

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 roofs, or on the other side of closed doors. Smoke detectors also may not sense a fire on another level of a residence or building. A second floor detector, for example, may not sense a first floor or basement fire. Moreover, smoke detectors have sensing limitations. No smoke detector can sense every kind of fire every time. In general, detectors may not always warn about fires caused by carelessness and safety hazards like smoking in bed, violent explosions, escaping gas, improper storage of flammable materials, overloaded electrical circuits, children playing with matches, or arson. Depending on the nature of the fire and/or 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 99 degrees to 150 degree 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 wake 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

4115R 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).

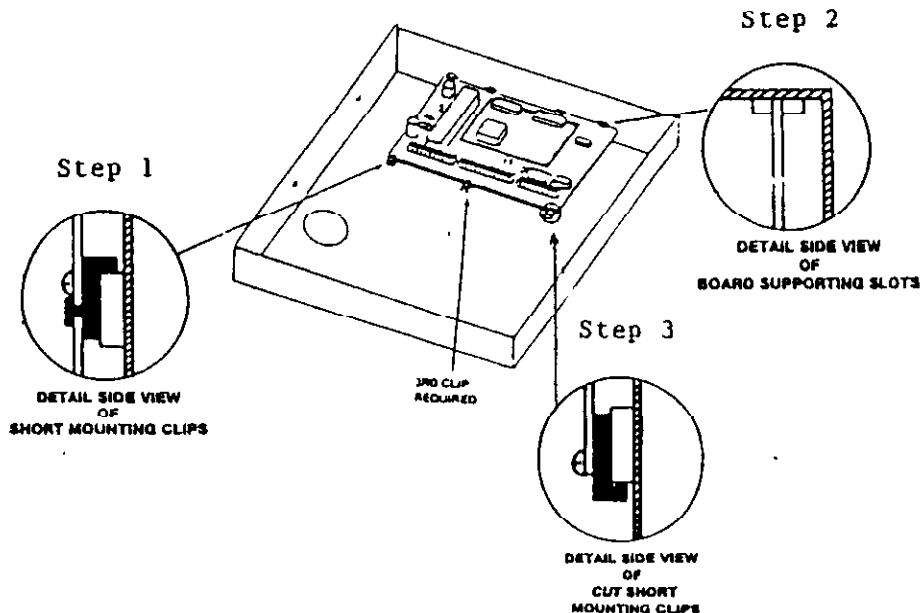
TYPE 10: INTERIOR BURGLARY (DELAYED)

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

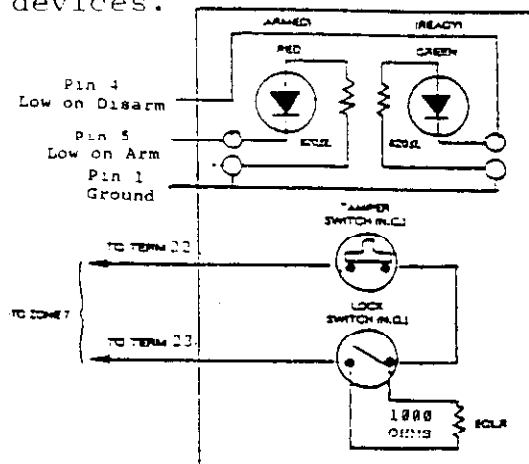
An optional Remote Keyswitch may be used for remote arming and disarming (this is an installer-programmed option, address *30). A normally-open momentary switch is connected across Zone 7 (which must be given up as a protection zone). A momentary short of the zone will arm the System in the AWAY mode; 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

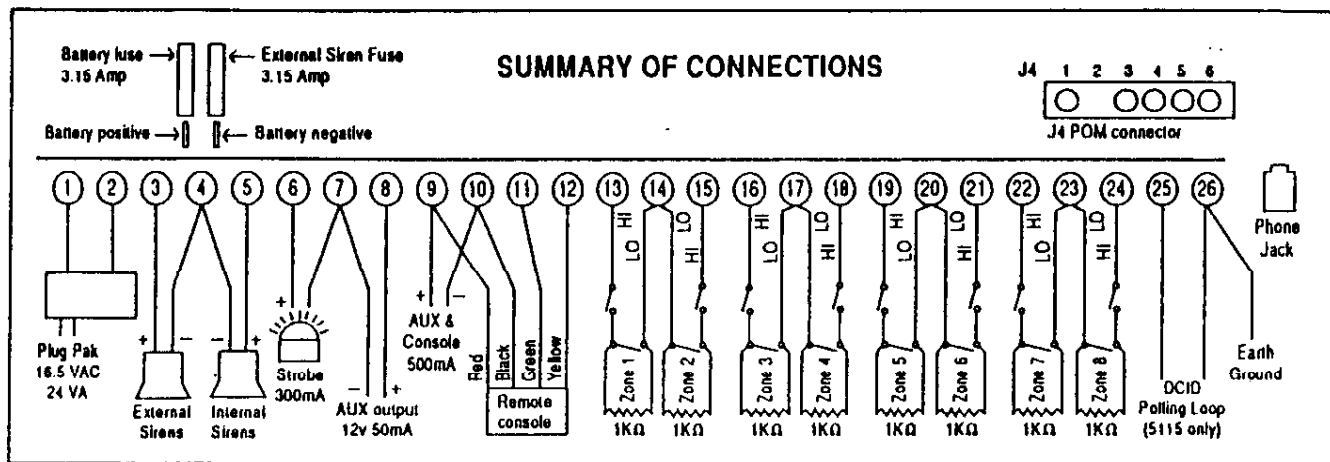
(See Summary of Connections Diagram)

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

[illegible]

*06	ASSIGN RESPONSE TYPE FOR ZONES 33-40	
	[][] [][] [][] [][]	[0][0] [0][0] [0][0] [0][0]
	33 34 35 36	
	[][] [][] [][] [][]	[0][0] [0][0] [0][0] [0][0]
	37 38 39 40	
*07	ASSIGN RESPONSE TYPE FOR ZONES 41-48	
	[][] [][] [][] [][]	[0][0] [0][0] [0][0] [0][0]
	41 42 43 44	
	[][] [][] [][] [][]	[0][0] [0][0] [0][0] [0][0]
	45 46 47 48	
*08	ASSIGN RESPONSE TYPE FOR ZONES 49-56	
	[][] [][] [][] [][]	[0][0] [0][0] [0][0] [0][0]
	49 50 51 52	
	[][] [][] [][] [][]	[0][0] [0][0] [0][0] [0][0]
	53 54 55 56	
*09	ASSIGN RESPONSE TYPE FOR ZONES 57-64	
	[][] [][] [][] [][]	[0][0] [0][0] [0][0] [0][0]
	57 58 59 60	
	[][] [][] [][] [][]	[0][0] [0][0] [0][0] [0][0]
	61 62 63 64	
*10	ASSIGN RESPONSE TYPE FOR CONSOLE PANICS AND EXPANSION SUPERVISION	
	[][] [][] [][]	[0][0] [0][0] [0][6]
	95 96 99	
	Loop 1 & * 3 & # * & #	
*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)
*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 [][][][][][][][][][]	Acct No.'s are two digit enteries {1}[5] {1}[5] {1}[5] {1}[5]																																				
*44	SECONDARY PHONE NUMBER [][][][][][][][][][] [][][][][][][][][][]	<table border="0"> <thead> <tr> <th>No.</th> <th>ENTER</th> <th>No.</th> <th>ENTER</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>00</td> <td>8</td> <td>08</td> </tr> <tr> <td>1</td> <td>01</td> <td>9</td> <td>09</td> </tr> <tr> <td>2</td> <td>02</td> <td>A</td> <td>(DON'T USE)</td> </tr> <tr> <td>3</td> <td>03</td> <td>B</td> <td>11</td> </tr> <tr> <td>4</td> <td>04</td> <td>C</td> <td>12</td> </tr> <tr> <td>5</td> <td>05</td> <td>D</td> <td>13</td> </tr> <tr> <td>6</td> <td>06</td> <td>E OR *</td> <td>14</td> </tr> <tr> <td>7</td> <td>07</td> <td>F OR #</td> <td>15</td> </tr> </tbody> </table>	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
No.	ENTER	No.	ENTER																																			
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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] {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] {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] {1}[1] {1}[1] {1}[1] {1}[1] User 17-22 Enabled (0) Disable																																				
*52	DOWNLOAD REPORT CODE [][][]	{0}[0] {0}[0] No Code Reported (01) Enable Communication Report																																				
*53	RING DETECTION COUNT [][][]	{0}[0] {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	
	[][][][][][][][][][]	[0][9] [1][0] [1][1] [1][2]
	9 10 11 12	
	[][][][][][][][][][]	[1][3] [1][4] [1][5] [0][1]
	13 14 15 16	
*69	CHANNEL ASSIGNED TO ZN 17-24	
	[][][][][][][][][][]	[0][2] [0][3] [0][4] [0][5]
	17 18 19 20	
	[][][][][][][][][][]	[0][6] [0][7] [0][8] [0][9]
	21 22 23 24	
*70	CHANNEL ASSIGNED TO ZN 25-32	
	[][][][][][][][][][]	[1][0] [1][1] [1][2] [1][3]
	25 26 27 28	
	[][][][][][][][][][]	[1][4] [1][5] [0][1] [0][2]
	29 30 31 32	
*71	CHANNEL ASSIGNED TO ZN 33-40	
	[][][][][][][][][][]	[0][3] [0][4] [0][5] [0][6]
	33 34 35 36	
	[][][][][][][][][][]	[0][7] [0][8] [0][9] [1][0]
	37 38 39 40	
*72	CHANNEL ASSIGNED TO ZN 41-48	
	[][][][][][][][][][]	[1][1] [1][2] [1][3] [1][4]
	41 42 43 44	
	[][][][][][][][][][]	[1][5] [0][1] [0][2] [0][3]
	45 46 47 48	
*73	CHANNEL ASSIGNED TO ZN 49-56	
	[][][][][][][][][][]	[0][4] [0][5] [0][6] [0][7]
	49 50 51 52	
	[][][][][][][][][][]	[0][8] [0][9] [1][0] [1][1]
	53 54 55 56	
*74	CHANNEL ASSIGNED TO ZN 57-64	
	[][][][][][][][][][]	[1][2] [1][3] [1][4] [1][5]
	57 58 59 60	
	[][][][][][][][][][]	[0][1] [0][2] [0][3] [0][4]
	61 62 63 64	
*75	CHANNEL ASSIGNED WIRELESS RECEIVER FAULTS	
	[][][][][][][][][][]	[0][5] [0][6] [0][7] [0][8]
	88 89 90 91	
*76	CHANNEL ASSIGNED PANIC/EXP FAULTS	
	[][][][][][][][][][]	[1][0] [1][1] [1][2]
	95 96 99	

*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

TO GAIN ACCESS TO THE 100 SERIES ENTER

*94 AND PROCEED.

1*00 WIRELESS SELECTION

FOR ZONES 1-8

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

[0] [0] [0] [0] [0] [0] [0] [0]
(1) Enable

1*01 WIRELESS SELECTION

FOR ZONES 9-16

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

[0] [0] [0] [0] [0] [0] [0] [0]
(1) Enable

1*02 WIRELESS SELECTION

FOR ZONES 17-24

[][][][][][][][][]
17 18 19 20 21 22 23 24

[0] [0] [0] [0] [0] [0] [0] [0]
(1) Enable

1*03 WIRELESS SELECTION

FOR ZONES 25-32

[][][][][][][][][]
25 26 27 28 29 30 31 32

[0] [0] [0] [0] [0] [0] [0] [0]
(1) Enable

1*04 WIRELESS SELECTION FOR ZONES 33-40	[] [] [] [] [] [] [] [] 33 34 35 36 37 38 39 40	[0] [0] [0] [0] [0] [0] [0] [0] (1) Enable
1*05 WIRELESS SELECTION FOR ZONES 41-48	[] [] [] [] [] [] [] [] 41 42 43 44 45 46 47 48	[0] [0] [0] [0] [0] [0] [0] [0] (1) Enable
1*06 WIRELESS SELECTION FOR ZONES 49-56	[] [] [] [] [] [] [] [] 49 50 51 52 53 54 55 56	[0] [0] [0] [0] [0] [0] [0] [0] (1) Enable
1*07 WIRELESS SELECTION FOR ZONES 57-64	[] [] [] [] [] [] [] [] 57 58 59 60 61 62 63 64	[0] [0] [0] [0] [0] [0] [0] [0] (1) Enable
1*08 FIRST WIRELESS RECEIVER OPTION	[]	[0] Disabled (1) Enable
1*09 SECOND WIRELESS RECEIVER OPTION	[]	[0] Disabled (1) Enable
1*10 WIRELESS TRANSMITTER LOW BATTERY ANNUNCIATION	[]	[0] Disarmed Only (1) Armed & Disarmed
1*11 WIRELESS TRANSMITTER LOW BATTERY REPORT	[]	[1] Enabled (0) Disable
1*12 WIRELESS RECEIVER SUPERVISION INTERVAL	[] []	[0] [6] 12 Hours (0) (0) No Supervision
1*13 WIRELESS TRANSMITTER SUPERVISION INTERVAL	[] []	[1] [2] 24 Hours (0) (0) No Supervision
1*14 WIRELESS KEYPAD INVALID KEYPRESS DETECTION	[]	[0] Disabled (1) Enable
1*15 WIRELESS KEYPAD	[]	[0] Enabled (1) Disable
1*16 TROUBLE SOUND FOR TRANSMITTER SUPERVISION	[]	[1] Disabled (0) Enable
1*17 WIRELESS RECEIVER FAULTS RESPONSE TYPES	[] [] [] [] [] [] [] [] ZONE 88 89 90 91	[0][0] [0][0] [0][0] [0][0]
1*18 HOUSE CODE FOR 4281 SERIES	[] []	[0] [0] (00-31) House Codes

PROGRAMMING ZONE DESCRIPTIONS - (5137 CONSOLES ONLY)

INTRODUCTION

A user friendly English language description/location of protection zones, keypad panics, polling loop short and the first Wireless supervision faults can be programmed into the system (up to 59 descriptions). Each description can be composed of a combination of words (up to a maximum of 3) that are selected from a vocabulary of approximately 220 words stored in memory (a complete list of all words in this vocabulary is provided at the end of this section). In addition, up to 5 installer-defined words can be added to those already in memory. Thus, when an alarm or trouble occurs in a zone, an appropriate description for the location of that zone will be displayed at the console. In addition, an installer's message can be programmed which will be displayed when the system is "Ready" (eg. THE JONES's).

5137 LCD Viewing Angle Adjustment:

Insert the end of the small, key-shaped tool (supplied) into the small hole to the left of the console display window (the adjustment screw is recessed in this hole). Turn the adjustment screw to the left or right until optimum viewing is achieved. Be sure to take the height of the users into account when making this adjustment.

USING THE BUILT-IN QUICK-REFERENCE USER'S MANUAL (ONLY USEABLE WITH 5137)

An abbreviated User's Manual is stored in memory and can be displayed by simply pressing any of the function keys (e.g., OFF, AWAY, STAY, MAXIMUM, BYPASS, INSTANT, CODE, TEST, READY, #, and CHIME) for approximately 5 seconds and then releasing it. Abbreviated instructions relative to the key that has been pressed will then be displayed (2 lines of text are displayed at a time). This function is available when the system is in the armed or the disarmed state. This feature will prove particularly useful to the end user if the printed User's Manual is not conveniently accessible when the user needs to perform a little-used and unfamiliar system procedure.

ENTERING ZONE DESCRIPTIONS

1. Enter programming mode as described previously.
2. Key *93. The following will be displayed: *ZN ??

Note: No selectable zone descriptors are available for zones 60-64.
The factory setting is the zone number.

When in this mode, the console keys perform the following functions:

- [3] Scrolls both alphabet and actual words in ascending alphabetical order.
- [1] Scrolls both alphabet and actual words in descending alphabetical order.
- [6] Toggles between alphabet and actual word list.
- [8] Saves the zone description in the system's memory.
- [#] # plus zone number will display the description for that zone.

3. Key *01 to begin entering the description for zone 1, (key *02 for zone 2, *03 for zone 3 etc.). The following will be displayed: *ZN 01 A

Note that the first letter of the alphabet appears after the zone number, and that the zone number is automatically included with the proposed description.

4. Select the first letter of the desired description (note that "A" is already displayed). Use key [3] to advance through the alphabet and key [1] to go backward. For example, assume the desired description for zone 1 is BACK DOOR. Press key [3] repeatedly until "B" appears, then press key [6] to display the first available word beginning with B. Repeatedly press key [3] to advance through the available words until the word BACK is displayed. Press key [1] to move backward through the word list.
5. For selection of the second word (DOOR), press key [6]. "A" will now be displayed again after the first word selected. Press key [3] until the desired first letter of the second word appears (in this example, "D"). Then press key [6] to display the first available word beginning with "D". Press key [3] repeatedly until the desired word (DOOR) appears.
6. If you wish to add a third word (provided there is sufficient space for it in the display), repeat step 5 for that word.
7. When all desired words have been entered, press key [8] to store the description in memory.

8. To review the zone descriptions, key [#] plus zone number (eg. #01). To edit zone descriptions, key [*] plus zone number (eg. *01)
9. To exit the zone description mode, key *99.

NOTE: Alpha descriptor entry can be accomplished locally at the 5137 console or remotely using ADVANTAGE Downloader.

ADDING CUSTOM WORDS

Up to 5 installer-defined words can be added to the built-in vocabulary. Each of the 5 "words" can actually consist of several words, but bear in mind that a maximum of 10 characters can be used for each word string. To create the custom word or word string, proceed as follows:

1. Enter the programming mode.
2. Key *93. The following will be displayed: *ZN ??
3. Now key 00 to get into the mode which allow the custom words to be created. The following will be displayed: * ED ?

When in this mode, the keys perform the following functions:

- [3] Advances through alphabet in ascending order.
 - [1] Advances through alphabet in descending order.
 - [6] Selects the desired letter, and moves the cursor to the right one space.
 - [4] Moves the cursor one space to the left.
 - [7] Inserts a space at the cursor location, erasing any character at that location.
 - [8] Saves the new word in the system's memory.
 - [*] Returns to description entry mode.
4. Key the number of the custom word or word string to be created (0-4). For example, if you are creating the first word (or word string), enter 0; when creating the second word, enter 1, and so on. A cursor will now appear at the beginning of the second line.
 5. Use the [3] key to advance through the alphabet (numbers, symbols and special characters are included). Use the [1] key to move back through the alphabet.

IMPORTANT: Custom words must begin with an alphabetic character. If numbers or symbols are used as the first character, the word will not be saved.

6. When you have reached the desired character, press the [6] key to select it. The cursor will then move to the right, in position for the next character.
7. Repeat steps 5 and 6 to create the desired word (or words). Note that the [4] key can be used to move the cursor to the left if necessary, and that key [7] can be used to enter a blank (or to erase an existing character). Each word or word string cannot exceed 10 characters.
8. Press the [8] key to save the custom word(s) and return to the * ED ? display. The custom word (or string of words) will be automatically added to the built-in vocabulary at the end of the group of words beginning with the same letter.
9. Repeat steps 4 through 8 to create up to 4 additional custom words (or word strings).
10. Press the [*] key to return to the *ZN ?? display, and follow the zone description entry procedure to assign the new words to a zone description.
11. Key *99 to exit the zone description programming mode.

CREATING A CUSTOM MESSAGE DISPLAY (Installer's Message)

Normally, when the system is in the disarmed state, the following display is present on the Console.

```
****DISARMED****  
READY TO ARM
```

Part or all of the above message can be modified to create a custom installer message. For example, ****DISARMED**** on the first line or READY TO ARM on the second line could be replaced by the installation company name or phone number for service. Note that there are only 16 character spaces on each of the two lines. To create a custom display message, proceed as follows:

1. Enter the programming mode.
2. Key *93. The following will be displayed: * ZN ??
3. Key 00. The following will appear: * ED ??
4. Press the [5] key. The following will appear:

```
****DISARMED****  
READY TO ARM
```

A cursor will be present at the extreme left of the first line (over the first "star"). The [6] key is used to move the cursor to the right and the [4] key to move the cursor to the left. Key [7] may be used to insert spaces or erase existing characters.

5. For example, to replace READY TO ARM with the message SERVICE:424-0177, proceed as follows:

Press the [6] key to move the cursor to the right, and continue until the cursor is positioned over the first location on the second line.

Press the [3] key to advance through the alphabet to the first desired character (in this case, "S"). Use the [1] key to move backward, when necessary. When the desired character is reached, press [6]. the cursor will then move to the next position, ready for entry of the next character (in this example, "E"). When the cursor reaches a position over an existing character, pressing the [3] or [1] key will advance or back up from that character in the alphabet. Proceed in this manner until all characters in the message have been entered.

6. To store this new display message in memory, press the [8] key.
7. Press the [*] key to return to the * ZN ?? display. To confirm that the new message has been stored in memory, press 00 and then press key [5]. The new message should be displayed.
8. Key *99 to exit the descriptor/programming mode.

VOCABULARY OF WORDS STORED IN MEMORY* (5137) CONSOLE ONLY)

ABOVE	DADS	HALL	OFFICE	SHOW	WORK
ACCESS	DAUGHTERS	HEAT	OIL	SHUTTER	
ACCOUNTS	DEN	HOLDUP	OPENING	SIDE	XMITTER
ADMIN	DESK	HOUSE	OUTER	SIREN	
AIR	DETECTOR		OUTSIDE	SKYLIGHT	YARD
ALARM	DINING	INNER	OVER	SLIDING	
AMBUSH	DISCRIMINATOR	INSIDE	OVERFLOW	SMOKE	ZONE ZONE
AREA	DISPLAY	INTERIOR	OVERHEAD	SONIC	
APARTMENT	DOCK	INTRUSION		SONS	0
ART	DOOR		PAINTING	SOUTH	
ASSISTANTS	DOWN	JEWELLERY	PANEL	SPRINKLER	1 1ST
AUDIO	DOWNSTAIRS		PANIC	STATION	
AUXILIARY	DRAWER	KITCHEN	PASSIVE	STEREO	2 2ND
	DRIVEWAY		PATIO	STORE	
BABY	DRUG	LAUNDRY	PAY	STORAGE	3 3RD
BACK	DUCT	LEFT	PENDANT	STORY	
BAR		LEVEL	PERIMETER	STRIKE	4 4TH
BASEMENT	EAST	LIBRARY	PETTY	STUDY	
BATHROOM	ELECTRIC	LIGHT	PHONE	SUPERVISED	5 5TH
BED	EMERGENCY	LIQUOR	PHOTO	SWIMMING	
BEDROOM	ENTRY	LIVING	PIR	SWITCH	6 6TH
BEHIND	EQUIPMENT	LOADING	POINT		
BELOW	EXECUTIVE	LOCK	POLICE	TAMPER	7 7TH
BOTTOM	EXIT	LOOP	POOL	TAPE	
BOX	EXTERIOR	LOUNGE	POWER	TELEPHONE	8 8TH
BREAK		LOWER		TELLER	
BUILDING	FACTORY		QUAD	TEMPERATURE	9 9TH
BUTTON	FAILURE	MACHINE		THERMOSTAT	
	FAMILY	MAIDS	RADIO	TOOL	
CABINET	FATHERS	MAIN	REAR	TRANSMITTER	
CALL	FENCE	MANAGERS	REED		
CAMERA	FILE	MASTER	REMOTE	ULTRA	
CAR	FIRE	MAT	RF	UNDER	
CASE	FLOOR	MEDICAL	RIGHT	UP	
CCTV	FOIL	MEDICINE	ROLLER	UPPER	
CEILING	FOYER	MONEY	ROOM	UPSTAIRS	
CELLAR	FREEZER	MONITOR	ROOF	UTILITY	
CIRCUIT	FRIDGE	MOTHERS	RUMPUS		
CLIP	FRONT	MOTION		VALVE	
CLOSED	FURNACE	MOTOR	SAFE	VAULT	
COATROOM		MUMS	SATELLITE	VIBRATION	
COLD	GALLERY		SCREEN	VOLTAGE	
COLLECTION	GARAGE	NORTH	SENSOR		
COMPUTER	GAS	NUMBER	SENSOR	WALL	
CONSOLE	GATE	#	SERVICE	WAREHOUSE	
CONTRACT	GLASS	NURSERY	SHED	WEST	
CONTROL	GUEST		SHOCK	WINDOW	
COVER	GUN		SHOP	WINE	
CUPBOARD			SHORT	WING	

*NOTE: This factory-provided vocabulary of words is subject to change.

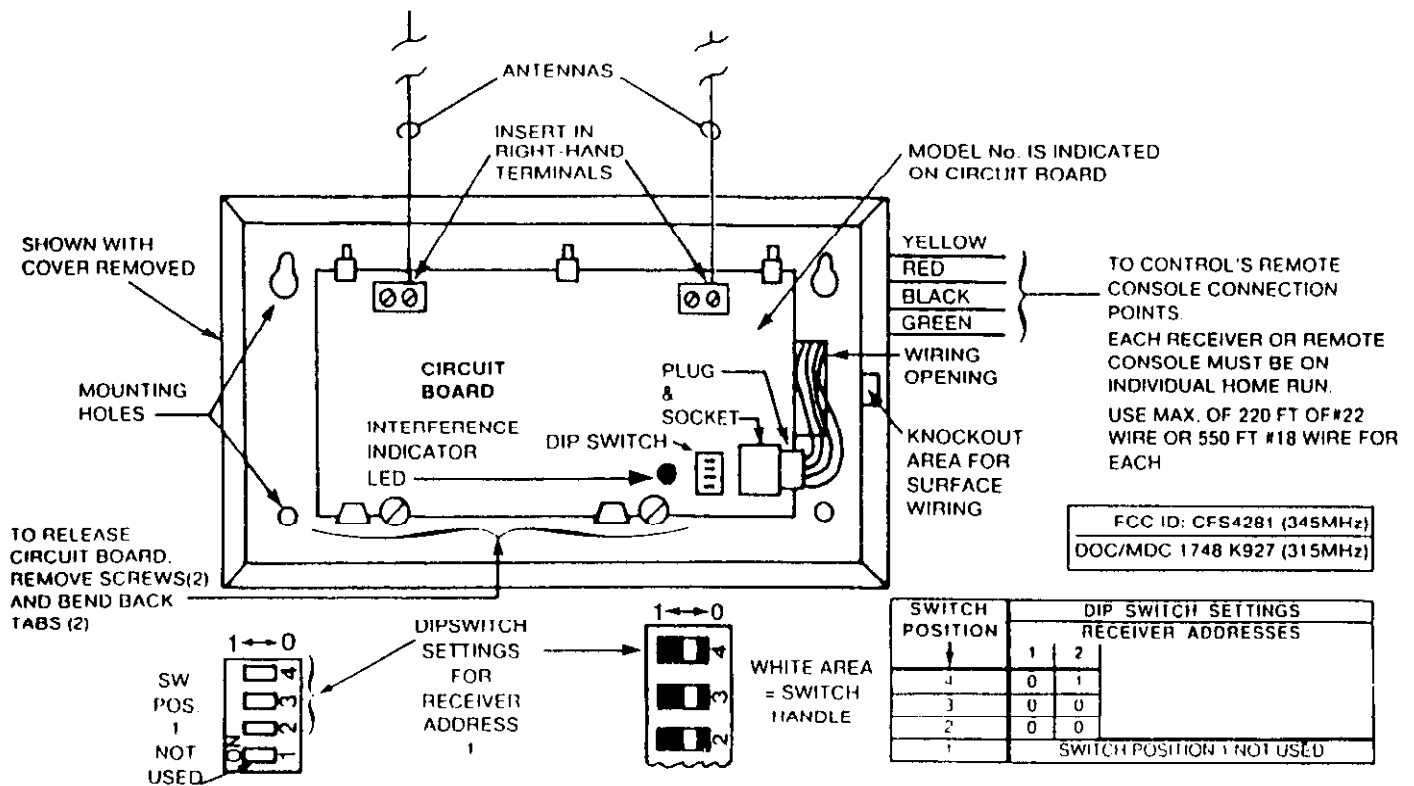
SUPERVISED WIRELESS EXPANSION FOR ADVANTAGE 3115 & 4115

ADVANTAGE supports all Alert III, supervised wireless transmitters. These include passive infrared's, single and dual technology glass break, remote keypad with integral panic, normally closed transmitters, with or without integral reed switches and smoke detectors.

ADVANTAGE 3115 and 4115 supports wireless expansion utilising the ADVAN3R and ADVAN4R software option, to a maximum of 8 zones in addition to the 8 existing hardwire circuits. To expand the ADVANTAGE 3115 and 4115 one or two 4281 type receivers can be utilised. The 4281 can receive signals within a nominal range of 60 metres. In addition two 4281's can be used to provide greater range or to provide redundant reception paths. Two 4281 receivers do not increase the number of zones available.

Important: A 4 wire run must be used for the 4281 radio receivers, two wires for data and two wires for power, connect to the console terminals.

Diagram 1: SUMMARY OF CONNECTIONS FOR No. 4281



No. 4281 SUPERVISED WIRELESS RECEIVER FOR ADVANTAGE 3115 & 4115

Introduction

The 4281 Supervised Wireless Receiver is designed for use with Control/Communicators, ADVANTAGE 3115 and ADVANTAGE 4115. The receiver recognises alarm, status and keypad control messages from Alert III (5700) series wireless transmitters operating at 345MHz. These messages are processed and relayed to ADVANTAGE via a 4 wire connection to the control's remote console terminals.

Two individually identified receivers can be employed. Connection of multiple receivers to a control can be made for redundant coverage or for extended coverage of large areas. Multiple receivers do not increase the number of transmitters that ADVANTAGE can support.

The 4281 features a Spatial Diversity System which virtually eliminates the possibility of "Nulls" and "Dead Spots" within the coverage area.

Note: If a 4281 Receiver is connected to a system in which more than the permitted number of wireless zones have been attempted to be programmed, a "4281 SET UP ERROR" (e.g. "E4") display may result on the system's console and none of the zones will be protected.

Installation

1. The receiver is to be located remotely from the control.

Important Note: The recommended distance between the control and 4281 receiver is 3 meters. If this distance is less than 3 meters the effect will be reduced coverage.

- 1) If concealed wiring is to be used, it should be routed through the rectangular opening at the rear of the base before mounting. For surface wiring entry, a thin break-away area is provided along the base's right edge.
- 2) Mount the receiver in the selected location. For greatest security, use all four mounting holes (two keyslot holes and two round holes) provided in the base.
- 3) Affix the receiver's Summary of Connections label to the inside of the housing cover.
- 4) The circuit board mounting clips, grounding lugs and screws included with the receiver will not be needed.

2. Set the receiver's DIP switch to identify the receiver's address, as indicated in the table in Diagram 1. If only one receiver is being used, set its address to #1 as shown.

Note: The 4281's House ID will be selected and programmed at the control as part of the ADVANTAGE programming procedure (programming field 1*18)

3. Connect the receiver's 4 wires to the control's corresponding remote console connection points and make sure that the wiring plug is inserted in its socket at the lower right corner of the receiver's circuit board.
4. Install the antennas in the right-hand terminals of the two terminals blocks at the upper edge of the circuit board.
5. Replace the receiver's cover.

6. Proceed with the Installation of the system's wireless transmitters. This should include conducting the Sniffer Mode and Transmitter Test Mode tests (to determine a suitable House ID and to verify its proper setting in the transmitters) and the Go/No Go test (to check signals received from the transmitter locations).

6.1 **Sniffer Mode to Select Receiver House ID:** To avoid interference from nearby systems, set the Receiver for House ID "00" then enter your "installer Code" + [#] + [2]. Note that if two Receivers are being used, both must be set to ID "00". The Receiver will now "sniff" out any House ID's in the area and display them at the console. Keeping the Receiver in this mode for about 2 hours will give a good indication of the House ID's being used. To exit the Sniffer Mode, key your installer code + OFF. Set the Receiver's House ID to one not displayed in the Sniffer Mode.

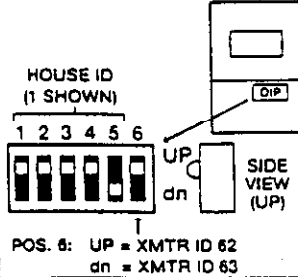
6.2 **Sniffer Mode to Verify Transmitter House ID's:** To check that all transmitters have been set for the proper house ID, set the Receiver to the proper house ID and enter the Installer code + [#] + [3]. Fault each transmitter to cause a transmission and check that each transmitter's ID number is displayed at the console in turn. To exit the Sniffer Mode, simply key your installer code + OFF.

DIP SWITCH TABLES FOR WIRELESS DEVICES

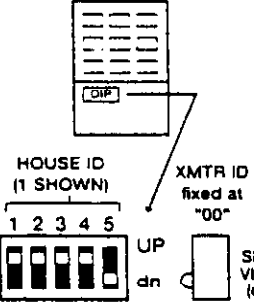
House ID Switch Setting for All Devices Except 5716

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

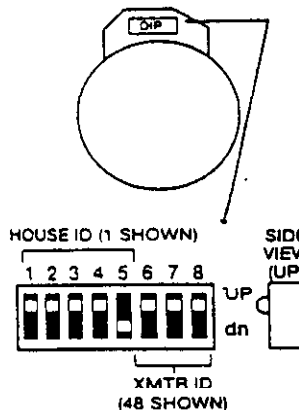
5701 Panic Xmtr.



5727 Keypad

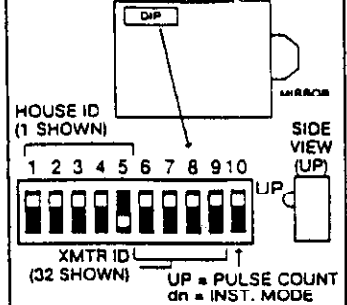


5706 Smoke Detector/Transmitter



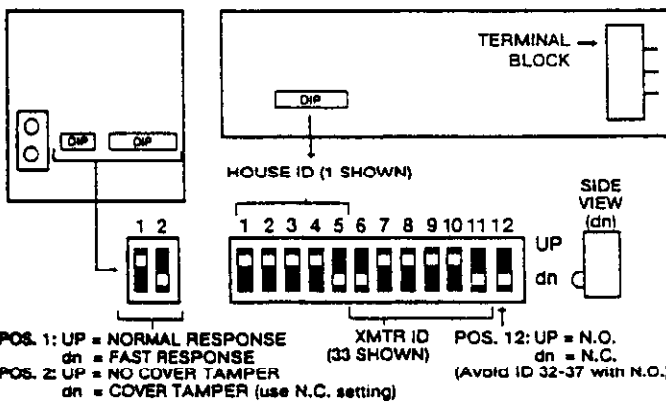
XMTR ID	6	7	8
48	UP	UP	UP
49	UP	UP	dn
50	UP	dn	UP
51	UP	dn	dn
52	dn	UP	UP
53	dn	UP	dn
54	dn	dn	UP
55	dn	dn	dn

5775 PIR Detector/Transmitter



XMTR ID	6	7	8	9
32	UP	UP	UP	UP
33	UP	UP	UP	dn
34	UP	UP	dn	UP
35	UP	UP	dn	dn
36	UP	dn	UP	UP
37	UP	dn	UP	dn
38	UP	dn	dn	UP
39	UP	dn	dn	dn
40	dn	UP	UP	UP
41	dn	UP	UP	dn
42	dn	UP	dn	UP
43	dn	UP	dn	dn
44	dn	dn	UP	UP
45	dn	dn	UP	dn
46	dn	dn	dn	UP
47	dn	dn	dn	dn

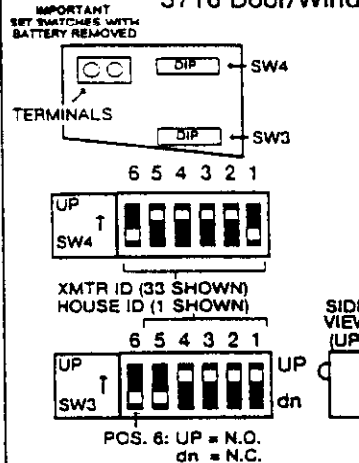
5715 Universal Xmtr.



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

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

5716 Door/Window Transmitter



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

TRANSMITTER ID	6	5	4	3	2	1
1	dn	UP	UP	UP	UP	UP
2	dn	UP	UP	UP	dn	UP
3	dn	UP	UP	dn	UP	UP
4	dn	UP	UP	dn	dn	UP
5	dn	UP	UP	dn	dn	dn
6	dn	UP	UP	dn	UP	UP
7	dn	UP	UP	dn	dn	UP
8	dn	UP	UP	dn	dn	dn
9	dn	UP	UP	dn	UP	UP
10	dn	UP	UP	dn	dn	UP
11	dn	UP	UP	dn	dn	dn
12	dn	UP	UP	dn	UP	UP
13	dn	UP	UP	dn	dn	UP
14	dn	UP	UP	dn	dn	dn
15	dn	UP	UP	dn	UP	UP
16	dn	UP	UP	dn	dn	UP
17	dn	UP	UP	dn	dn	dn
18	dn	UP	UP	dn	UP	UP
19	dn	UP	UP	dn	dn	UP
20	dn	UP	UP	dn	dn	dn
21	dn	UP	UP	dn	UP	UP
22	dn	UP	UP	dn	dn	UP
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