

WARNING THE LIMITATIONS OF THE ALARM

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

- Intruders may gain access through unprotected openings or have the technical sophistication to bypass an alarm sensor or disconnect an alarm warning device.
- Intrusion detectors (e.g. passive infrared detectors), smoke detectors, and many other sensing devices will not work without power. Battery operated devices will not work without batteries, with dead batteries, or if the batteries are not put in properly. Devices powered solely by AC will not work if their AC power supply is cut off for any reason, however briefly.
- Signals sent by wireless transmitters may be blocked or reflected by metal before they reach the alarm receiver. Even if the signal path has been recently checked during a weekly test, blockage can occur if a metal object is moved into the path.
- A user may not be able to reach a panic or emergency button quickly enough.
- While smoke detectors have played a key role in reducing residential fire deaths in the United States, they may not activate or provide early warning for a variety of reasons in as many as 35% of all fires, according to some studies. Some of the reasons smoke detectors used in conjunction with this System may not work are as follows. Smoke detectors may have been improperly installed and positioned. Smoke detectors may not sense fires that start where smoke cannot reach the detectors, such as in chimneys, in walls, or on the other side of closed doors. Smoke detectors also may not sense a fire on another level of a residence or building. A second floor detector, for example, may not sense a first floor or basement fire. Moreover, smoke detectors have sensing limitations. No smoke detector can sense every kind of fire everytime. In general, detectors may not always warn about fires caused by carelessness and safety hazards like smoking in bed, violent explosions, escaping gas, improper storage of flammable materials, overloaded electrical circuits, children playing with matches, or arson. Depending on the nature of the fire and/or the 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 the 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 or 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 degrees to 150 degrees Fahrenheit, the detection performance can decrease.
- Alarm warning devices such as sirens, bells or horns may not alert people or wake up sleepers who are located on the other side of a closed or partly open doors. If warning device sound on a different level of the residence from the bedrooms, then they are less likely to waken or alert people inside the bedrooms. Even persons who are awake may not hear the warning if the alarm is muffled by noise from a stereo, air conditioner or other appliances, or by passing traffic. Finally, alarm warning devices, however loud, may not warn hearing-impaired people or waken deep sleepers.
- 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

- Even if the system responds to the emergency as intended, however, occupants may have insufficient time to protect themselves from the emergency situation. In the case of a monitored alarm system, authorities may not respond appropriately.
- This equipment, like other electrical devices, is subject to component failure. Even though this equipment is designed to last as long as 10 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 are working properly. Installing an alarm system may make one eligible for lower insurance rates, but an alarm system is not a substitute for insurance. Homeowners, property owners and renters should continue to act prudently in protecting themselves and continue to insure their lives and property.
- We continue to develop new and improved protection devices. Users of alarm systems owe it to themselves and their loved ones to learn about these developments.

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 36 months from the date stamp control on the product or, for products not having an Ademco date stamp, for 24 months from date of original purchase unless the installation instructions or catalogue sets forth a shorter period, in which case the shorter period shall apply. Seller's obligation shall be limited to repairing or replacing, at its option, free of charge for materials or labor, any part which is proved not in compliance with Seller's specifications or proves defective in materials or workmanship under normal use and service. Seller shall have no obligation under this Limited Warranty or otherwise if the product is altered or improperly repaired or serviced by anyone other than Ademco factory service. For warranty service, return product transportation prepaid, to any Ademco Registered Office in Australia.

THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF, IN NO CASE SHALL SELLER BE LIABLE TO ANYONE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, OR UPON ANY OTHER BASIS OF LIABILITY WHATSOEVER, EVEN IF THE LOSS OR DAMAGE IS CAUSED BY THE SELLER'S OWN NEGLIGENCE OR FAULT.

Seller does not represent that its product may not be compromised or circumvented; that the product will prevent any personal injury or property loss by burglary, robbery, fire or otherwise; or that the product will in all cases provide adequate warning or protection. Buyer understands that a properly installed and maintained alarm may only reduce the risk of a burglary, robbery or fire without warning, but it is not insurance or a guarantee that such will not occur or that there will be no personal injury or property loss as a result. CONSEQUENTLY, SELLER SHALL HAVE NO LIABILITY FOR ANY PERSONAL INJURY, PROPERTY DAMAGE OR OTHER LOSS BASED ON A CLAIM THE PRODUCT FAILED TO GIVE WARNING. However, if Seller is held liable, whether directly or indirectly, for any loss or damage arising under this Limited Warranty or otherwise, regardless of cause or origin, Seller's maximum liability shall not in any case exceed the purchase price of the product, which shall be the complete and exclusive remedy against Seller. This warranty replaces any previous warranties and is the only warranty made by Seller on this product. No increase or alteration, written or verbal, of this limited warranty is authorized.

ADVANTAGE **SERIES**

4115 **INSTALLATION** **INSTRUCTIONS**

**A complete ADVANTAGE Technical Reference
Manual that can unlock the full power of
the ADVANTAGE System is available.
See inside front cover for more
information.**

ADEMCO AUSTRALIA

Revision 6/93 V2
Applicable to Rev 4.00 or higher

ZONE TYPE DEFINITIONS

Each zone must be assigned a zone type, which defines the way in which the system responds to faults in that zone. In addition, there are three keypad activated zones (PANIC keys).

TYPE 1: ENTRY/EXIT #1

Used for the primary entry/exit route (eg: front door, main entrance).

TYPE 2: ENTRY/EXIT #2

Used for a secondary entry/exit route (eg: Garage door, loading dock door, back door), where more time might be needed to get to and from the console. Entry/Exit #2 must be of a greater duration than Entry/Exit #1.

TYPE 3: PERIMETER BURGLARY

Used for exterior doors and/or windows which require an instant alarm when faulted.

TYPE 4: INTERIOR BURGLARY (FOLLOWER)

Used for areas where an entry delay is required only if an entry/exit delay zone is faulted first.

TYPE 5: DAY/NIGHT BURGLARY

Used for zones which contain a fire door or a window (such as in a store), or to a zone covering a sensitive area such as a stock room, drug supply room, etc., or other controlled access area where immediate notification or an entry is desired.

TYPE 6: 24 HOUR SILENT ALARM

This zone type is generally assigned to a zone containing a Hold-up or Panic button that is designed to initiate an alarm report to the Central Station, but which produces no visual displays or alarm sounds (eg: banks, jewellery counters).

TYPE 7: 24 HOUR AUDIBLE

This type is also assigned to a zone containing a Panic button, but which will initiate an audible alarm in addition to an alarm report to the Central Station (eg: bedside panic).

TYPE 8: 24 HOUR AUXILIARY

This type maybe assigned to a zone containing a button for use in personal emergencies or to a zone containing monitoring devices such as water sensors, temperature sensors, etc. Designed to initiate an alarm report to the Central Station and only provides Console alarm sounds and displays.

TYPE 9: SUPERVISED FIRE

Used for zones containing smoke detectors, heat detectors, pull stations, etc. An open in this zone will initiate a trouble signal. A short in this zone will initiate a fire alarm (pulsed external sounder and report to central station).

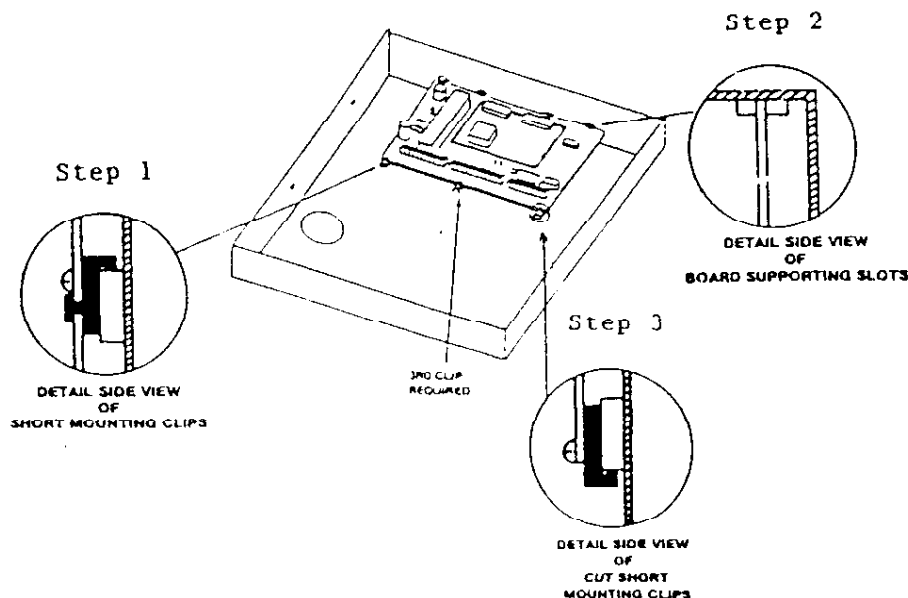
TYPE 10: INTERIOR BURGLARY (DELAYED)

This type is similar to type 4, except that entry delay begins whenever sensors in this zone are faulted, regardless of whether or not an entry/exit delay zone was faulted first.

MOUNTING THE CIRCUIT BOARD

- * Hang the three mounting clips on the raised cabinet tabs. Observe proper clip orientation to avoid damage to the clip when the mounting screws are tightened and to avoid problems with the insertion and removal of the PC board.
- * Insert the top of the circuit board into the slot at the top of the cabinet. Make certain that the board rests upon the correct row as indicated in step 2 detail.
- * Swing the base of the board into the mounting clips and secure the board to the cabinet with the accompanying screws (as illustrated in step 3 detail).

NOTES: Loom tie the field wiring away from the microprocessor (centre) section of the PC board. The cabinet provides 2 anchor points on its left and right sidewalls for anchoring field wiring using loom ties. These steps are important to minimising the risk of panel RF interference with television reception.



REMOTE KEYSWITCH OPERATION & WIRING

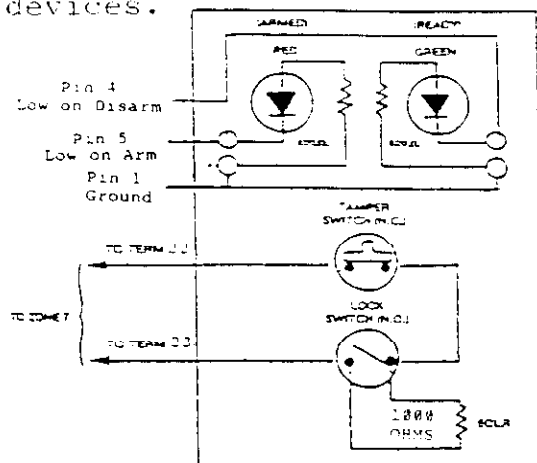
An optional Remote Keyswitch may be used for remote arming and disarming (this is an installer-programmed option, address *30). A normally-open momentary switch is connected across Zone 7 (which must be given up as a protection zone). A momentary short of the zone will arm the System in the AWAY mode; if the key is held (short maintained) for over 3 seconds, the System will arm in the STAY mode. When a momentary short is applied subsequently, the System will disarm. A keyswitch tamper (normally-closed) switch wired in series with zone 7 will, if activated, disable keyswitch operation until the system is next disarmed via a keypad.

Note: An end-of-line resistor must be used for proper functioning of the keyswitch. If the EOLR on this zone is removed from circuit, normally by using a tamper switch, the keyswitch will be disable until the next valid arm/disarm sequence.

GREEN	RED	MEANING
OFF	OFF	DISARMED & NOT READY
ON	OFF	DISARMED & READY
OFF	ON STEADY	ARMED AWAY
OFF	SLOW FLASH	ARMED STAY
OFF	RAPID FLASH	ALARM MEMORY

Note: These outputs flash in some cases, therefore may not be used to drive other devices.

Connect to
J4 POM Connector



WIRING CONNECTIONS

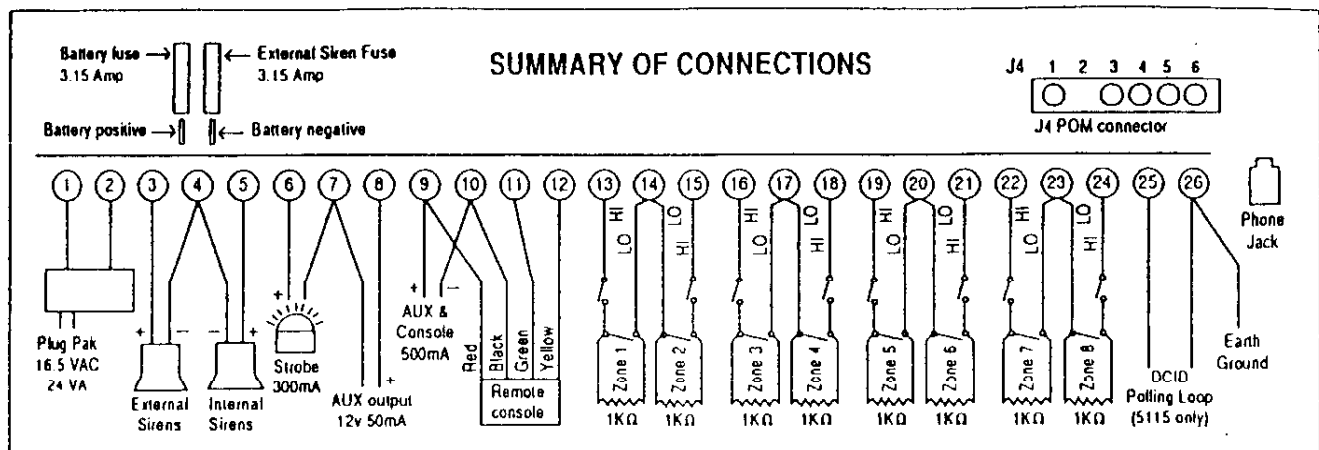
(See Summary of Connections Diagram)

Important: Do not connect the battery or plug in the Plug Pak until all other wiring connections have been completed. When powering up the system, you must use the following sequence:

1. Plug in Plug Pak.
2. Connect the battery.

Grounding the System

In order for the lightning protective devices in this product to be effective, Terminal 26 must be terminated to a protective earth.



Wiring Consoles

A console must be separately wired from the chosen location directly to the control panel.

If more than one console is used then it also must be separately wired.

To Enter & Exit Programming Mode

Enter programming mode by pressing [*] and [#] at the same time and within 30 seconds after power is applied. Or Enter the installer code, and press CODE - [0] - [0]. Load the factory default programming set by entering the following code sequence:

Press To Load This Programming Mode

*97 Loads standard default values

To Exit programming mode, press either *98 or *99.

*98 To prevent re-access to programming mode by installer code method.

*99 Allows installer code access to programming mode.

To program a data field, key [*] plus Address (for example *01), then make the required entry. To simply review a data field, key [#] plus Address, for example #01.

ADVANTAGE has a factory default table that suits most installations. Before making minor changes to these defaults the following step should be taken.

Enter programming mode for the first time and re-load the factory defaults by using *97.

Each field's factory default value is shown in [] square brackets. The options available for that specific address are listed in () round brackets.

Enter any changes into the programming sheets before you commence programming.

[] FACTORY DEFAULT
() OPTIONS AVAILABLE

ON INITIAL POWER-UP LOAD FACTORY DEFAULTS * 97

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*00  INSTALLER CODE
     [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]
     [4] [1] [1] [5]

*01  MASTER SECURITY CODE
     [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]
     [1] [2] [3] [4]

00   = Assign for Unused Zones
01   = ENTRY/EXIT #1, Burglary
02   = ENTRY/EXIT #2, Burglary
03   = PERIMETER, Burglary
04   = INTERIOR, FOLLOWER, Burglary
05   = TROUBLE BY DAY/ALARM
     BY NIGHT, Burglary
06   = 24 HOUR SILENT
07   = 24 HOUR AUDIBLE
08   = 24 HOUR AUXILIARY
09   = FIRE
10   = INTERIOR, DELAY, Burglary

*02  ASSIGN RESPONSE TYPE
     FOR ZONE 1-8
     [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]
     1         2         3         4
     [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]
     5         6         7         8
     [0][1] [0][4] [0][3] [0][3]
     [0][3] [0][3] [0][3] [0][3]

*03  ASSIGN RESPONSE TYPE
     FOR ZONES 9-16
     [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]
     9         10        11        12
     [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]
     13        14        15        16
     [0][0] [0][0] [0][0] [0][0]
     [0][0] [0][0] [0][0] [0][0]

*04  ASSIGN RESPONSE TYPE
     FOR ZONES 17
     [ ] [ ] [ ]
     17
     [0][0]

*10  ASSIGN RESPONSE TYPE FOR
     CONSOLE PANICS AND EXPANSION
     SUPERVISION
     [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]
     95        96        99
     1 & * 3 & # * & #
     [0][0] [0][0] [0][6]

*18  ENTRY DELAY #1
     [ ] [ ] [ ]
     [0] [2] 30 Seconds (0-225 Seconds)

*19  EXIT DELAY #1
     [ ] [ ] [ ]
     [0] [3] 45 Seconds (0-225 Seconds)

*20  ENTRY DELAY #2
     [ ] [ ] [ ]
     [0] [6] 90 Seconds (0-225 Seconds)

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*21	EXIT DELAY #2 [] []	[0] [8] 120 Seconds (0-225 Seconds)
*22	ALARM SOUNDER DURATION [] []	[1] [0] 10 Minutes (01-15 Minutes)
*23	AUXILIARY OUTPUT FUNCTION []	[0] Mimic Console Sounder (1) Satellite Hold-off (2) Resettable Smoke Detector Power
*24	CONFIRMATION OF ARMING DING []	[0] Disabled (1) Enable
*25	AC POWER LOSS SOUNDING []	[1] Enabled (0) Disable
*26	CONSOLE SOUNDER OPTION []	[0] Enabled (1) Disable
*27	ENTRY WARNING SOUND []	[0] 3 Short Beeps (1) Continuous
*28	EXIT WARNING SOUND []	[2] Enabled (0) Silent Exit Delay (1) Continuous Console Beeps on Exit
*29	INTERNAL SIREN TYPE []	[0] Pulsed Output (1) Steady Output
*30	KEYSWITCH ARM/DISARM OPTION []	[0] Disabled (1) Enable
*31	MULTIPLE ALARMS ON SOUNDERS []	[0] Disabled (1) Enable
*33	POWER UP IN PREVIOUS STATE []	[1] Enabled (0) Disable
*34	QUICK ARM []	[1] Enabled (0) Disable
*35	NON BYPASSABLE ZONE [] []	[0] [0] All Zones Bypassable
*36	FORCE ARMING []	[1] Enabled (0) Disable
*37	POM TYPE [] []	[0] [0] LED Drivers (01) Grouped Alarm Outputs (02) Controlled By Downloading
*38	COMMUNICATIONS DEVICE SELECTION []	[0] Digital Communicator (1) Derived Channel Communicator

*39 DECADIC OR DTMF DIALLING
 [] [0] Decadic(pulse) (1) DTMF(tone)

*40 DIAL TONE DETECTION
 [] [0] Disabled (1) Enable

*41 PABX ACCESS CODE
 [] [] [] []

*42 PRIMARY PHONE NUMBER
 [] [] [] [] [] [] []
 [] [] [] [] [] [] []
 Enter phone number followed by
 * to proceed to next address

*43 PRIMARY ACCOUNT NUMBER
 [] [] [] [] [] [] [] []
 Accent No.'s are two digit enteries
 [1][5] [1][5] [1][5] [1][5]

*44 SECONDARY PHONE NUMBER
 [] [] [] [] [] [] []
 [] [] [] [] [] [] []

No. ENTER	No. ENTER
0 00	8 08
1 01	9 09
2 02	A (DON'T USE)
3 03	B 11
4 04	C 12
5 05	D 13
6 06	E OR * 14
7 07	F OR # 15

*45 SECONDARY ACCOUNT NUMBER
 [] [] [] [] [] [] [] []
 [1][5] [1][5] [1][5] [1][5]

*46 CENTRAL STATION DOWNLOAD NUMBER
 [] [] [] [] [] [] [] []
 [] [] [] [] [] [] [] []

*47 CENTRAL STATION ID NUMBER
 [] [] [] [] [] [] [] []
 [] [] [] [] [] [] [] []
 [1] [5] [1] [5] [1] [5] [1] [5]
 [1] [5] [1] [5] [1] [5] [1] [5]

*48 DOWNLOAD COMMAND OPTIONS
 [] [] [] [] [] [] [] []
 1 [1] Dialler Shutdown Enabled
 2 [1] System Shutdown Enabled
 3 [0] Not used
 4 [1] Remote Bypass Enabled
 5 [1] Remote Disarm Enabled
 6 [1] Remote Arm Enabled
 7 [1] Upload Program Enabled
 8 [1] Download Program Enabled

*49 OPEN/CLOSE REPORTING
 FOR USERS 1-8
 [] [] [] [] [] [] [] []
 [1] [1] [1] [1] [1] [1] [1] [1]
 User 1-8 Enabled (0) Disable

*50 OPEN/CLOSE REPORTING
 FOR USERS 9-16
 [] [] [] [] [] [] [] []
 [1] [1] [1] [1] [1] [1] [1] [1]
 User 9-16 Enabled (0) Disable

*51	OPEN/CLOSE REPORTING FOR USERS 17-22 [] [] [] [] [] [] [] [] [] []	[1] [1] [1] [1] [1] [1] [1] [1] User 17-22 Enabled (0) Disable
*52	DOWNLOAD REPORT CODE [] []	{0} {0} No Code Reported (01) Enable Communication Report
*53	RING DETECTION COUNT [] []	{0} {0} Disabled Enter 01-31
*54	PRIMARY TRANSMISSION FORMAT []	[1] ADEMCO Contact ID (0) ADEMCO Local Audio (2) ADEMCO Expanded Hi Speed Format
*55	SECONDARY TRANSMISSION FORMAT []	[1] Same as Primary Transmission Format
*56	LOCAL AUDIO DURATION [] []	{0} {0} 1 Second minimum Enter 01-63
*57	DIAL FORMAT []	{0} Primary Phone Number Only (1) Dual Report (2) Alternate by Pairs (3) Split Reporting Type One (4) Split Reporting Type Two
*58	CHECKSUM VERIFICATION []	[1] Enabled (0) Disable
*59	DECADIC IF DTMF FAILS []	{0} Disabled (1) Enable
*61	DURESS []	{0} Enabled (1) Disable
*62	TEST REPORT INTERVAL []	{0} No Report (1) 12 Hourly (2) 24 Hourly (3) 168 Hour Intervals
*63	ALARM COUNT [] []	{0} {5} Five Alarm Counts Enter (01-15)
*64	FIRST TEST REPORT [] []	{0} {0} Instant (01-63 hours)
*65	DELAYED BURGLARY REPORTING []	{0} Disabled (1) Enable (delay 16. sec.)

*66 RESTORE REPORT TYPE

[]

[0] Dynamic (all alarm)
[1] Restore on Disarm

*67 CHANNEL ASSIGNED TO ZN 1-8

[][][][][][][][][]
1 2 3 4
[][][][][][][][][]
5 6 7 8

[0][1] [0][2] [0][3] [0][4]
[0][5] [0][6] [0][7] [0][8]

*68 CHANNEL ASSIGNED TO ZN 9-16

[][][][][][][][][]
9 10 11 12
[][][][][][][][][]
13 14 15 16

[0][9] [1][0] [1][1] [1][2]
[1][3] [1][4] [1][5] [0][11]

*69 CHANNEL ASSIGNED TO ZN 17

[][]
17

[0][12]

*76 CHANNEL ASSIGNED PANIC/EXP
FAULTS

[][][][][][][][]
95 96 99

[1][0] [1][1] [1][2]

*77 RESTORE FOR ZN TYPES 1-8

1 []
2 []
3 []
4 []

5 []

6 []
7 []
8 []

[1] Enabled (0) Disable
Type 1 [1] ENTRY/EXIT #1, Burglary
2 [1] ENTRY/EXIT #2, Burglary
3 [1] PERIMETER, Burglar
4 [1] INTERIOR, FOLLOWER,
Burglary
5 [1] TROUBLE BY DAY/ALARM BY
NIGHT, Burglary
6 [1] 24 HOUR SILENT
7 [1] 24 HOUR AUDIBLE
8 [1] 24 HOUR AUXILIARY

*78 RESTORE FOR ZN TYPES 9-10

9 []
10 []

[1] Enabled (0) Disable
Type 9 [1] FIRE
10 [1] INTERIOR, DELAY, Burglary

*79 NON ALARM CODES

[][][][][][][][][]
AC LOSS AC LOSS TBL TBL.RES
[][][][][][][][][]
BYPASS BYP.RES REST

[0][1] [0][1] [0][1] [0][1]
[0][1] [0][1] [0][1]

*80 NON ALARM CODES

[][][][][][][][][]
OPN CLS LOW BATT
[][][][][][][][][]
TST PWR CAN

[0][1] [0][1] [0][1] [0][1]
[0][1] [0][0] [0][0]

*81 CALL BACK DEFEAT MODE

[]

[0] Disable (1) Enabled

TO EXIT PROGRAM MODE * 99