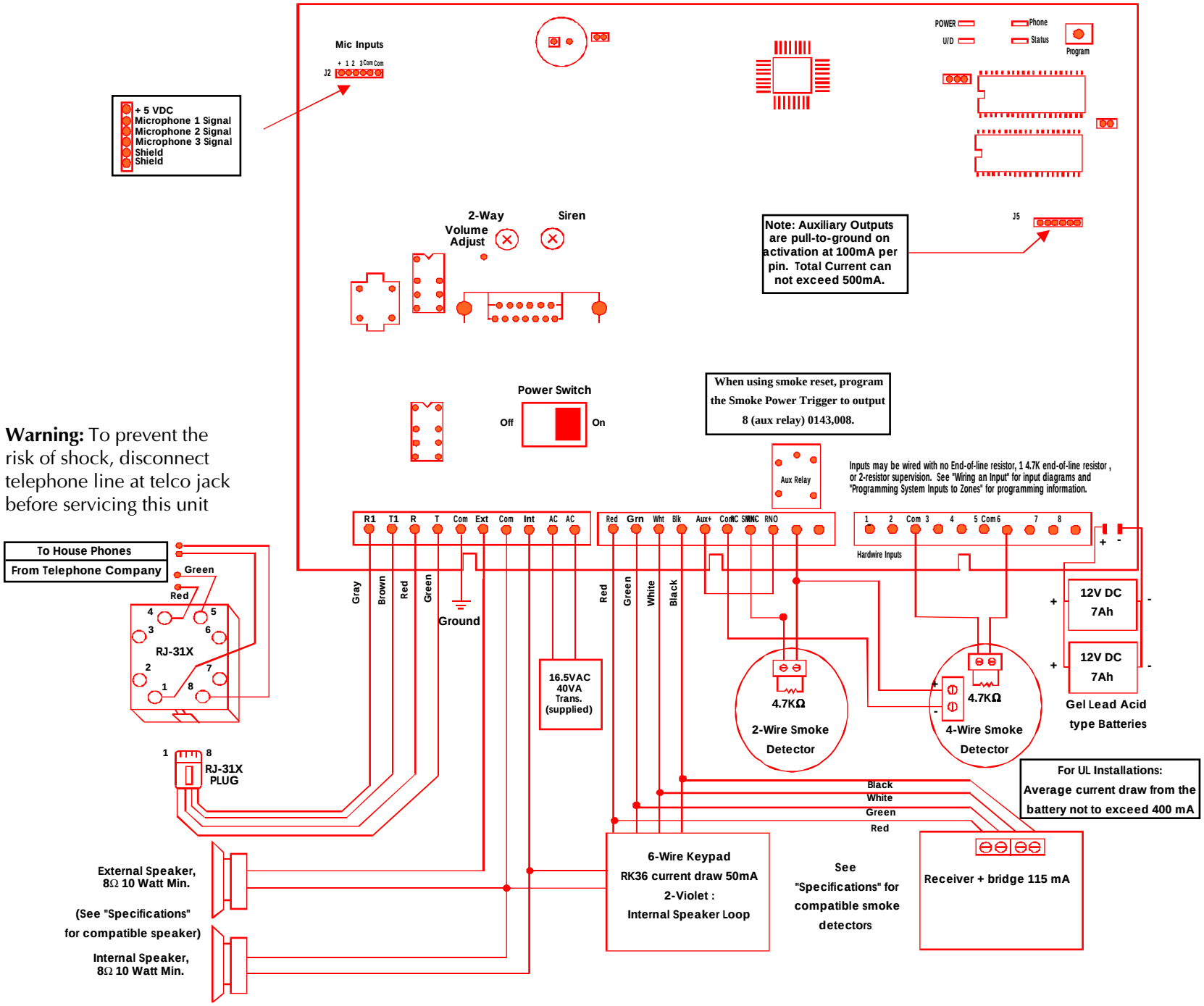
2. Insert the top of the circuit board into the slots at the top of the cabinet. Be certain that the board rests in the correct row (see below).

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





Wiring Diagram



Wiring Notes

Grounding: Ground the panel to the "com" on far left terminal block as shown in Wiring Diagram on previous page.

UL recommends attaching the system ground to a cold water pipe, 16ga. at 15 feet. Although cold water pipes have been the standard for earth ground, it is very common in modern construction that a cold water pipe does not provide an adequate ground due to the extensive use of PVC and other styles of "plastic" tubing. The best method for grounding the panel is to locate the panel in an area with easy access to the power company's earth ground.

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

Communicator: Connection of the fire alarm signal to a fire alarm headquarters or a central station shall be permitted only with the permission of the local authority having jurisdiction. The burglary alarm signal shall not be connected to a police emergency number.

Codes: This equipment should be installed in accordance with National Fire Protection Association's Standard 74 (National Fire Protection Association, Battery March Park, Quincy, MA 02269). Printed information describing proper installation, operation, testing, maintenance, evacuation planning and repair service is to be provided with this equipment.

Compliance: This device complies with part 15 of FCC rules. Operation is subject to the following two conditions: (1) It may not cause harmful interference. (2) It must accept any interference that may cause undesired operation.
Complies with Part 68 of the FCC rules for direct telephone interconnect.
FCC Registration Number: 107USA-74224-AL-T
Ringer Equivalence: 0.8
Use USOC RJ-31X telephone connection jack. Complies with ANSI/UL 1023 Household Burglary Alarm System Units and ANSI/UL 985 Household Fire Warning System Units.

Connections: Use UL Listed Cable for all connections.

Testing: Weekly testing is required to ensure proper operation of this system

Servicing: To prevent the risk of shock, disconnect telephone line at telephone company supply jack before servicing this unit.

Battery: Battery normally need not be replaced for at least 3 years. Use a 12 volt 7Ah battery (minimum). For all UL installations use two 12 volt 7Ah batteries wired in parallel.

The Destiny-4100 is compatible with the ADEMCO 4140-BLK removable terminal strips. If necessary, these connectors allow for quick replacement of the control board.

System Terminals

House Phones: The R1 and T1 terminals provide telephone service to the house if the installation contains an RJ-31X terminal block for true phone line seizure.

Telephone Company: The incoming telephone service is wired through an RJ-31X jack to the R and T terminals on the control panel. If regular phone service is unavailable, the system will provide power and a distinct system tone to all in house phones.

Speakers: The control panel contains amplified internal and external siren drivers. Both internal and external speaker connections require 8Ω , 10 watt (minimum) speakers. The "EXT" and "COM" (speaker common) terminals provide full volume audio during activation. Mount the external speaker(s) in an area that is unaccessible to intruders and will provide a sufficient volume during an activation.

The "INT" and "COM" terminals produce speech, low volume monitor beeps, keypad echo beeps, system status, pre-alarm warning, and a high volume alert during activation. Typically, the speaker (16Ω) in the RK36 keypad is used as the internal speaker; however, any 8Ω, 10 watt (minimum) speaker can be combined with the keypad to provide audio to areas without a keypad. Use of the internal keypad speaker is not permitted in a UL installations. See "Specifications" for compatible speakers.

Wire all speakers in a series/parallel combination that does not allow the impedance for either the internal or external output to drop below 4Ω.

Transformer (AC Power): Use a 16.5 VAC, 40 VA transformer (supplied) to supply AC power. Do not connect the transformer to a switched AC outlet. If an AC failure occurs, after 1 minute (programmable) the system will speak "POWER OFF", the keypad POWER LED will turn off, and the keypad STATUS LED will begin to flash. After requesting system status the system will speak "POWER OFF" and the STATUS LED will become solid. AC failure and restore conditions can be transmitted to the central station.

2-Wire Smoke Detectors: 2-wire smoke detectors are connected to the "Aux+" and "SMK-" terminals. Be certain to observe polarity. Smoke power reset is built into the panel by using the Aux Relay (See Wiring Diagram). Program the Smoke Reset Trigger to activate output 8 (Aux Relay). Entering a valid full function user code followed by the "6" digit. When the Smoke Reset Trigger is programmed, the panel will speak "Smoke Power." A 4.7KΩ resistor must be wired in parallel with the last detector in the loop. If a resistor is not used, or if there is a break in the loop, a TROUBLE indication will occur. Up to 12 2-wire smoke detectors can be powered by the smoke power supply.

4-Wire Smoke Detectors: The "Aux+" terminal supplies up to 1.85 AMPs of power. A 4.7KΩ resistor must be wired in parallel with the detector and wired to a zone input. Power is drawn from the Aux+ and COM terminals. Smoke power reset is built into the panel by using the Aux Relay (See Wiring Diagram). Program the Smoke Reset Trigger to activate output 8 (Aux Relay). Entering a valid full function user code followed by the "6" digit. When the Smoke Reset Trigger is programmed, the panel will speak "Smoke Power."

Auxiliary Power: 12V+ Auxiliary power for hardwire devices such as motion detectors and glass break detectors is available on the "AUX" terminal. The auxiliary output is protected at 1.85 Amps.

Keypad 4-wire Bus: Connect corresponding 4-wire bus colored wires from peripheral devices to the appropriate terminals. Additional devices may be daisy chained or wired in parallel to the system board. The 4-wire bus is protected at 1.85 Amps.

Auxiliary Relay: A programmable relay is available on the "RNC" , and "RNO" terminals. Use "RNC" for relay normally closed or "RNO" for relay normally open.

Battery Leads: Connect the red lead to the + battery terminal and the black lead to the - battery terminal. The battery is tested every 180 seconds to ensure it is present and charged. A low battery condition can be indicated at the keypad and/or communicated to the central station.

Auxiliary Outputs: An auxiliary output wire harness is supplied for J5. There are 4 programmable output pins and 2 power pins. Pins 1-4 will provide a ground path when activated. Pins 5 & 6 supply +12V DC. Do not exceed 100 mA per pin or 500mA total. These outputs are intended to drive relays with a coil impedance of 500Ω or greater or any other device requiring 100 mA or less. The outputs are not intended to power devices without the use of a relay. It is acceptable to power an LED when a 1KΩ to 4.7KΩ, current limiting resistor is wired in series. Use of Auxiliary Outputs is not permitted in a UL installation. See System Triggers section for programming information.

Microphone Input: A microphone wire harness is supplied at J2. Consult the Specifications section to determine compatible microphones. Up to 3 microphones can be wired in parallel to each of the 3 microphone inputs. Please note, if multiple microphones (3 max) are wired to a single microphone input, the microphones must be turned off and on as a group. It is recommended to only wire 1 microphone to each of the 3 input channels allowing a central station to have full control of each microphone during a two-way session. Use of two-way voice is not permitted in a UL installation.

Power Switch: Located in the center of the control board is a black slide switch which controls all power (including the battery) to the system. Right = ON; Left = OFF.

Siren Adjustment: The potentiometer marked "Siren" on the left side of the control board controls the volume level of any system generated speech and the key depression feedback beeps. Using a small screwdriver, turn the potentiometer to obtain the desired volume. Clockwise increases volume. This adjustment will not the affect alarm notification volume from the speaker during an activation.

Program Switch: Located in the upper right corner of the control board, this switch is used to return the system to various defaults. Holding the button down and releasing after a specific number of "beeps" will activate different system functions:

beeps	Action
1	Return user code 1 to default: 1,2,3,4
3	Enter direct connect mode (Same as 9952 in program mode)
5	Return service (program) code default: 9,1,7,3
10	Default panel
other	Three error beeps: no programming is affected.

Hardwire Inputs: There are 8 hardware inputs on the control panel. Through programming, each input can be wired in one of three ways: with a 4.7KΩ end-of-line resistor (EOLR), without an EOLR, or with class-A 2-resistor supervision.

Two-Way Adjustment: The potentiometer marked "2-WAY VOL" controls the volume level of voice over the phone line to the inside speaker during two-way communication or paging. Using a small screwdriver, turn the potentiometer to obtain the desired volume. Clockwise increases volume. This adjustment will not the affect alarm notification volume from the speaker during an activation. Use of two-way voice is not permitted in a UL installation.

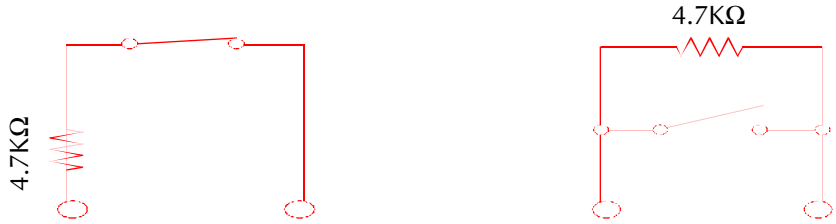
Upload / Download LED: At the top right of the board is a yellow LED labeled "U/D" which is illuminated when there is a modem to modem connection during upload or download.

POWER LED: At the top right of the board is a red LED labeled "POWER" which is illuminated when the system is receiving power.

STATUS LED: At the top right of the board is a green LED labeled "STATUS" which flashes to show the microprocessor is functioning. An incoming ring detection will cause this LED to flash very fast for the first ring.

Phone LED: At the top right of the board is a green LED labeled "PHONE" which is illuminated when the system's supervision of the phone line verifies a valid phone line on "R" and "T." If the system does not confirm a phone line, the LED will turn off. Phone line failures can be indicated at the keypad as well as sound a local alarm. Phone line restoration can be communicated to the central station.

Wiring an Input Using an End-of-Line Resistor



Normally Closed Normally Open

Single E.O.L Resistor: Traditional inputs are wired with a single end-of-line resistor. An open or short is treated as an open. A single end-of-line resistor is only effective if the resistor is placed after the last device wired in an input loop. This is the only suitable wiring method for smoke loops.

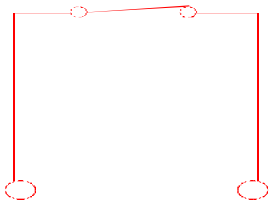
Wiring an Input Using 2 End-of-Line Resistor Supervision

Normally Closed Normally Open

Only use 1 End-of-Line Resistor on smoke detector loops.

Two Resistor Supervision: This wiring arrangement allows the system to detect and handle open loops and shorts as a trouble condition. Through programming, trouble conditions can be communicated to the central station and show trouble status on a keypad.

Wiring an Input Using No End-of-Line Resistors



Normally Closed

All inputs that do not use end-of-line resistors must be wired with a normally closed sensor

No End-of-Line Resistor: The option is recommended only for "non-perimeter" zones that do not require tamper protection. There is no tamper protection (other than a cut loop shows an open) without a resistor and all loops that do not use a resistor must be normally closed. No End-of Line Resistor is not permitted in a UL installation.

Programming

System options are contained in EEPROM. Each programmable section of memory has a 4 digit location and a three digit value. To reduce the amount of programming necessary, each location is supplied with a default value. The programming process can be simplified and the chances of programming errors can be reduced by obtaining a copy of the Windows 95 based PC software available from APEX, the BBS at 919-954-0318 or our web site at *www.ademco.com/apex/apexhome.htm*. The BBS settings are no parity, 8 bits with 1 stop bit, and connection speeds up to 28.8 baud.

Program Mode

To program new values into memory locations, it is necessary to first place the system into program mode. This is achieved in the same manner from a keypad or remote telephone; from keypad mode (anytime the system is in an idle state) enter the service code (factory default of **9,1,7,3).** The system will respond with "ENTER PROGRAM MODE." The LED's on keypads will turn off.

Locations and Values

Programming requires the entry of a valid 4 digit program location followed by the entry of a 3 digit programming value. When a valid program location is entered, the inside speaker will emit one beep. Press the H (# from telephone), the system will speak the current value in the location. To establish a new value, reenter the 4 digit location and type the desired new value after the single confirmation beep. The system will confirm the new program value by speaking the location followed by the value. To cancel a current program location at any time prior to the system speaking the programming confirmation, press A (* from telephone), at that point a new location can be entered. If the system responds with three beeps after a location is entered, an invalid location has been entered. Values entered into undocumented locations may cause spurious system operation.

Exiting Program Mode

To exit program mode, enter **9,8,9,9**, instead of a program location, the system will respond with "EXIT PROGRAM MODE." If a key (or digit) is not pressed within the time period programmed in location **0557**, the system will automatically exit program mode.

Quick Start

Keypad connection:	Connect a hardwire keypad to the keypad terminals on the control board, be certain to properly match the colors as follows: Black to **BLK**, Red to **RED**, Green to **GRN**, White to **WHT**.
Speaker connection:	Connect the violet keypad speaker leads to the **INT** and **COM** terminals on the control board.
Power connection:	Connect the power transformer to the AC terminals on the control board and plug the transformer into an unswitched 120 VAC outlet.
Apply power:	Turn the power switch to the "ON" position (right). Wait for a start tone(s) followed by a pause and two beeps.
Setting time and day:	The panel **MAY** prompt "Press 2 and 8 to set time" if the clock was not set prior to transit or if the capacitor responsible for sustaining the clock dissipated during transit and stocking. Press the 2 and 8 keys on the keypad simultaneously. The panel will prompt for a 4 digit time (use a leading 0 for times under 10:00), followed by a prompt for AM or PM. The next prompt is for the day of the week (1-Sunday, 2-Monday, 3-Tuesday, 4-Wednesday, 5-Thursday, 6-Friday, 7-Saturday). Enter a two digit month, two digit date and two digit year.
Arm and disarm:	Press the **A** key on the keypad and the green AWAY LED will light. "ARMED TO AWAY" will be heard through the speaker. To disarm, push **1,2,3,4** (default Primary User Code) on the keypad. The AWAY LED will go out and "CONTROL IS DISARMED" will be heard.
Default Panel:	**To ensure erroneous values are not stored in memory from the manufacturing and/or testing, the panel should be defaulted before installation. Enter 9,1,7,3 followed by 9,9,8,2.**
Program:	Proceed with programming to suit the installation.

Using This Manual:

Automated Locations: Automated Location prompt for specific information and automatically record the appropriate information into the correct locations.

Value Locations: A documented location that contains a specific value (i.e. time, user number, etc.)

Option Location: Most system options require a total of option values to be placed in a location.

Example:

Options - Enter Total	**Location**	**Value**
Speak auxiliary zone type		**001**
Speak status immediately after local phone access		002
Silence inside speaker in HOME/Night mode (Not permitted in a UL installation)		004
Speak zone description in Extended Monitor		**008**
Disable force arming (For UL installations this option must be enabled)		064
Default	**0078**	**009**

The **bold** 001 and 008 state the values are included in a defaulted panel. To include the 3rd option, add 004 and enter the total (013) in location 0078. If no options were selected, enter 000.

Charts: Charts are used to provide a large number of locations in a small space. Depending on how the section is used, the locations in charts contain either an option value or a discrete value.

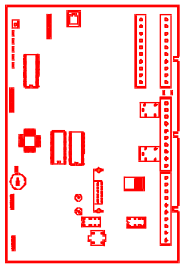
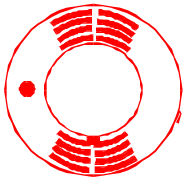
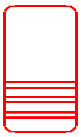
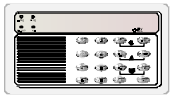
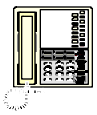
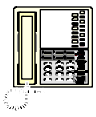
Example:

Options	**Value**
2 end-of-line resistor supervision	064
No end of line resistor (Not permitted in a UL installation)	128
Default (1 end-of-line resistor)	**000**

Zone 1			
Input	**Control Board Loop 1**		
Option	Location	Default	New Value
Zone Type	0647	255	
Option 1	0643	080	
Option 2	0644	000	
Supervision	1106	000	
Word 1		Word 3	
Word 2		Word 4	

The title at the top of the chart refers to the system zone number. The Input type (Control Board Loop 1) refers to hardware type. Below the Option heading are the locations for Zone 1. To program the zone for 2 end-of-line resistor supervision, enter 1106,064. Each location referenced above is shipped with the values found in the default column.

System Setup

	Hardware Device Types	System Zone Assignments (Assignments may not be changed)
	System Board Inputs 1-8	Zone 1-8
	Two Wire Smoke Loop	Zone 9
	Wireless Transmitters	Zones 10 - 23
	Portable Transmitters	Zones 24 - 25
	System Keypads	Zone 26
	Local Phone Panic	Zone 27
	Phone Line Monitor	Zone 28
TROUBLE AC Power Low Battery Communicator	Monitor Trouble Conditions	Zone 29

Programming Zones

The device types for each zone on the Destiny 4100 are predefined. The device assignments are fixed and may not be modified.

Zones 1-8:	Hardware Inputs 1-8 on the system controller
Zone 9:	Two-Wire Smoke loop
Zone 10 - 23:	14 Wireless Alarm Point Transmitters
Zone 24 - 25:	2 Wireless Portable Transmitters
Zone 26:	System Keypad
Zone 27:	Local Phone Activation
Zone 28:	Remote Phone Activation / Phone Line Monitor
Zone 29:	Monitor Trouble Contitions

Each hardware type can be found on the following pages. Under each heading are detailed instructions on how to program the hardware type. For a full description of any of the following zone options, please consult the Glossary in the rear of the manual.

These Options are Common to Each Zone Section

Zone Type

Type	**Value**
Exterior Instant	000
Exterior Delay 1	001
Exterior Delay 2	002
Interior Instant	003
Interior Delay 1	004
Interior Delay 2	005
Fire	006
Panic	007
Silent Panic	008
Emergency	009
Follower	010
Aux Type 1	011
Aux Type 2	012
Day Zone	013
Step arming	014
Disable	255

Zone Options 1

Options - Enter Total	**Value**
Report Alarm Activation to Central Station	016
Display open status at keypad	064
Default	**000**

Zone Options 2

Options - Enter Total	**Value**
Suppress Speech/Beeps for monitor	016
Suppress "OPEN" from being spoken during monitor	032
Suppress siren on activation	064
Default	**000**

Zones 1 - 8: System Controller

At default, all 8 system inputs are disabled. To enable a hardware input, enter a zone type in the zone type location.

Example: To enable Zone 1 (Input 1) and assign it as an Exterior Instant, enter 0647,000

Generally, this is all of the programming necessary to activate a zone. There are 4 spaces in each zone record to note a zone description. At the end of the zone programming section are detailed instructions for entering zone descriptions and a complete listing of the system vocabulary.

Other options:

Each input is defaulted to use a single End-Of-Line Resistor(EOLR). For certain installations, it may be necessary to use full 2-resistor supervision or for ease of installation, no EOLR. To adjust the supervision setting, enter the appropriate value in the supervision location.

Options	**Value**
2 end-of-line resistor supervision	064
No end of line resistor (Not permitted in a UL installation)	128
Default (1 end-of-line resistor)	**000**

Zone 1				**Zone 2**			
Input	**Control Board Loop 1**			Input	**Control Board Loop 2**		
Option	Location	Default	New Value	Option	Location	Default	New Value
Zone Type	0647	255		Zone Type	0663	255	
Option 1	0643	080		Option 1	0659	080	
Option 2	0644	000		Option 2	0660	000	
Supervision	1106	000		Supervision	1110	000	
Word 1		Word 3		Word 1		Word 3	
Word 2		Word 4		Word 2		Word 4	

Zone 3				**Zone 4**			
Input	**Control Board Loop 3**			Input	**Control Board Loop 4**		
Option	Location	Default	New Value	Option	Location	Default	New Value
Zone Type	0679	255		Zone Type	0695	255	
Option 1	0675	080		Option 1	0691	080	
Option 2	0676	000		Option 2	0692	000	
Supervision	1114	000		Supervision	1118	000	
Word 1		Word 3		Word 1		Word 3	
Word 2		Word 4		Word 2		Word 4	

Zone 5				**Zone 6**			
Input	**Control Board Loop 5**			Input	**Control Board Loop 6**		
Option	Location	Default	New Value	Option	Location	Default	New Value
Zone Type	0711	255		Zone Type	0727	255	
Option 1	0707	080		Option 1	0723	080	
Option 2	0708	000		Option 2	0724	000	
Supervision	1122	000		Supervision	1126	000	
Word 1		Word 3		Word 1		Word 3	
Word 2		Word 4		Word 2		Word 4	

Zone 7				**Zone 8**			
Input	**Control Board Loop 7**			Input	**Control Board Loop 8**		
Option	Location	Default	New Value	Option	Location	Default	New Value
Zone Type	0743	255		Zone Type	0759	255	
Option 1	0739	080		Option 1	0755	080	
Option 2	0740	000		Option 2	0756	000	
Supervision	1130	000		Supervision	1134	000	
Word 1		Word 3		Word 1		Word 3	
Word 2		Word 4		Word 2		Word 4	

Zone 9: System Controller Two-Wire Smoke Loop

At default, the two wire smoke loop is disabled. To enable the loop, enter 0775,006 (Zone type Fire). The word description is predefined as "Smoke Detector." This can be changed by altering the zone description for zone 9. Programming zone descriptions is covered at the end of this section.

Zone 9							
Input	**2-Wire Smoke**						
Option	Location	Default	New Value	Default Description			
Zone Type	0775	255		Word 1	Word 2	Word 3	Word 4
Option 1	0771	016		Smoke (151)	Detector (057)	N/A	N/A
Option 2	0772	000					

Zones 10 - 23: Alarm Type Transmitters

At default, all 14 alarm point transmitters are disabled. To enable a transmitter, enter a zone type in the zone type location and program a serial number.

Example: To enable Zone 10 (Transmitter 1) and assign it as an Exterior Instant, enter 0791,000.

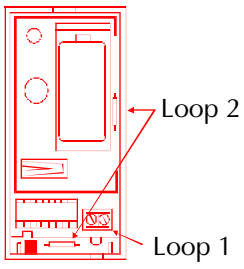
To program a serial number, enter 9940 in program mode. The system will prompt "Enter Zone." Enter the zone number (10). The panel will repeat the zone number and prompt "Enter Seven." Enter the seven digit serial number that appears on the bar code of the transmitter (Ignore the leading letter). The panel will prompt for the next zone. Enter the next transmitter zone number or "H" to exit.

Each of the 14 transmitter zones are defaulted as a supervised 5817 using loop 2. To use a different alarm point device, choose the device from the list below and place the appropriate value in the Device location using the chart on the following page.

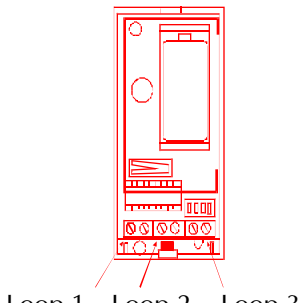
Alarm Point Transmitters

Type	Description	Value
5816 (MN)	2 input alarm point transmitter	003
5816TEMP	Low temperature transmitter	004
5817	3 input alarm point transmitter	005
5818	Recessed door transmitter	006
5819	3 input shock transmitter	007
5890	Passive Infrared	011
5849	Shock / Glass Detector	012
5806	Smoke Detector	018
5807	Smoke Detector	018
5808	Smoke Detector	019

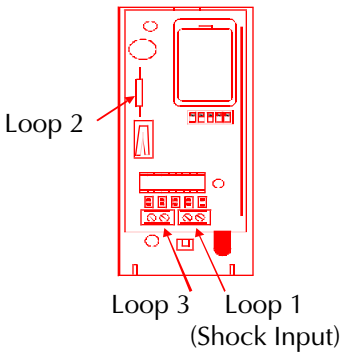
5816 (MN)



5817



5819



Each of the 14 alarm point transmitters are defaulted as a supervised 5817 using loop 2. To adjust these settings, enter the correct total from the options below in the Loop Location. When transmitters are being used that only have one input, use loop 1.

Loop Options	**Value**
Use Loop 1	001
Use Loop 2	**002**
Use Loop 3	004
Enable 6 hour supervision	**128**
Default	**130**

Example: To program zone 12 as loop 3 on a supervised 5817, values 004 (Loop 3) and 128 (supervision) would be added together (132) and entered into the Loop location for zone 12 (1173,132). To change zone 12 from a 5817 to a 5816, location 1176 would be changed to 003 (from device listing).

Zone 10				**Zone 11**			
Input	**Transmitter 1**	Serial #:		Input	**Transmitter 2**	Serial #:	
Option	Location	Default	New Value	Option	Location	Default	New Value
Device	1152	005		Device	1164	005	
Loop	1149	130		Loop	1161	130	
Zone Type	0791	255		Zone Type	0807	255	
Option 1	0787	080		Option 1	0803	080	
Option 2	0788	000		Option 2	0804	000	
Word 1		Word 3		Word 1		Word 3	
Word 2		Word 4		Word 2		Word 4	

Zone 12				**Zone 13**			
Input	**Transmitter 3**	Serial #:		Input	**Transmitter 4**	Serial #:	
Option	Location	Default	New Value	Option	Location	Default	New Value
Device	1176	005		Device	1188	005	
Loop	1173	130		Loop	1185	130	
Zone Type	0823	255		Zone Type	0839	255	
Option 1	0819	080		Option 1	0835	080	
Option 2	0820	000		Option 2	0836	000	
Word 1		Word 3		Word 1		Word 3	
Word 2		Word 4		Word 2		Word 4	

Zone 14				**Zone 15**			
Input	**Transmitter 5**	Serial #:		Input	**Transmitter 6**	Serial #:	
Option	Location	Default	New Value	Option	Location	Default	New Value
Device	1200	005		Device	1212	005	
Loop	1197	130		Loop	1209	130	
Zone Type	0855	255		Zone Type	0871	255	
Option 1	0851	080		Option 1	0867	080	
Option 2	0852	000		Option 2	0868	000	
Word 1		Word 3		Word 1		Word 3	
Word 2		Word 4		Word 2		Word 4	

Zone 16				**Zone 17**			
Input	**Transmitter 7**	Serial #:		Input	**Transmitter 8**	Serial #:	
Option	Location	Default	New Value	Option	Location	Default	New Value
Device	1224	005		Device	1236	005	
Loop	1221	130		Loop	1233	130	
Zone Type	0887	255		Zone Type	0903	255	
Option 1	0883	080		Option 1	0899	080	
Option 2	0884	000		Option 2	0900	000	
Word 1		Word 3		Word 1		Word 3	
Word 2		Word 4		Word 2		Word 4	

Zones 18 - 23 continued on next page

Zones 18 - 23: Alarm Type Transmitters Continued

Zone 18				Zone 19			
Input	**Transmitter 9**	Serial #:		Input	**Transmitter 10**	Serial #:	
Option	Location	Default	New Value	Option	Location	Default	New Value
Device	1248	005		Device	1260	005	
Loop	1245	130		Loop	1257	130	
Zone Type	0919	255		Zone Type	0935	255	
Option 1	0915	080		Option 1	0931	080	
Option 2	0916	000		Option 2	0932	000	
Word 1		Word 3		Word 1		Word 3	
Word 2		Word 4		Word 2		Word 4	

Zone 20				Zone 21			
Input	**Transmitter 11**	Serial #:		Input	**Transmitter 12**	Serial #:	
Option	Location	Default	New Value	Option	Location	Default	New Value
Device	1272	005		Device	1284	005	
Loop	1269	130		Loop	1281	130	
Zone Type	0951	255		Zone Type	0967	255	
Option 1	0947	080		Option 1	0963	080	
Option 2	0948	000		Option 2	0964	000	
Word 1		Word 3		Word 1		Word 3	
Word 2		Word 4		Word 2		Word 4	

Zone 22				Zone 23			
Input	**Transmitter 13**	Serial #:		Input	**Transmitter 14**	Serial #:	
Option	Location	Default	New Value	Option	Location	Default	New Value
Device	1296	005		Device	1308	005	
Loop	1293	130		Loop	1305	130	
Zone Type	0983	255		Zone Type	0999	255	
Option 1	0979	080		Option 1	0995	080	
Option 2	0980	000		Option 2	0996	000	
Word 1		Word 3		Word 1		Word 3	
Word 2		Word 4		Word 2		Word 4	

Zones 24 - 25: Portable Transmitters

To program a portable transmitter's serial number, enter 9940 in program mode. The system will prompt "Enter Zone." Enter the zone number (24). The panel will repeat the zone number and prompt "Enter Seven." Enter the seven digit serial number that appears on the bar code of the transmitter (Ignore the leading letter). The panel will prompt for the next zone. Enter the next transmitter zone number or "H" to exit.

Both of the portable transmitters are defaulted as 5804s. To use a different portable transmitter, choose the device from the list on the next page and place the appropriate value in the Device location.

Each of functions that can be programmed to a button are listed in the Button Function table. Program the appropriate button with the button function value. For a description of how each button function operates see "Button Functions" in the Glossary at the end of this manual. If a transmitter has less than 4 buttons enter 255 in the additional button function locations.

Option 1 value 016 (report to central station) is the only Zone Option that applies to zones 24 - 25. To prevent portable transmitter activations from reporting to the central station, enter 000 in the option 1 location.

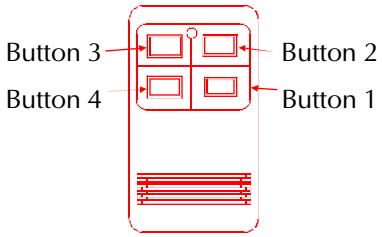
Portable Transmitters

Type	Description	Value
5801	4 button portable	008
5802	1 button portable	016
5802 CP	1 button portable	017
5802 MN	1 button portable	009
5804	4 button portable	010

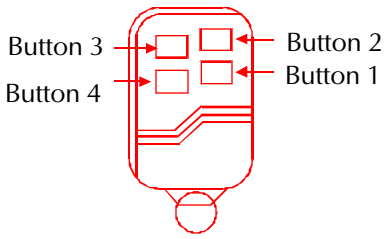
Button Functions - A full description of each function is available in the Glossary

Option	Value
Speak Time	000
Toggle Monitor	001
Speak Long Term Memory	003
Silence Day Zone	004
Speak Status	005
24 Hour Fire	006
24 Hour Panic	007
24 Hour Silent	008
24 Hour Emergency	009
Trigger a Relay	010
Extended Monitor A	013
Extended Monitor B	014
Enter Bypass Mode	015
Set Time	016
Step Arming	017
Arm to AWAY	018
Arm to HOME	019
Disarm	020
Disable	255

5801



5804



Zone 24 – User 1				Zone 25 – User 2			
Input	**Portable 1**			Input	**Portable 2**		
Option	Location	Default	New Value	Option	Location	Default	New Value
Device	1320	010		Device	1332	010	
Button 1	1309	255		Button 1	1321	255	
Button 2	1310	255		Button 2	1322	255	
Button 3	1311	255		Button 3	1323	255	
Button 4	1312	255		Button 4	1324	255	
Option 1	1011	080		Option 1	1027	080	
Supervision	1317	000		Supervision	1329	000	
Word 1		Word 3		Word 1		Word 3	
Word 2		Word 4		Word 2		Word 4	

Option	Value
Enable 6 hour supervision	**128**
Default	**000**

Zone 26: System Keypads

All keypad activations report as Zone 26. Keys and key combinations are fully programmable. Use the button function list (Zones 24-25) to change the functionality of the listed keypad inputs. The word description is predefined as "System Keypad." This can be changed by altering the zone description for zone 26. Programming zone descriptions is covered at the end of this section. Option 1 value 016 (report to central station) is the only Zone Option that applies to zone 26.

Zone 26			
Input	**System Keypads**		
Option	Location	Default	New Value
3 – Status	1334	006	
6 – Monitor	1335	009	
9 – F1	1336	007	
1 – 7	1337	255	
2 – 8	1338	016	
3 – 9	1339	255	
Status	1340	005	
Monitor	1341	001	
F1	1342	000	
F2	1343	010	
Option 1	1043	080	
Word 1	System (159)		
Word 2	Keypad (092)		
Word 3	N/A		
Word 4	N/A		

Zone 27: Local Phone

Zone 27							
Input	**Local Phone**						
Option	Location	Default	New Value	Default Description			
Zone Type	1063	255		Word 1	Word 2	Word 3	Word 4
Option 1	1059	000		House (183)	Phone (125)	N/A	N/A
Option 2	1060	000					

While in local phone keypad mode, a user can activate a zone by entering 5 zeros. The 5 zero activation is treated by the system in the same manner as a traditional zone open. Zone Options 1 and 2 apply. This zone is traditionally programmed as a 24 hour panic. The word description is predefined as "House Phone." This can be changed by altering the zone description for zone 27. Programming zone descriptions is covered at the end of this section.

Zone 28: Remote Phone / Phone Line Monitor

Zone 28							
Input	**Remote Phone**						
Option	Location	Default	New Value	Default Description			
Zone Type	1079	255		Word 1	Word 2	Word 3	Word 4
Option 1	1075	000		Remote (137)	Phone (125)	N/A	N/A
Option 2	1076	000					

Loss of phone line is treated by the system in the same manner as a traditional zone open. See System Times And Other Options (location 0456) to determine the number of 4 second samples before panel detects a loss of phone line. For notification at the keypad, this input can be programmed as an auxiliary zone type for enunciation at the keypad, a day zone for extended monitoring and alerts while armed, or a 24 hour panic for alarm activation upon loss of phone line (not recommended). Zone 28 is reported when an activation occurs from a remote phone (see User Code + digit). The word description is predefined as "Remote Phone." This can be changed by altering the zone description for zone 28. Programming zone descriptions is covered at the end of this section.

Zone 29: Monitor Trouble Conditions

Option - A description of each option is available in the Glossary	Location	Value
* Duration for recognition of AC power loss (minutes)	0097	001
* Monitor low battery and enable battery test (001 to enable)	0180	000
* Communicator fail (001 to enable)	0181	001

* 000 disables (Must be enabled for UL installation)

User Code + Digit Functions

User Code + Options	Local phone/keypads	Function	Remote Phone	Function
Function for User Code + 1	0117	000	0551	015
Function for User Code + 2	0118	001	0552	001
Function for User Code + 3	0119	013	0553	013
Function for User Code + 4	0120	014	0554	014
Function for User Code + 5	0121	004	0555	005
User Code + 6			Smoke Power Reset	
User Code + 7			Change User Codes	
User Code + 8			Speak Alert Memory	
User Code + 9			* Bypass Mode	
User Code + 0			User Test Mode	

*** Bypass Mode not permitted in UL installations.**

Additional functions are available to the end user by entering a full function user code followed by a digit 0-9. The functions for digits 1 through 5 are programmable. The functionality for a user code + digit action from a local phone and keypad are shared. Remote phone activations are programmed separately. Use the Button Functions list from zones 24-25 for a list of available values for the above locations.

System Access Codes

PC Access Code	Location	Default
Digit 1	0471	010 (*)
Digit 2	0472	010 (*)
Digit 3	0473	001
Digit 4	0474	002
Program Mode Access Code	**Location**	**Default**
Digit 1	0545	009
Digit 2	0546	001
Digit 3	0547	007
Digit 4	0548	003
Local Phone Access Code	**Location**	**Default**
Digit 1	0559	010 (*)
Digit 2	0560	011 (#)
Digit 3	0561	255 (N/A)
Digit 4	0562	255 (N/A)
Secured Callback Access Code	**Location**	**Default**
Digit 1	0563	002
Digit 2	0564	005
Digit 3	0565	008
Digit 4	0566	000
Answering Machine Override Digit	**Location**	**Default**
Digit	0550	011 (#)

Automated Programming Locations

Place system in RF field strength mode and speak serial number	9951
Exit RF field strength mode	9950
Exit program mode	9899
Clear user codes 2-8	0000
Clear keypad status	9897
Enter Zone word description	9920
Speak Zone description	9930
Speak a selected word	9999
Clear event memory log and long term memory	9898
Enter Phone # for automatic download (From system Keypad only)	9904
Enter Account # for automatic download (From system Keypad only)	9909
Speak automatic download Phone #	9914
Speak automatic download account #	9919
Initiate direct connect computer programming	9952
Initiate unattended programming download	9953
Initiate unattended event memory log upload	9954
Speak software revision number	9990
Set time/date (HH - Hour, MM - Minute, W- Day of the week, MM- Month, DD- Day, YY- Year)	9991
Set automatic arm/disarm times (24Hr format - Not permitted in a UL installation)	9993
Speak time and date	9996
Set automatic Event Memory Log upload time	9997
Enter Phone #1 to central station	9900
Enter Phone #2 to central station	9901
Enter Account #1 for central station	9905
Enter Account #2 for central station	9906
Speak Phone #1	9910
Speak Phone #2	9911
Speak Account #1	9915
Speak Account #2	9916
Set Fail to Open/Close times (24Hr format)	9994
Set Communicator test times (24Hr format)	9995
Echo communicator activity through inside speaker	9960

Automated locations are designed to reduce the amount of programming required by the installer. Based on the programmers inputs to prompted questions, the system automatically places the correct values in memory locations. This process saves the installer time and reduces the risk of potential programming errors. Instead of entering a location and a value, enter the desired memory location (they always start with 9). The system will prompt for programming information. Above are a listing of all of the automated locations in the Destiny 4100. A full description of the system prompts are found in the section that corresponds with the location's function or the Glossary in the back of this manual.

Assigning Words to Zones

Location 9920 is used to enter descriptions for each zone. Enter program mode and enter 9920. The panel will prompt "Enter Zone Number." Enter the zone number (Zones 1 - 9 use a leading 0). The zone number will be repeated. Enter the three digit value for word 1. The word will be spoken. Enter the next word value or "H" to exit. Up to four words can be programmed per zone. Zone 29 will speak "power off" when AC power loss is detected, "control battery trouble" when a low battery is detected and "communicator fail" when there is a communicator failure.

Vocabulary

Word	Location
Access	024
Account	025
Alarm	222
Alert	026
Am	033
And	197
Appliance	027
April	227
Are	028
Area	029
Armed	030
Attic	031
August	231
Away	032
B	034
Back	035
Bar	176
Basement	036
Bathroom	037
Battery	038
Bay	039
Bedroom	040
Bottom	041
Boys	042
Break	043
Bypassed	044
C	045
Cabinet	177
Closed	046
Closet	047
Code	048
Communicator	175
Control	049
Corner	050
Crawlspace	051
D	052
Date	211
December	235
Deck	053
Degrees	054
Den	055
Detected	056
Detector	057
Digit	209
Dining	058
Disarmed	059
Door	060
Down	061
Driveway	198
E	062
East	063
Eight	008
Eighty	022
Eleven	011
Enter	064
Entry	065
Error	207
Exit	066
F	067
Fail	068
Family	069
Fan	178
February	225
Fifteen	014
Fifty	019
Fire	070
First	071
Five	005
Flood	072
Floor	179
Florida	073
Force	074
Forty	018
Four	004
Foyer	075
French	076
Friday	219
Front	077
Fuse	078
Garage	079
Gas	180
Gate	199
Girls	080
Glass	081
Great	082
Guest	083
Gun	181
Hall	084
Head	085
Heat	086
Home	087
Hottub	182
House	183
In	088
Intruder	089
Intrusion detected	090
Is	091
January	224
Jewelry	184
July	230
June	229
Keypad	092
Kitchen	093
Lamp	094
Laundry	095
Left	097
Leave immediately	096
Level	185
Library	098
Light	099
Lights	100
Living	101
Location	200
Lock	102
Low	103
Main	104
March	226
Master	105
May	228
Medicine	186
Middle	106
Mode	107
Module	108
Monday	215
Monitor	187
Month	212
Motion	109
Mud	110
Night	111
Nine	009
Ninety	023
No	221
Nook	112
North	113
November	234
Number	114
Nursery	115
O	116
October	233
Off	117
Office	118
On	119
One	001
Open	120
Option	201
Or	202
Out	121
Outlet	122
Over	123
Parlor	188
Patio	203
Pause	124
Pet	189
Phone	125
Play	126
Pm	134
Pool	127
Porch	128
Pound	129
Power	130
Pro	131
Problem	132
Program	133
Rear	190
Rec	135
Receiver	206
Remain calm	136
Remote	137
Report	138
Restored	139
Right	140
Room	141
Safe	191
Saturday	220
Screen	142
Second	143
Sensor	144
September	232
Serial	208
Set	205
Seven	007
Seventy	021
Shock	145
Shop	146
Showing	147
Side	148
Six	006
Sixty	020
Sky	149
Slider	192
Sliding	150
Smoke	151
South	152
Spa	193
Spare	153
Stairs	154
Star	155
Stay	204
Storage	156
Stress	194
Study	157
Sun	158
Sunday	214
System	159
Tamper	195
Teen	015
Temperature	160
Ten	010
Test	223
Third	161
Thirteen	013
Thirty	017
Three	003
Thursday	218
Time	213
Tone	162
Top	163
Trouble	164
Tuesday	216
Twelve	012
Twenty	016
Two	002
Under	165
Unit	166
Up	167
User	168
Utility	169
Walk	170
Water	196
Wednesday	217
West	171
Window	172
Year	210
Zero	000
Zone	173
Zones	174

System Times And Other Options

System Time Options - A description of each time is available in the Glossary	Units	Location	Default	
Entry delay 1 (Not to exceed 45 seconds in a UL installation)	seconds	0080	020	_____
Entry delay 2 (Not to exceed 45 seconds in a UL installation)	seconds	0081	020	_____
Exit delay (Not to exceed 60 seconds in a UL installation)	seconds	0082	030	_____
Alarm cut off and reset (Not to be less than 4 minutes in a UL installation)	minutes	0083	005	_____
* Duration between fire, tamper, trouble chirps	seconds	0086	005	_____
* Duration for recognition of AC power loss	minutes	0097	001	_____
Duration between spoken "Pre-alarm" cycles (000 = 3 seconds)	seconds	0099	000	_____
Fire siren tone duration before speech	seconds	0101	005	_____
Burglary siren tone duration before speech	seconds	0102	005	_____
Fire cut off and reset (Not permitted in a UL installation)	minutes	0100	005	_____
Number of 4 second samples to determine loss of phone line	samples	0456	006	_____
Time frame for User Test Timeout	minutes	0098	003	_____
Answer service callback override wait time	seconds	0470	025	_____
Number of rings for pickup (minimum of 002, 000 disables)	rings	0458	010	_____
Inactivity time before automatic hang up while in user phone access	seconds	0556	015	_____
Inactivity time before automatic hang up/exit when programming	seconds	0557	060	_____
Delay before dialing after activation Phone #1 (000 - disables)	seconds	0437	002	_____
Delay before dialing after activation Phone #2 (000 - disables)	seconds	0438	002	_____
Off-hook time during listen-in before automatic hang-up (000 - 256 seconds)	seconds	0453	120	_____
Central Station handshake wait period	seconds	0455	025	_____
Two-way callback from central station wait period	minutes	0461	002	_____
Voice only and two-way callback wait period for a valid code	seconds	0465	060	_____
Maximum number of dialing attempts Phone #1	attempts	0449	008	_____
Maximum number of dialing attempts Phone #2	attempts	0450	008	_____
Touch tone (000) or pulse (001) dialing		0454	000	_____
Ignore dial tone (for use with cellular backup) (001 - enabled)		0466	000	_____
Number of disappearing code activations	activation	0073	001	_____
Number of retries when dialing	attempts	0185	008	_____
Activations before Auto-Bypass (Not permitted in a UL installation: 000)	activation	0115	000	_____
Time frame activations occur within (Not permitted in a UL installation)	hours	0116	024	_____
Time extended monitor is displayed on the keypad (000 - continuous)	seconds	0175	030	_____
Time between speech/beeps when extended monitor is active (000 - disable)	seconds	0176	005	_____

* 000 disables (Must be enabled for UL installation)

User Code Options

Options : Enter total - A description of each option is available in the Glossary	Location	Value
Duress		001
Disappearing		004
Enable master functions - bypass mode, extended monitor, user code changes		**008**
Works on remote telephone		**016**
Works on keypads		**032**
Works on local telephones		**064**
Generate open report to CS and/or Event Memory log		**002**
Generate close report to CS and/or Event Memory log		**128**
Default - User code 1 (all others default 000)	**0065**	**250**

User Code	1	2	3	4	5	6	7	8
Location	0065	0066	0067	0068	0069	0070	0071	0072

Program Mode Access Code Options 0549 048

System Options - Group 1

Options - Enter Total - A description of each option is available in the Glossary	Location	Value
Disarm before rearm		**004**
Mute external Speaker (external driver -off, internal driver - adjustable)		008
Access code before arm		016
Speak pre-alarm instead of tone		**032**
3 digit disarm code		064
Speak system status with 1st digit of a user code		**128**
Default	**0074**	**164**

System Options - Group 2

Options - Enter Total - A description of each option is available in the Glossary	Location	Value
*Trigger a relay from a portable transmitter or keypad		002
Automatic "force arm" (no second key press) (Not permitted in a UL installation)		004
No exterior instant exit delay		008
No entry delay for Exterior Delay 1 in HOME mode		016
Auto 96 hr clear of long term memory and event memory log		032
Zone trouble = zone activation when armed		064
Default	**0075**	**000**

* A button function must be assigned in order to restore trigger

System Options - Group 3

Options - Enter Total - A description of each option is available in the Glossary	Location	Value
Speak time remaining and end of exit delay (inside speaker every 10 seconds)		**001**
Track activations and record in Long Term Memory		**002**
Voice driver		**004**
Echo local phone speech to inside speaker		016
Enable night mode		**032**
Enable two-way voice call back (Not permitted in a UL installation)		064
Default	**0076**	**039**

System Options - Group 4

Options - Enter Total - A description of each option is available in the Glossary	Location	Value
Prevent access to Program Mode when armed		001
Suppress Dialer during 2-way callback wait period (Not permitted in a UL installation		128
Default	**0077**	**000**

System Options - Group 5

Options - Enter Total - A description of each option is available in the Glossary	Location	Value
Speak auxiliary zone type		**001**
Speak status immediately after local phone access		002
Silence inside speaker in Home/Night mode (Not permitted in a UL installation)		004
Speak zone description in Extended Monitor		**008**
Disable force arming (For UL installations this option must be enabled)		064
Default	**0078**	**009**

System Options - Group 6

Options - Enter Total - A description of each option is available in the Glossary	Location	Value
Speak time and date when time is requested		002
Enable answer service override callback		008
Default	**0079**	**000**

Monitor Trouble Conditions

Option - A description of each option is available in the Glossary	Location	Value
* Monitor low battery and enable battery test (001 to enable)	0180	000
* Communicator fail (001 to enable)	0181	001

* 000 disables (Must be enabled for UL installation)

Bypass Options

Option: Enter Total - A description of each option is available in the Glossary	Location	Value
Open zones automatically bypassed at "force arm"		001
Zones bypassed by "force arm" auto unbypassed at disarm		002
Unbypass all bypassed zones automatically at disarm		004
Default (Force Armed zones reactivated when shut)	**0182**	**000**

Extended Monitor Zone Type Assignment

Zone Types - Enter Total for Extended Monitor A	Location	Value
Exterior instant		**001**
Exterior delay 1		002
Exterior delay 2		004
Interior instant		008
Interior delay 1		016
Interior delay 2		032
Follower		064
Auxiliary 1 and 2		128
Default	**0177**	**001**

Zone Types - Enter Total for Extended Monitor B	Location	Value
Exterior instant		**001**
Exterior delay 1		**002**
Exterior delay 2		**004**
Interior instant		008
Interior delay 1		016
Interior delay 2		032
Follower		064
Auxiliary 1 and 2		128
Default	**0178**	**007**

With the system disarmed, entering a full function user code followed by the 3 or 4 digit, will place the system into extended monitor mode A or B. The system will speak "MONITOR ON" through the inside speaker. Entering a full function user code followed by 3 or 4 will clear any active extended monitor zones and stop the extended monitor beep or speech. The system will speak "MONITOR RESTORED." If the system is in extended monitor mode and there are no extended monitor zones active, entering a full function user code followed by 3 or 4 will take the system out of extended monitor mode. The system will speak "MONITOR OFF".

The enunciation feature of the control panel can be used to monitor exterior, interior, and follower zones. As an example, it may be desirable to monitor interior door activity of residents in a retirement home. Normal extended monitor activity is not sent to the central station. If a Day Zone causes an Extended Monitor activation when the system is not armed, a Day Zone Trouble can be sent to the central station.

There are two different levels or types of extended monitor, A and B. Locations 0177 and 0178 determine which zone types are to be monitored by each extended monitor type. Entering a full function user code followed by the digit 3 will place the system in extended monitor mode type A or enter the 4 digit for extended monitor type B. When entering extended monitor the system responds with "MONITOR ON" through the inside speaker.

NOTE: You can only enter the extended monitor mode when the system is disarmed. If the system is in extended monitor mode it will automatically exit that mode when the system is armed.

System Triggers

Event	Location	Output	Location	Option	Location	Time	Option Default Times
Any alarm activation	0122	000	0188	010	0475	005	Unit disarm or as long as alarm cut off and reset
Burglary	0123	000	0189	010	0476	005	Same as above
Fire	0124	000	0190	010	0477	005	Same as above
Panic	0125	000	0191	010	0478	005	Same as above
Silent Panic	0126	000	0192	010	0479	005	Same as above
Auxiliary 1 and 2	0127	000	0193	010	0480	005	Unit zone is restored
Pre-alarm	0128	000	0194	010	0481	005	Duration of Pre-alarm
Extended Monitor	0129	000	0195	010	0482	005	Location 0175
Remote Phone Access	0130	000	0196	010	0483	005	Duration of call
Emergency	0131	000	0197	010	0484	005	Same as any activation
Arm to HOME	0132	000	0198	010	0485	005	Duration armed to HOME
Arm to AWAY	0133	000	0199	010	0486	005	Duration armed to AWAY
Arm to NIGHT	0148	000	0214	010	0501	005	Duration armed to NIGHT
Arm to HOME, NIGHT, or AWAY	0134	000	0200	010	0487	005	Duration armed to HOME
Disarm	0135	000	0201	010	0488	005	5 seconds
Access Code Entered	0136	000	0202	010	0489	005	5 seconds
Alert	0137	000	0203	010	0490	005	As long as alert LED is on
Loss of Phone Line	0138	000	0204	010	0491	005	As long as phone line is gone
Duress Disarm	0139	000	0205	010	0492	005	5 seconds
Duress When Not Armed	0140	000	0206	010	0493	005	5 seconds
AC Fail	0141	000	0207	010	0494	005	Until restore
Two-way Voice	0142	000	0208	010	0495	005	As long as in two-way mode
Smoke Reset	0143	000					* (see below)
Speech Activation	0144	000	0210	010	0497	005	Only at voice announciation
Ring Detect	0145	000	0211	010	0498	005	Duration of Ring
House Phone Off Hook	0146	000	0212	010	0499	005	As long as off hook
Communicator Fail	0147	000	0213	010	0500	005	Until communication established
Trigger a Relay	0149	000	0215	010	0502	005	See: *System Option - Group2*

* Smoke is a special trigger and no options or delays are allowed.
  Smoke reset function is as follows:
    The assigned output will do an "ON" activity for 5 seconds.
    The assigned output will do an "OFF" activity.
    An additional 5 second settling delay for smoke devices is counted down.

System Triggers Option

Option - Enter Total	Value
Activation Action	
Do Nothing	000
Turn Output Off	001
Turn Output On	**002**
Turn Output Off, Start Delay	003
Turn Output On, Start Delay	004
Restore Action	
Do Nothing	000
Turn Output Off	**008**
Turn Output On	016
Turn Output Off, Start Delay	024
Restore Timer	
Restore after value in Time location (in seconds)	016
Default	**010**

System Triggers Option Legend

ACTIVATION	RESTORATION	Value
NOTHING at	NOTHING at	000
OFF at	NOTHING at	001
Comes ON/Stays ON	NOTHING at	002
OFF at/DELAY/Then Goes OFF	NOTHING at	003
ON at/DELAY/Then Goes OFF	NOTHING at	004
NOTHING at	OFF at	008
OFF at	ON at	016
NOTHING at	ON at/DELAY/Then Comes ON	024
OFF at	OFF at	009
OFF at	NO at	017
OFF at	OFF at/DELAY/Then Comes ON	025
ON at	OFF at	010
ON at	ON at	018
ON at	OFF at/DELAY/Then Comes ON	026
OFF at/DELAY Then Comes ON	OFF at	011
OFF at/DELAY/Then Comes ON	ON at	019
OFF at/DELAY/Then Comes ON	OFF at/DELAY/Then Comes ON	027
ON at/DELAY/Then Goes OFF	OFF at	012
ON at/DELAY/Then Goes OFF	ON at	020
ON at/DELAY/Then Goes OFF	OFF at/DELAY/Then Comes ON	028

System Triggers allow the Destiny 4100 to control outputs based on system events. Each event has an output, option and time location. The output location determines which of the available outputs is controlled when an event activation occurs. The on-board output pins are outputs 1-4, the on-board relay is output 8, and if added, 8 additional relay outputs are available on an EXP-8 board (9-16). The option locations determine how the panel should respond when a trigger event occurs and restores. Not all triggers have a natural restore action (see Glossary). For these triggers it is suggested that the Restore timer option is enabled. Place a time (in seconds) in the time location. Each time the event trigger action occurs, the panel will wait the programmed time period and then execute the programmed restore action. For a complete listing of the activation and restore events for each trigger, consult the Glossary in the back of this manual.

Automated Event Memory Log Upload

Choose upload days total	**Location**	**Value**
Sunday		001
Monday		002
Tuesday		004
Wednesday		008
Thursday		016
Friday		032
Saturday		064
Clear Event Memory Log after upload		128
Default (Report on the 1st of every month)	**0183**	**000**

The event memory log can be automatically uploaded to a PC in auto answer mode. Program location 0183 to select the day or days of the week to upload the event memory log. To upload on multiple days, the values can be added. Choose a time to upload the log and enter the time in 24 hour format in location 9997. Use location 9909 to set the panel account number and enter the PC phone number in 9904 (shared with unattended program download).

Automatic Communicator Testing

Choose to Report Daily, Weekly, or Monthly and enter the appropriate value	**Location**	**Value**
Report Daily	0105	000
Report Weekly		064
Sunday		001
Monday		002
Tuesday		003
Wednesday		004
Thursday		005
Friday		006
Saturday		007
Enter Total (Example is Report on every Sunday)	0105	065
Report Monthly		**128**
Add the day of the month to use (valid days are 1-31)		**001**
Default (Enter **000** for UL installations)	**0105**	**129**

Choose if the communicator should send a test signal daily, weekly or monthly and enter the appropriate value in location 0105.

Daily: Enter 000.

Weekly: Enter 064 plus the value of the day to be used. To communicate on every Tuesday, a value of 067 would be entered.

Monthly: Enter 128 plus the day of the month to be used. To communicate on the 12th of every month, a value of 140 would be entered. If a day is chosen that is greater than the number of days in a given month, the transmission will occur on the last day of the month.

Enter automatic communicator test time in 24 hour format in location 9995.

For a UL installation, a communicator test must be performed daily.

Fail To Open (Disarm) / Fail to Close (Arm)

Options - Enter Total	**Location**	**Value**
Enable Fail to Open		001
Fail to Close - Verify Armed to AWAY		002
Fail to Close - Verify Armed to Home or Night		004
Fail to Close - Verify Armed to AWAY, Home or Night		008
Use 5 day cycle (otherwise 7 day cycle)		016
Default (Fail to Open / Close disabled)	**0216**	**000**

Fail to open/close will check system arming status at a programmed time and report to the central station if the proper condition is not met. Program the option total in location 0216. Use location 9994 to program the appropriate fail to Arm time followed by the Disarm time in military format. For times below 10:00 use a leading zero. If only one arming state is being monitored, still enter two times. If the option is not selected the programmed time will be ignored.

Automatic Arming and Disarming

Options - Enter Total	**Location**	**Value**
Arm to AWAY		001
Arm to HOME		002
Disarm		008
Force arm with open zones		016
5 day cycle (otherwise 7 day cycle)		032
Default (Automatic Arm / Disarm disabled)	**0108**	**000**

Choose the arming and disarming options and enter the total in location 0108. Use location 9993 to enter the arm and disarm times in 24 hour format. Location 0108 requires the sum of selected options. If **001** and **002** are programmed together, arming to AWAY will take precedence. If arm and disarm options are both selected, setting the same time for both will never produce an automatic disarm. If **016** is not selected and there are zones open the system will not arm. Automatic arm/disarm is not permitted in a UL installation.

Reporting Format

Reporting Options: Enter total - See Glossary for a description of each format	**Location**	**Value**
Silent Knight Slow		000
Silent Knight Fast		001
Sescoa Fast (Radionics)		**002**
Multiple Reports / Connection		**008**
Voice Only		032
Phone #1 Default	**0441**	**010**
Phone #2 Default	**0443**	**010**

Reporting Format - Enter total	**Value**
3/1	000
4/2	001
4/2 extended w/ zone ID	002
4/1/1	004
Ademco Contact-ID (requires 4 digit account)	**008**
Phone #1 Default	**0442** **008**
Phone #2 Default	**0444** **008**

Two-Way Digit Assignments

This feature is not permitted in a UL installation

Telephone Digit	Default Function	Location	Default Value
0	Exit 2-way by going to keypad mode or hanging up	0162	000
1	Microphone #1 On	0163	001
2	Microphone #2 On	0164	002
3	Microphone #3 On	0165	003
4	Microphone #1 Off	0166	004
5	Microphone #2 Off	0167	005
6	Microphone #3 Off	0168	006
7	High microphone sensitivity	0169	007
8	Normal microphone sensitivity	0170	008
9	All microphones on	0171	009
*	Listen	0172	010
#	Talk	0173	011
	Rearrange Keypad phone digits (001 to change from default)	0161	000

Two-way key functions: It is not recommended to alter the telephone digit assignments for two-way voice, however, to conform to some central stations this process may be necessary. **To reassign the assignments, place a 001 in location 0161**. Each of the two-way functions are listed along with the digit assigned. By altering the location values, each function can be reassigned to a new key digit. Take care when altering key assignments not to program a single digit to have multiple functions. The system will only expedite one function per telephone digit. Two-way voice is not permitted in a UL installation.

Two-Way Voice Options

This feature is not permitted in a UL installation

Voice Only Options - Enter total	Value
One Digit Access	001
Full User Code Access	002
The 0 digit exits to keypad mode	**008**
Two Way Callback Options	
One Digit Access	016
Full User Code Access	032
The 0 digit exits to keypad mode	128
Default 0464	**008**

Central stations that do not support two-way voice after a communicator transmission may require two-way callback. With this option enabled (System Option Group 3) the control panel will wait a programmed period of time (0461) after a digital communication for the central station to call. Two-way voice is not permitted in a UL installation.

The Voice only option is used for any reporting that is not a central station. Most commonly, this option is used for two-way calls to a user's office phone or a numeric pager.

There are three security options associated with two-way callback and voice only reporting: One digit access, full code access, and entering 0 to exit to keypad mode. If either of the access code options are selected, the panel will answer the phone and play a repeated beep until a valid code is entered or the two-way callback time expires. If neither code option is selected, the system will be in listen-in mode when the phone is answered. Without the "0 exits to keypad mode" options selected, the central station will not have access to keypad mode.

When using a number pager, do not select one digit or full access code options and the panel will only make one dialing attempt.

Ademco Contact ID Report Codes

APEX Description	Code Sent to Central Station	ADEMCO Description
Exterior instant	E 131 Z	Perimeter burglary
Exterior delay 1	E 134 Z	Entry/exit burglary
Exterior delay 2	E 134 Z	Entry/exit burglary
Interior instant	E 132 Z	Interior burglary
Interior delay 1	E 132 Z	Interior burglary
Interior delay 2	E 132 Z	Interior burglary
Fire	E 110 Z	Fire alarm
Panic	E 120 Z	Panic alarm
Silent panic	E 122 Z	Silent
Emergency	E 100 Z	Medical
Follower	E 132 Z	Interior burglary
Auxiliary	E 150 Z	24 hour nonburglary
Duress disarm	E 121 0	Duress
Duress when not armed	E 121 0	Duress
Zone restore after activation	R 140 Z	General Alarm
Transmitter low battery	E 384 Z	RF low battery
Transmitter battery restore	R 384 Z	RF low battery
Zone trouble	E 370 Z	Protection loop
Zone trouble restore	R 370 Z	Protection loop
High current trouble	E 300 91	System trouble
High current restore	R 300 91	System trouble
Phone line restore	R 350 28	Communication
Open (disarm)	E 401 U	Open by user
Open after activation	E 450 U	Exception open
Close (arm)	R 401 U	Close by user
Force Arm	R 450 U	Exception close
Control low battery	E 302 29	Low system battery
Control battery restore	R 302 29	Low system battery
AC fail	E 301 29	AC loss
AC restore	R 301 29	AC loss
User communicator test	E 601 Z	Manual trigger test
Automatic communicator test	E 602 99	Periodic test report
Cancel	E 406 Z	Cancel
Zone bypass	E 570 Z	Zone bypass
Zone unbypass	R 570 Z	Zone bypass
Day zone trouble	E 135 Z	Day alarm
Day zone trouble restore	R 135 Z	Day alarm
Upload/download attempt	E 412 99	Success - download/access
Program mode entry	E 627 99	Program mode entry
Fail to open	E 453 99	Failed to open
Fail to close	E 454 99	Failed to close
Zone open	E 371 Z	Protection Loop
Zone restore	R 371 Z	Protection Loop
Tamper	E 383 Z	Zone tamper
Tamper Restore	R 383 Z	Zone tamper restore
Receiver Supervision Trouble	E 355 Z	Loss of radio supervision
Receiver Supervision Trouble Restore	R 355 Z	Loss of radio supervision

Dialer Options

Options - Enter total	**Value**
Dial Phone #1	**001**
Dial Phone #2	002
Enable two-way voice/listen in (Not permitted in a UL installation)	004
Dial alternate number if first choice fails	008
Record this report type in Event Memory Log	**128**
Default (for Fire and Burg)	**129**

Report Codes

Report Type		**Location**	**Value**	
Exterior Instant	Central Station Report Code	0337	003	
	Dialer Option	0387	129	
Exterior Delay 1	Central Station Report Code	0338	003	
	Dialer Option	0388	129	
Exterior Delay 2	Central Station Report Code	0339	003	
	Dialer Option	0389	129	
Interior Instant	Central Station Report Code	0340	004	
	Dialer Option	0390	129	
Interior Delay 1	Central Station Report Code	0341	004	
	Dialer Option	0391	129	
Interior Delay 2	Central Station Report Code	0342	004	
	Dialer Option	0392	129	
Fire	Report Code	0343	001	
(Must enable in UL installations)	Dialer Option	0393	129	
Panic	Central Station Report Code	0344	002	
	Dialer Option	0394	129	
Silent Panic	Central Station Report Code	0345	002	
	Dialer Option	0395	129	
Emergency	Central Station Report Code	0346	005	
	Dialer Option	0396	129	
Follower	Central Station Report Code	0347	004	
	Dialer Option	0397	129	
Auxiliary Zone Type	Central Station Report Code	0348	005	
	Dialer Option	0398	129	
Duress Disarm Silent	Central Station Report Code	0349	002	
	Dialer Option	0399	129	
Duress When Not Armed	Central Station Report Code	0350	002	
	Dialer Option	0400	129	
Zone Restore After Activation	Central Station Report Code	0351	009	
	Dialer Option	0401	128	
Transmitter Low Battery	Central Station Report Code	0352	006	
	Dialer Option	0402	129	
Transmitter Battery Restore	Central Station Report Code	0353	009	
	Dialer Option	0403	129	
Zone Trouble	Central Station Report Code	0354	008	
	Dialer Option	0404	128	
Zone Trouble Restore	Central Station Report Code	0355	009	
	Dialer Option	0405	128	
Phone Line Restore	Central Station Report Code	0358	009	
	Dialer Option	0408	128	

Report Type		Location	Value
Open (Disarm)	Central Station Report Code	0359	011 _____
	Dialer Option	0409	128 _____
Open (Disarm) After Activation	Central Station Report Code	0360	011 _____
	Dialer Option	0410	128 _____
Close (Arm)	Central Station Report Code	0361	012 _____
	Dialer Option	0411	128 _____
Force Arm	Central Station Report Code	0362	012 _____
	Dialer Option	0412	128 _____
Control Low Battery	Central Station Report Code=	0363	008 _____
	Dialer Option	0413	129 _____
Control Battery Restore	Central Station Report Code	0364	009 _____
	Dialer Option	0414	129 _____
AC Fail	Central Station Report Code	0365	008 _____
	Dialer Option	0415	128 _____
AC Restore	Central Station Report Code	0366	009 _____
	Dialer Option	0416	128 _____
User Communicator Test	Central Station Report Code	0367	007 _____
	Dialer Option	0417	129 _____
Automatic Communicator Test	Central Station Report Code	0368	007 _____
	Dialer Option	0418	129 _____
Cancel	Central Station Report Code	0369	000 _____
	Dialer Option	0419	128 _____
Zone Bypass	Central Station Report Code	0370	013 _____
	Dialer Option	0420	128 _____
Zone Unbypass	Central Station Report Code	0371	014 _____
	Dialer Option	0421	128 _____
Day Zone Trouble	Central Station Report Code	0372	008 _____
	Dialer Option	0422	128 _____
Day Zone Trouble Restore	Central Station Report Code	0373	009 _____
	Dialer Option	0423	128 _____
Upload/Download Attempt	Central Station Report Code	0374	015 _____
	Dialer Option	0424	128 _____
Program Mode Entry	Central Station Report Code	0375	015 _____
	Dialer Option	0425	128 _____
Fail to Open	Central Station Report Code	0376	011 _____
	Dialer Option	0426	129 _____
Fail to Close	Central Station Report Code	0377	012 _____
	Dialer Option	0427	129 _____
Zone Open	Central Station Report Code	0380	000 _____
	Dialer Option	0430	000 _____
Zone Restore	Central Station Report Code	0381	000 _____
	Dialer Option	0431	000 _____
Tamper	Central Station Report Code	0382	008 _____
	Dialer Option	0432	128 _____
Tamper Restore	Central Station Report Code	0383	009 _____
	Dialer Option	0433	128 _____
Receiver Supervision Trouble	Central Station Report Code	0384	008 _____
	Dialer Option	0434	128 _____
Receiver Supervision Restore	Central Station Report Code	0385	009 _____
	Dialer Option	0435	128 _____

Glossary of Terms

Access code before arm: In this configuration, a full access code (arm/disarm code) must be entered to arm the system. Once armed, the system must be disarmed to allow a change from one arming mode to another.

Alarm cut off and reset: The system provides for an automatic reset (cut off high volume tones and system reset) in the range of 1 to 255 minutes.

Answer service override: For installations that use answering services provided by the phone company. Two separate calls must be made to the system for the panel to answer. On the first call, let the phone ring twice and hang up. Call a second time, and the panel will answer on the first ring and respond with an access confirmation tone.

NOTE: For remote phone access to work correctly, the panel must be wired for full phone line seizure using an RJ-31X connection.

After the system confirmation tone, enter a valid disarm code that is programmed for remote phone access within 15 seconds. The system will respond with system status. Remote phone access operates in the same manner as local phone access, however, all arming state changes are echoed over the inside house speakers. During remote phone access, local phone access is unavailable and all local phones will receive a system beep every second signifying remote phone access is active.

NOTE: Some electronic phone systems use the * and # keys for additional functions. It may be required that the * and # are pressed twice for the system to generate the * or # tone.

Answer service time: This option is active only when Answer Service Override is enabled. This value determines the amount of time the panel will wait for a second call after hearing two rings on the first call.

Answering Machine Override Digit: If an answering machine is used on the same phone line as the control panel, the answering machine override feature in the panel must be used. Once the answering machine answers the line, enter the override digit. The system will respond with an access confirmation tone.

Auto. EML/LTM clear: All selected alerts that are sent to Event Memory Log and Long Term Memory are cleared every 96 hours.

Automatic force arm: Without this option enabled, if a user attempts to arm the system with a zone open, the system will respond with "ZONES OPEN". The user can then "force arm" around the open zone. This temporarily bypasses the zone until the zone is closed. If this option is enabled, the open zone will automatically be temporarily bypassed (force armed) on the first key press. The user is never notified that zones are open unless system status is requested. Automatic force arm is not permitted in a UL installation.

Battery trouble: If the backup battery is under 10 volts, low battery can be displayed at the keypad and / or sent to the central station. This option must be enabled in a UL installation.

Burg tone before speech: The length of time the system will create a burglary tone before speech.

Button Functions:

These are activations that are controlled by portable transmitters and/or key combinations on keypads.

Silence Day Zone: Cancels a day zone and extended monitor activation.

Speak Long Term Memory: The system maintains a long term alarm memory for all alert activations. This is useful for identifying zones that cause the system to go into alarm. The zone activations can be retrieved by entering a valid user code followed by the 8 key. The system will speak up to 8 alert activations in order starting with the most recent.

Speak Status: Speak current system status.

Speak Time: Assign to a key to speak system time.

Toggle Monitor: Toggle the monitor mode.

24 Hour Emergency: Initiate an emergency alarm.

Trigger a Relay: Sends on/off command to relay from a portable transmitter or keypad.

24 Hour Fire: Initiate a fire alert activation.

24 Hour Panic: Initiate a panic activation.

24 Hour Silent: Initiate a silent alarm activation.

Extended Monitor: Toggle Extended Monitor on/off

Enter Bypass Mode: Places the system in Bypass Mode. This function is only to be used with keypads and phone.

Set Time: Places the system in Set Time mode. This function is only to be used with keypads.

Step Arming: Each time a step arming button is depressed, the system steps the arming stage in order between the following stages. Starting with the system disarmed, the first press will arm the system to AWAY. A second press, before exit delay time expires, will arm the system to HOME. A third press, or a second press after exit time has expired, will disarm the system. Arming to Night is not available with step arming. Even if force arming is not programmed, the system will always force arm any open zones when step arming is used. Step arming is not permitted in a UL installation.

Arm to AWAY/HOME: Force Arms (even with force arming disabled) the panel to AWAY or HOME.

Disarm: Disarms the panel

Bypass Mode: To bypass individual zones, enter a valid full function code followed by the 9 digit. The system will speak "BYPASSED MODE, ENTER ZONE NUMBER." Press a two-digit zone number (leading zero if necessary). The current bypass state of the zone is spoken. Pressing A toggles the bypass status (confirmed in speech). Pressing H exits bypass mode. To unbypass all bypassed zones, enter 00 as the two-digit zone number.

The following are system operation notes relative to bypass:

1) Bypassed zones will display open/close if programmed to do so.
2) Bypassed zones that show as open are ignored for purposes of forced arming.
3) No monitor speech or beep or alarm activation will occur for a bypassed zone.
4) Only zones that exist in the system can be bypassed. The system will issue 3-beeps if an invalid zone number is entered.
5) Fire zones and disabled zones cannot be bypassed.
6) As a programmable option, any bypassed zone will automatically unbypass the next time the system is disarmed. If this option is not programmed, bypassed zones will remain bypassed until they are manually unbypassed.

Bypassing is not permitted in a UL installation.

Callback Wait Duration: The amount of time the panel will wait after a digital communication for the central station to call during a two-way callback session.

Central Station Account: Each phone number has an account number associated with it. You may use a 3- or 4-digit account number. If Ademco Contact I.D. is being used as the reporting format, a 4 digit account number must be used. The system allows additional characters as follows:

Hexadecimal Digit	# or H Followed By
B	1
C	2
D	3
E	4
F	**5**

Central Station Handshake: This location determines the amount of time the communicator will wait for a central station receiver digital handshake.

Central Station Number: Space is provided for two 16-digit phone numbers. These numbers are programmed as normally dialed. To enter communicator phone numbers, enter the appropriate 9000 location and enter the number. The system places the numbers in the appropriate locations. There are characters that are available in the dialing string that are not found on the keypad. The chart below explains how to enter additional functions:

Dialing Feature	# or H Followed By
Dial *	1
Dial #	2
Wait for second dial tone	3
3 second pause in dialing sequence	4

After the number is entered, press # or H key twice to save. Pressing the * or A key at any time during phone number will clear all digits that have been entered.

Changing User Codes: To change user code, in keypad mode, enter a full function user code (default user 1 is 1,2,3,4), followed by the 7 digit. The system will speak "ENTER USER NUMBER." Press the 2-digit number (01-08) for the user code you wish to change. You will then hear "ENTER CODE (the number you selected)". The next four digits pressed will be the new code. After the fourth digit, the system will speak "EXIT".

Clear EML and LTM: The Event Memory Log and Long Term memory can be cleared by entering 9898.

Clear Keypad Status: Under very unusual circumstances, a keypad may not receive a transmission from the control panel resulting in a status message not being cleared. This command clears all status messages at the keypad.

Clear User Codes: This location will erase user codes 2 through 8.

Delay Before Dial: For both phone numbers, the system will wait a programmed time period (1 to 255 seconds) after activation before dialing the central station. If a value of 000 is programmed, the communicator is disabled. If an alarm activation occurs and the system is disarmed before the delay expires, the system will not communicate to the central station. Valid delay values are 1-255 seconds.

Dial Alternate Number: If only one phone number is selected and the system is unable to communicate, the system will try to contact the second number.

Dial Attempts: This option controls the maximum number of times the communicator will attempt to call the central station. If the communicator is unable to connect with a central station, the system will either stop dialing or begin dialing an alternate phone number. The system can be programmed to show communicator trouble at the keypad if all dialing attempts are unsuccessful. A communicator trouble condition will automatically clear from the keypad the next time the system is armed.

Dial Phone Number 1: This option tells the control panel to always call phone number #1 if the corresponding zone type is the cause of an activation.

Dial Phone Number 2: This option tells the control panel to always call phone number #2 if the corresponding zone type is the cause of an activation.

Dialer Option: Each zone is individually programmed to report to the central station as well as each zone type. If a zone is programmed to report to the central station and the zone type is disabled or only programmed to report to the event memory log, the zone will NOT be reported to the central station.

Direct Connect: Used with the PC software. Connect the modem to the panel's R and T terminals. Activate the direct connect option in the PC software and with the control panel in program mode, enter 9952.

Disable Force Arming: When this option is programmed, the system will not arm if zones are open unless the system is armed from an Arm/Disarm zone input. This option must be enabled in a UL installation.

Disappearing Activations: User codes 2-8 can be programmed as disappearing codes. A disappearing code remains active for the number of times programmed in location 0129. When a code becomes inactive, a user can reset the disappearing counter by changing the disarm code.

Disarm Before Rearm: With this option selected, the system can only be armed from AWAY to HOME after disarming and vice versa. This prevents an intruder from turning off interior protection if they are able to circumvent perimeter protection.

Display Open at Keypad:	Used to show when specified zones are open. Typically, all internal zones (PIR's, Smoke Detectors) are **not** programmed to show status at the keypad. This prevents constant STATUS light flashing. External zones (windows, doors) should be programmed to show status so the user is updated to all perimeter changes. Zones that are programmed not to show open at the keypad are not included in the monitor mode, unless extended monitor is used. This programming option does not affect opening (disarming) and closing (arming) reports to the central station.
Duration Between Pre-alarm Cycles:	The length of time the system pauses before saying "Entry Detected." The shortest time period is three seconds (000). Any value in this location is added to the default 3 seconds.
Duress:	When this option is enabled, the user code will issue a silent duress code to the central station.
Duration Between Fire, Tamper, Trouble Chirps:	For zone trouble, transmitter tamper, or a fire zone trouble condition, a supervisory beep will be sounded at intervals determined by this time. For all activations except the fire chirp, the tone can be silenced by checking status. Valid times are from 1 to 255 seconds. If a value of 000 is programmed, this feature is disabled. This feature must be enabled in a UL installation
Duration for Recognition of AC Power Loss:	For systems with a back up battery, the system can determine when AC power is lost. This location determines the time period in minutes before the system will recognize the power loss and speak "POWER OFF." If the communicator is programmed, it will send a report to the central station. Valid AC power loss recognition times are from 1 to 255 minutes. This feature must be enabled in a UL installation
Echo Communicator:	To listen to the communicator transmission through the inside speaker, enter 9960 while in program mode. Each communication will be heard over the inside speaker. When testing is complete, return to programming mode and enter 9960 to turn off the communicator monitor feature. Communicator monitor automatically turns off when the panel is turned off or when the two-way voice circuit becomes active. Whenever possible use the communicator monitor feature instead of a telephone butt set. The panel's phone circuit is very sensitive to loading. A good test to attempt when experiencing communicator difficulties is to remove all connections from R1 and T1 and connect only the panel to R and T. This ensures a good phone connection and can help isolate troublesome connections.
Echo local Phone Speech:	When local (in house) phones are used as keypads, system speech is typically only heard through the phone. With this option selected, system speech will be heard through the inside speaker as well as the phone.
Enable Night mode:	With this option selected, the system can be placed into Night mode. When the system is armed to HOME, press the H or # key. When armed to Night mode, both the AWAY and HOME LED's on the keypad will be lit, the entry delay doors become instant and interior delay #2 zones are active. To exit Night mode, disarm or press the H or # key to return to HOME mode.

Enable Two-way Callback: For this option to be used, at least one activation must be programmed to enable two-way voice/listen-in with the central station. After the digital communication, with this option enabled, the system will hang up and wait for the programmed time in location 0461 for a call back from the central station. The dialer LED will blink while waiting for the return call. The system will answer after the first ring and will automatically be in two-way with listen-in or will issue three beeps requesting a valid access code. If this option is not programmed, the system will hold the line after the kiss-off tone and will be in two-way listen in mode. See the "Communicator" for two-way callback options. Two-way callback is not permitted in a UL installation. To enable two-way callback refer to System Options Group 3.

Enable Two-way Voice: This enables two-way voice to be used after the digital communication to the central station.

Enter Time: The panel will prompt for a 4 digit time (use a leading 0 for times under 10:00), followed by a prompt for AM or PM. The next prompt is for the day of the week (1-Sunday, 2-Monday, 3-Tuesday, 4-Wednesday, 5-Thursday, 6-Friday, 7-Saturday). Enter a two digit month, two digit date and two digit year.

Enter zone Description: This location provides a method for adding up to a four word description for each zone in the system. The panel will prompt for a three digit zone number followed by prompts for 4 words. Enter the three digit value for the desired word. If programming fewer than 4 words or to exit, press H. Zone 29 will speak "power off" when AC power loss is detected, "control battery trouble" when a low battery is detected and "communicator fail" when there is a communicator failure.

Entry Delay 1 and 2: The system provides two different entry delay times for exterior and interior delay zone types. Each of these times is programmable from 1 to 255 seconds. Not to exceed 45 seconds in a UL installation.

Event Memory Log: The control panel has a built-in 80 event system memory log (EML) that can be retrieved manually with the upload/download software package or automatically by programming the control panel to call a computer with the upload/download software running in the automatic EML upload mode.

Exit Delay: An exit delay time may be programmed for 1 to 255 seconds. Not to exceed 60 seconds in a UL installation.

Exit Program Mode: Removes the system from program mode and places the system in keypad mode.

Extended Monitor KeyPad Display Time: This option determines the amount of time an extended monitor activation will remain in system status.

Extended Monitor A/B: With the system disarmed, entering a full function user code followed by the 3 or 4 digit, will place the system into extended monitor mode A or B. The system will speak "MONITOR ON" through the inside speaker. Entering a full function user code followed by 3 or 4 will clear any active extended monitor zones and stop the extended monitor beep or speech. The system will speak "MONITOR RESTORED." If the system is in extended monitor mode and there are no extended monitor zones active, entering a full function user code followed by 3 or 4 will take the system out of extended monitor mode. The system will speak "MONITOR OFF".

The enunciation feature of the control panel can be used to monitor exterior, interior, and follower zones. As an example, it may be desirable to monitor interior door activity of residents in a retirement home. Normal extended monitor activity is not sent to the central station. If a Day Zone causes an Extended Monitor activation when the system is not armed, a Day Zone Trouble can be sent to the central station.

There are two different levels or types of extended monitor, A and B. Locations 0177 and 0175 determine which zone types are to be monitored by each extended monitor type. Entering a full function user code followed by the digit 3 will place the system in extended monitor mode type A or enter the 4 digit for extended monitor type B. When entering extended monitor the system responds with "MONITOR ON" through the inside speaker.

NOTE: You can only enter the extended monitor mode when the system is disarmed. If the system is in extended monitor mode it will automatically exit that mode when the system is armed.

Fire Cut Off and Reset: The length of time the system will stay in alarm without a disarm before the system stops the sirens and waits for another zone activation. Fire cut off and reset is not permitted in a UL installation.

5 Day Cycle: The automatic arm/disarm feature will occur every day unless the 5 day cycle is included in the "Automatic Arm / Disarm" option. The 5 day cycle is Monday through Friday.

Force Arm w/ Open Zones: To automatically force arm around open zones, include force arm around open zones in the total for the "Automatic Arm / Disarm" option. If this option is not used the panel will not automatically arm if a zone is open.

Force Bypass-unbypassed: The option "zones bypassed by force arm auto unbypassed at disarm" is useful if the option "open zones automatically bypassed at force arm" is enabled. With both options set, all zones that are bypassed at force arm will be unbypassed when the system is disarmed. Bypass is not permitted in a UL installation.

Ignore Dial Tone: This removes the dial tone detect in the panel for cellular backup units that do not supply dial tone.

Key Combinations: The chart is used for setting custom key combinations. To change a key combination, select the column for the keypad and the desired key or combination. Enter the Key function in the location.

Local Telephones: Allows use of the code on in-house touch tone phones.

Local Phone Access Code: Code required to access the system from a local phone.

Master Functions: Adding this option allows a code to enter into bypass mode, extended monitor, change user codes, and activate smoke reset.

Monitor Trouble: The system can speak and indicate a high current situation, control low battery, and a failure to complete a digital communication as trouble conditions at the keypad. Entering 001 will enable speech and show the condition at the keypad while 000 disables this feature. This feature must be enabled in a UL installation

Multiple Reports: Multiple reports will be sent to the central station in one phone connection as opposed to hanging up and re-dialing for each report.

Mute External Speakers: This option sends all tones to the inside speaker and is adjustable with the inside speaker volume adjustment. The external speaker output is turned off. The main use of this feature is for testing alarm activations.

No Entry Delay in HOME: When enabled, this option will cause the exterior delay zones to become instant when e system is armed to HOME.

No Exterior Instant Exit Delay:	When enabled, this option will eliminate the exit delay on all exterior instant zones following arming to either HOME or AWAY.
No Program Mode:	With this option set, the system will not enter program mode with the panel armed.
Number of Activations for Auto-Bypass:	Zones can be automatically bypassed, if the zone causes multiple activations within a specified time frame (reset each time the system is armed). The number of activations and time period are programmable. Once a valid disarm code is entered, the bypassed zone will be unbypassed. A program value of 000 disables this feature. Automatic bypassing of zones is not permitted in a UL installation.
Off-hook Duration:	The system can be programmed to enter two-way after a digital communication. This location determines how long the system will hold the line without a valid two-way command before automatically dropping the line. Valid times are 000 - 255, 000 = 256 seconds.
Open zones Bypassed:	With open zones automatically bypassed at "force arm" enabled, zones are not force armed, they are bypassed. Therefore, if a zone is open and the system is force armed, the zone will remain bypassed even if the zone is closed. Without this option set, closing the zone will place the zone back into the system as a monitored input. Bypass is not permitted in a UL installation.
PC Access Code:	Code required for programming the panel via computer software.
Phone Inactivity Hang-up:	The amount of time the system will wait without activity before terminating the connection.
Phone Samples:	The built in phone monitor circuit can be adjusted based on the installation location. Every four seconds the phone line is sampled, this option determines the number of samples needed for the panel to determine that a valid phone line has been connected or removed. In locations subject to brief phone outages use a higher number, in locations that have reliable phone service use a lower number. The default 6 works best in most applications.
Program Access Code:	Code required to place the system into program mode.
Program Inactivity:	The amount of inactivity time before the system exits program mode to keypad mode.
Program Code Options:	Works the same as user code options but applies to the program mode access code.
Record in EML:	The system contains a 80 Event Memory Log (EML). Reports that are sent to the central station are available to be sent to the EML. Even if a report is not programmed to be sent to the central station it may still be programmed to be sent to the EML. Each report code can be recorded in the EML by adding the 128 value in the dialer option. The only method for retrieving the EML is with the PC based programming software. Once the EML reaches 80 events, all new events push out the oldest event. The EML can be cleared by entering 9898 from the keypad or phone while in program mode.
Remote Telephone:	Allows use of the code from any off site touch tone phone.
Removing User Codes:	Follow the user code sequence and press the A key when prompted for the user code. NOTE: Code 1 cannot be removed; only changed.

Report Code: All events that initiate a communicator report are associated with a report code (based on zone type) that appears at the central station. Each report code can be defined for all report types except Contact ID. When Contact ID is used, no programming is required. The following abbreviations are used in the "Ademco Contact ID Codes" Chart:

Z - Zone (up to 3 digits)
U - User number
E - Event or open
R - Restore or close

Reporting Formats:

Ademco Contact ID: A DTMF based reporting format. If this format type is enabled, it is not necessary to program report codes. It is still necessary to program the dialer options.

3/1 format: Communication format consisting of a 3 digit account number followed by a single digit (hexadecimal) activation type.

4/2 format: Communication format consisting of a 4 digit account number followed by a two digit (hexadecimal) activation type.

4/2 extended format: Communication format consisting of two lines of information: line 1: 4 digit account number followed by a two digit (hexadecimal) activation type. line 2: Last digit from line 1 repeated 4 times followed by a two digit (decimal) zone number.

4/1/1 format: Communication format consisting of a 4 digit account number followed by a single digit (hexadecimal) activation type and a single digit (hexadecimal) zone number (15 max). Zones above 15 are reported as "F."

RF Strength Mode: This mode reduces the sensitivity of the receiver and speaks the serial number for all 5800 signals.

Report to Central Station: Programs a zone to activate a digital communication to the central station if the zone is the cause of an alert condition.

Rings for Phone Pickup: This location determines the number of rings before the panel answers the phone. Installations with an answering machine should be programmed with a longer ring count than the answering machine.

Sescoa Fast: Sescoa, Acron, Vertex, DCI, Franklin - 2300Hz handshake/kiss-off, 1800Hz data transmission, 30/20 millisecond tone (20 baud), 800 millisecond inter-digit delay

Secured Access Code: Code required for a central station to access the panel during two-way callback if the secured callback option is selected.

Send Close Report: Each time the code is used for arming a report is sent to the central station and/or the event memory log depending on the Close Report dialing options.

Send Open Report: Each time the code is used for disarming a report is sent to the central station and/or the event memory log depending on the Open Report dialing options.

Set Time and Date:	After entering 9991 the system will prompt "Enter Eleven." The time, day, and date are entered in the following format HHMMWMMDDYY. HHMM - Military time, if the hour value is less than 10 use a leading zero. W - Day of the week: 1-Sun 2-Mon 3-Tue 4-Wed 5-Thr 6-Fri 7-Sat. MM - Month. Months less than 10 use a leading zero. DD - Date. Days less than 10 use a leading zero. YY - Enter the last 2 digits of the year.
Signal End of Exit Delay:	With this option, the system will speak "EXIT IS OVER" when the exit delay time has expired after arming. The system will also speak "EXIT IN (number of seconds remaining in exit delay)" every 10 seconds. NOTE: Exit delays greater than 90 seconds are not enunciated until 90 seconds remain in the exit countdown.
Silence Inside Speaker in HOME/Night mode:	With this option selected, status, keypad echo and pre-alarm sounds to the inside speakers will be silenced when the system is armed to HOME or Night. Alarm activations will continue to sound. This option may be used in a home where someone is often coming home late at night and they do not want to disturb others when they arrive. This feature is not permitted in a UL installation.
Silent Knight Fast:	Silent Knight Fast - 1400Hz handshake/kiss-off, 1900Hz data transmission, 40/30 millisecond tone (15 baud), 560 millisecond inter-digit delay
Silent Knight Slow:	Silent Knight, Ademco, Vertex, Adcor - 1400Hz handshake/kiss-off, 1900Hz data transmission, 51/49 millisecond tone (10 baud), 600 millisecond inter-digit delay
Smoke Reset:	Enter a full function user code followed by the 6 digit to reset hardwire smoke detectors. Power to the smoke detectors is momentarily interrupted allowing them to reset. The system will speak, "SMOKE POWER" and activate the auxiliary relay if the system trigger Smoke Power is assigned to output 8 (auxiliary relay) .
Speak Account Number:	Speaks programmed account number.
Speak Alert Memory:	To hear all activations stored in LTM enter a full function code followed by the 8 key. The LTM will be spoken in order starting from the most recent activation. If there are no activations stored, the system will speak, "NO ALARM ENTRY". LTM and EML can be simultaneously cleared by entering 9898 in program mode. LTM will store 8 activations. If there are more than 8 activations, the oldest will drop off leaving room for the most recent.
Speak Auxiliary Zone Type:	When this option is programmed and "Show open status at the keypad" is selected for an auxiliary zone type, the system will speak the zone description when the zone is opened.
Speak Extended Monitor:	When this option is programmed, during an extended monitor the system will repeatedly speak the zone description instead of activating a series of beeps.

Speak Phone Number: To confirm programmed phone numbers, Enter the appropriate 9000 location and the number will be spoken. Special dialing feature codes will be heard as follows:

Dialing Feature	Spoken As
Dial *	Star
Dial #	Pound
Wait for second dial tone	Tone
3 second pause in dialing sequence	Pause

Speak Pre-alarm: When this option is selected the system will repeat "ENTRY DETECTED" followed by a zone description during pre-alarm in place of a low volume siren tone.

Speak Selected Word: This is used to play a specific word from the vocabulary.

Speak Software Revision: As dealers present ideas for new control panel options, the software is updated. Although all software is labeled, this location verifies the software revision number.

Speak System Status: When this option is selected, the system speaks status through the inside speaker or over the phone three seconds after pressing the first digit of a disarm code.

Speak Time and Date: With this option enabled, the system will speak time and date whenever a user requests time (user code followed by 1).

Speak Zone Description: This routine prompts for a three digit zone number. The system speaks the description associated with the selected zone. Zone 29 contains fixed words that are spoken when there is an AC power loss, low battery and communicator failure.

Status on Local Phone: With this option selected the system will speak the system status instead of the acceptance tone when you access the system from local phones.

Suppress Dialing During Two-way Callback: With this option set, the panel will only send new activation information to the central station after a two-way callback call is complete. If this option is not set, a two-way session can be terminated by the panel to allow additional information to be sent. Two-way callback is not permitted in a UL installation.

Suppress Monitor: This option will prevent a zone from being enunciated when the system is in monitor mode.

Suppress Open: This option will prevent the system from speaking the word "OPEN" at the end of a zone description. This is useful when the object being monitored does not have an open or closed state such as a driveway motion detector.

Suppress Siren: This option will cause a zone that normally produces an audible activation to produce a silent alarm. The activation appears in system status, however no audible indication is given.

3 Digit Disarm Code: This is a global option that converts all access codes to 3 digits instead of the traditional 4 digits.

Time Between Beeps: When using the extended monitor mode as an enunciator, you may wish to have audible indication as well as visual. The extended monitor speech or beep will sound at intervals determined by this time. Valid times are from 1 to 255 seconds. If a value of 000 is programmed, NO speech or beep will be heard.

Time Frame for Bypass: The amount of time the activations must occur within before a zone is automatically bypassed. Automatic bypassing of zones is not permitted in a UL installation.

Touch Tone / Pulse: This location determines the type phone service the panel uses for dialing. Program 000 for touch-tone or 001 for rotary.

Track Activations: With this option enabled, each individual zone activation will be written to long term memory as opposed to only the zone activation that created the alarm. For example, the back door causes an activation, then a passive infrared zone detects motion and then the front door opens. With this option enabled all of the activations will be written to memory versus only the back door. In addition, as each zone is violated the speech driver will speak the most recent zone violated as opposed to only the initial zone. Regardless how this option is programmed, each zone will be reported to the central station.

Triggers: Each trigger can send an on/off command during activation or restore. The trigger descriptions (below) specify activation and restore conditions. Enter the total of the appropriate options in the option location for each used trigger.

Any Alarm Activation: Activates the specified output during all alarm activations. The output is restored after disarm and at alarm cutoff and reset.

Burglary: Activates the specified output during all burglary activations. The output is restored after disarm and at alarm cutoff and reset.

Fire Output: Activates the specified output during all fire activations. The output is restored after disarm and at alarm cutoff and reset.

Panic: Activates the specified output during all panic activations. The output is restored after disarm and at alarm cutoff and reset.

Silent Panic: Activates the specified output during all silent panic activations. The output is restored after disarm and at alarm cutoff and reset.

Pre-Alarm: Activates the specified output during pre-alarm. The output is restored after disarm or an activation.

Extended Monitor: Activates the specified output during an extended monitor activation. The output is restored when the extended monitor expires.

Remote Phone Access: Activates the specified output when remote phone access is active. The output is restored when the remote phone access ends.

Emergency: Activates the specified output during all emergency activations. The output is restored after disarm and at alarm cutoff and reset.

Arm to HOME: Activates the specified output when the panel is armed to HOME. The output is restored after disarm.

Arm to AWAY: Activates the specified output when the panel is armed to AWAY. The output is restored after disarm or a change to a different arming state.

Arm to NIGHT: Activates the specified output when the panel is armed to NIGHT. The output is restored after disarm or a change to a different arming state.

Arm to HOME or AWAY: Activates the specified output when the panel is armed to HOME or AWAY. The output is restored after disarm.

Disarm: Active when the panel is disarmed. The output is restored when the panel is armed.

Access Code Entered: Output is activated when an access code is entered. There is not an event that restores the output , it is recommended to only use this trigger with channels programmed to automatically turn off.

Alert: Activates the specified output during all alarm activations. The output is restored after the alert status is cleared from the keypad.

Loss of Phone Line: Activates the specified output when a loss of phone line is detected. The output is restored when the phone line is restored.

Duress Disarm: Activates the specified output when a duress disarm occurs. There is not an event that restores the output, it is recommended to only use this trigger with channels programmed to automatically turn off.

Duress When Not Armed: Activates the specified output when a duress occurs when the system is not armed. There is not an event that restores the output, it is recommended to only use this trigger with channels programmed to automatically turn off.

AC Fail: Activates the specified output when power loss occurs. The output is restored when power is restored.

Two-Way Voice: Activates the specified output when two-way voice is active. The output is restored when two-way voice ends.

Smoke Reset: Activates the specified output when smoke reset occurs. The output is restored when smoke reset ends.

Speech Activation: Activates the specified output when the system is speaking. The output is restored when the system stops speaking.

Ring Detect: Activates the specified output when the phone rings. The output is restored when the phone stops ringing.

House Phone Off Hook: Activates the specified output when a house phone is off hook. The output is restored when the phone is hung up.

Communicator Fail: Activates the specified output when the panel in unable to communicate with a central station receiver. The output is restored after the next valid transmission.

Trigger a Relay: Activates the specified output when triggered by a portable transmitter or keypad button. The output is restored by toggling the button used for activation.

Two Way Callback:

Central stations that do not support two-way voice after a communicator transmission may require two-way callback. With this option enabled (System Option Group 3) the control panel will wait a programmed period of time (0461) after a digital communication for the central station to call. Two-way voice is not permitted in a UL installation.

There are three security options associated with two-way callback, one digit access, full code access, and entering 0 to exit to keypad mode. If either of the access code options are selected, the panel will answer the phone and play a repeated beep until a valid

code is entered or the two-way callback time expires. If neither code option is selected, the system will be in listen-in mode when the phone is answered. Without the "0 exits to keypad mode" options selected, the central station will not have access to keypad mode. Two-way key functions: It is not recommended to alter the telephone digit assignments for two-way voice, however, to conform to some central stations this process may be necessary. To reassign the assignments, place a 001 in location 0161. Each of the two-way functions are listed along with the digit assigned. By altering the location values, each function can be reassigned to a new key digit. Take care when altering key assignments not to program a single digit to have multiple functions. The system will only expedite one function per telephone digit. Two-way voice is not permitted in a UL installation.

Unattended Program Download: Used in installations where the programming for the panel is entered into the PC software prior to the installation of the control panel. The software is left in auto answer mode allowing the panel to call to PC, match numeric account numbers, and download the programming file. Use location 9909 to set the panel account number and enter the PC phone number in 9904 (shared with automatic EML upload) .
To initiate to automatic download sequence enter 9953.

Unbypass all Bypassed: This is a global option that allows all bypassed zones to become unbypassed each time the system is disarmed. Bypass is not permitted in a UL installation.

User Code Options: The locations below each user number control the capabilities of each code. Add the option values for each user and program the value in the appropriate location.

User Test Mode: A user Communicator test is integrated into the system to allow an end user to test the system on a regular basis. Enter a valid user code followed by the "0" digit. The system will speak "Enter User Test Mode." A User Communicator Test report is sent to the central station. WHILE IN TEST MODE THE SYSTEM CEASES TO BE A SECURITY SYSTEM. As each zone is tripped (including 24 hour zones) the system will speak the zone description followed by "active." After 3 minutes (programmable) the panel will automatically exit user test mode. To exit user test mode manually, enter a user code followed by the "0" digit.

User Test Timeout: Controls the amount of time before the User Test Mode will automatically time out.

Voice Driver: With this option selected, output to the speakers will alternate between siren tones and speech when there is a fire, burglary, emergency or panic activation. The system will say "FIRE, FIRE, REMAIN CALM, LEAVE IMMEDIATELY", "INTRUSION DETECTED, INTRUSION DETECTED", and "ALERT, ALERT". Not only will the type of activation be spoken, but also the description of the zone that caused it.

Voice Only Wait Period: Amount of time the system will wait for a valid code during a secured two-way callback or voice only session.

Wired/wireless Keypads: Allows use of the code on system keypads.

Zone Trouble Activation: This option applies only to supervised zones. With this option enabled, all trouble conditions are treated as an activation when the system is armed.

Zone type assignment: **Auxiliary:** Auxiliary zones are non-burglary zones designed to provide an automation, information, or service input to the system. This zone type does not activate an alarm even when the system is armed. When monitor mode is active, the zone is programmed to show open/close status at keypad and speak auxiliary zone type (System Option - Group 5, option 001) is enabled, the system will speak the zone description or sound a monitor beep when the zone input is activated. An auxiliary zone can be programmed to alert the central station.

Day: When the system is not armed a Day zone will cause an Extended Monitor activation and can send a Day Zone Trouble report to the central station. When the system is armed a Day Zone will act like an Exterior Instant. A day zone extended monitor activation can be cancelled with the "Silence Day Zone" button function.

Emergency: Emergency zones respond though inside speakers only. The alert consists of a pulsed tone followed by "ALERT, ALERT", and the up-to-four-word description of the zone.

Exterior Instant: Exterior instant zones instantly sound an alarm when the system is armed to HOME, AWAY or NIGHT. When the system is not armed, monitor mode is active, and the zone is programmed to show open/close status at the keypad, the system will speak the zone description or sound a monitor beep when the zone input is activated. Exterior Instant zones can be programmed to sound an alarm when the input is activated during an exit delay (System Options - Group 2, option 008). Otherwise, the exterior instant zone will respond in the same manner as when the system is not armed.

Exterior Delay #1: Tripping an exterior delay input places the system into a pre-alarm mode if the system is armed to AWAY or HOME (unless "No entry delay for Exterior Delay #1 in Home" is selected in System Options - group 2). The system refers to entry delay time #1 to determine the pre-alarm duration. If pre-alarm expires without a user entering a valid disarm code, the system will sound an alarm. When the system is not armed, monitor mode is active, and the zone is programmed to show open/close status at keypad, the system will speak the zone description or sound a monitor beep when the zone input is activated. During an exit delay, Exterior Delay zones respond in the same manner as when the system is not armed. In Night mode, this zone type acts an exterior instant.

Exterior Delay #2: Same as above but uses programmable entry delay time #2.

Fire: Fire zones respond with short high volume tones over the internal and external speakers. The system will alternate between the tones and speaking "FIRE, FIRE," followed by the up-to-four-word zone description, and "REMAIN CALM, LEAVE IMMEDIATELY."

Follower: An interior follower zone is active in the AWAY mode only. A follower acts as an instant zone providing an exterior delay zone is not previously tripped. When the system is in pre-alarm, the follower follows the pre-alarm time. No monitor function is provided and during an exit delay, an opening is ignored.

Interior Instant: The interior instant zones are active in the AWAY mode only. No monitor function is provided for interior zones (except during extended monitor). During an exit delay, an opening is ignored.

Interior Delay #1: Same as Exterior Delay #1 except active only in AWAY mode and no monitor is provided.

Interior Delay #2: Same as Exterior Delay #2 except active only in AWAY and NIGHT mode and no monitor is provided. Uses delay time #2.

Panic: Panic zones respond with a high volume alert on both the internal and external speaker. The alert consists of a pulsed tone followed by "ALERT, ALERT", and the up-to-four-word description of the zone.

Silent Panic: Silent panic zones respond by activating the communicator. An activation appears in system status, however, no audible indication is given.

Step Arming: The arm/disarm zone type is used for momentary arming inputs such as a keyswitch or touchpad. Each time the zone is closed the system moves in order between the following stages. Starting with the system disarmed, the first momentary closure will arm the system to AWAY. A second momentary closure, before exit delay time expires, will arm the system to HOME. A second closure after exit time has expired, will disarm the system. Arming to NIGHT is not available if an arm/disarm zone is used. Even if force arming is not programmed, the system will always force arm any open zones when an arm/disarm zone is used. This option is not permitted in UL installations.

FEDERAL COMMUNICATIONS COMMISSION (FCC) PART 15 STATEMENT

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

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause Interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user or installer may find a booklet titled "Interference Handbook" prepared by the Federal Communications Commission helpful: .This booklet is available from the U.S. Government Printing Office, Washington, DC 20402.

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

FEDERAL COMMUNICATIONS COMMISSION (FCC) PART 68 STATEMENT

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

This equipment uses the following jacks:

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

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

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

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

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

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

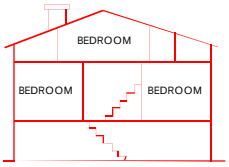
This equipment cannot be used on telephone company-provided coin service. Connection to Party Line Service is subject to state tariffs.

This equipment is hearing-aid compatible.

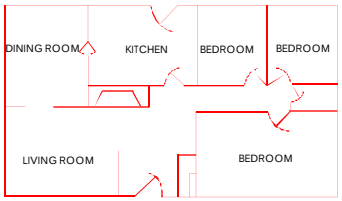
When programming or making test calls to emergency numbers, briefly explain to the dispatcher the reason for the call. Perform such activities in the off-peak hours; such as early morning or late evening.

INSTALLATION LAYOUT

Early warning fire detection is best achieved by the installation of fire detection equipment in the location as follows:



In homes with more than one sleeping area a smoke detector should be provided to protect each area.



A smoke detector shall be located between the sleeping area and the rest of the house.
- Refer to N.F.P.A. #74 Appendix B-1.1 thru B-10.

Preparation of an evacuation plan Is of prime importance in fire prevention. Establish a household emergency evacuation plan in the event of fire. Refer to the Smoke Detector instructions (or exact mounting, layout and spacing.

1 - Evaluate possible escape routes from your home.
2 - Select 2 escape routes from each room.
3 - Rooms on the second floor should have a rope ladder Be sure it will reach the ground.
4 - Draw a sketch of your escape plan so everyone is familiar with it.
5 - Practice your escape plan to assure that everyone knows what to do.
6 - Establish a meeting place outside where your family is to report. Once you have evacuated, the house do not return to a burning house.
7 - Advise the local fire authority that you have installed a fire alarm system.
8 - When the fire alarm signals, LEAVE IMMEDIATELY. Do not stop for belongings.
9 - If a fire occurs, test the door. If hot, use your alternate route. If the door is cool, brace your shoulder against it and open it cautiously. Shut the door to help prevent the fire and smoke from spreading. Crawl through smoke, holding your breath.
10 - Contact the Fire Department from a neighbor's telephone.
11 - Everyone including neighbors should be familiar with the Fire and Burglary signals

SYSTEM TESTING

This control unit was manufactured under rigid quality standards. Maintenance is best performed by your installing company with trained service personnel.

Installing Company: _____
Telephone Number: _____

It is recommended that you test your system once a week using the following procedure:
* Note: If your system Is monitored by a Central Station then contact them prior to performing this test.

1-Arm your security system.
2-Activate the system by opening a protected zone (example, window or door).
3-Confirm that the alarm sounding device (bell or siren) activates.
4-Disarm the system to silence the system and return to normal status.

In order to test the backup battery the following procedure should be performed;

1 - Remove the AC transformer from the AC outlet by removing the restraining screw which secures the transformer to the wall. (Note: the screw is not present in models sold in Canada).
2 - Observe that status light flashes on the keypad.
3 - Activate your alarm system using steps 1-4 listed above.
4- Replace the AC transformer to the AC outlet and secure using the retaining screw (Note: The retaining screw is not present in models sold in Canada).

The National Fire Protection Association publishes a standard for household fire warning equipment. N.F.P.A. #74. Further Information can be obtained by contacting; NEPA Public Affairs Dept., Batterymarch Park. Quincy, MA 02269.

If you have any further questions about the operation of your system, call your installer.

WARNING
THE LIMITATIONS OF THIS ALARM SYSTEM

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

- *** Intruders may gain access through unprotected openings or have the technical sophistication to bypass an alarm sensor or disconnect an alarm warning device.**
- ***Intrusion detectors (e.g., passive infrared detectors), smoke detectors, and many other sensing devices will not work without power. Battery-operated devices will not work without batteries, with dead batteries, or if the batteries are not put in properly. Devices powered solely by AC will not work if their AC power supply is cut off for any reason, however briefly.**
- ***Signals sent by wireless transmitters (used in some systems) may he blocked or reflected by metal before they reach the alarm receiver. Even if the signal path has been recently checked during a weekly test, blockage can occur if a metal object is moved into the path.**
- ***A user may not be able to reach a panic or emergency button quickly enough.**
- ***While smoke detectors have played a key role in reducing residential fire deaths in the United States, they may not activate or provide early warning for a variety of reasons in as many as 35% of all fires, according to data published by the Federal Emergency Management Agency. Some of the reasons some 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 a 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 an the nature of the fire, and/or location of the smoke detectors, the detector, even if it operates as anticipated, may not provide sufficient warning to allow all occupants to escape in time to prevent injury or death.**
- ***Passive Infrared Motion Detectors can only detect intrusion within the designed ranges as diagrammed in their installation manual. Passive Infrared Detectors do not provide volumetric area protection. They do create multiple beams of protection, and intrusion can only be detected in unobstructed areas covered by those beams. They cannot detect motion or intrusion that takes place behind walls, ceilings, floors, closed doors, glass partitions, glass doors, or windows. Mechanical tampering, masking, painting or spraying of any material on the mirrors, windows or any part of the optical system can reduce their detection ability. Passive Infrared Detectors sense changes in temperature; however, as the ambient temperature of the protected area approaches the temperature range of 90 to 105F (32 to 4OC), 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, that 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 protest themselves from the emergency situation. In the case of a monitored alarm system, authorities may not respond appropriately.**
- ***This equipment, like other electrical devices, is subject to component failure. Even though this equipment is designed to last as long as 20 years, the electronic components could fail at any time.**

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

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

Installing an alarm system may make the owner eligible for a lower insurance rate, but an alarm system is not a substitute for insurance. Homeowner, property owners and renters should continue to act prudently in protecting themselves and continue to insure their lives and property.

We continue to develop new and improved protection devices. Users of alarm systems owe it to themselves and their loved ones to learn about these developments.

ADEMCO 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 product 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 Ademco Factory Service, 165 Eileen Way, Syosset, New York 11791.

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 the products it sells may not be compromised or circumvented; that the products will prevent any personal injury or property loss by burglary, robbery, fire or otherwise; or that the products will in all cases provide adequate warning or protection. Customer understands that a properly installed and maintained alarm may only reduce the risk of a burglary, robbery, fire or other events occurring without providing an alarm, 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 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 the obligations of this Limited Warranty is authorized.