National Guardian®

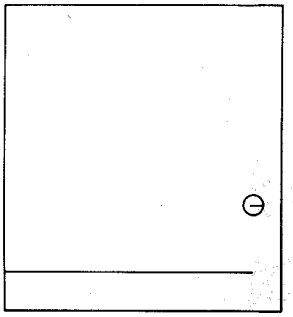
Controlink® 3010
SECURITY SYSTEM

INSTALLATION INSTRUCTIONS

N5718 1/91

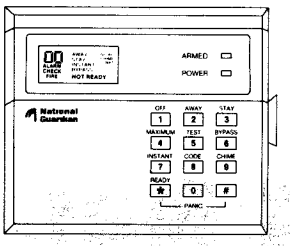
CONTROL EQUIPMENT

TRADITIONAL CONTROL/COMMUNICATOR WITH SEPARATE CONSOLE(S)



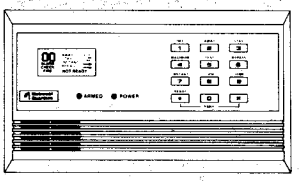
- METAL CABINET
- BUILT-IN ALARM RELAY
- BUILT -IN DIALER BOARD
- PLUG-IN POWER PACK INCLUDED
- 9 WIRED ZONES, EXPANDABLE FOR UP TO 64 ZONE POLLING LOOP AND/OR WIRELESS OPERATION BY ADDING 4152LMB PLUG-IN LOOP MODULE
- REQUIRES AT LEAST ONE CONSOLE (ECONOMY, STANDARD, OR ALPHA)

***Controlink*®3010 CONTROL PANEL**
(Ademco No. 4140XM)



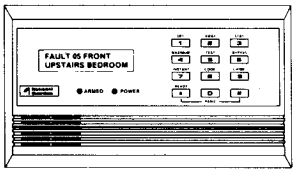
- CAN USE WITH 3010, 3010-1, OR 3010-2 CONTROL (4 wires)
- FIXED WORD, ENGLISH LANGUAGE/ ZONE No., BACKLIT LCD DISPLAY
- BUILT-IN SOUNDER
- PANIC ALARM
- LOW CURRENT DRAIN (20mA)
- PULL-OUT ZONE ID DRAWER

4127
ECONOMY (Fixed Word) CONSOLE



- CAN USE WITH 3010, 3010-1, OR 3010-2 CONTROL (4 wires)
- SAME DISPLAY AS , AND FUNCTIONALLY SIMILAR TO, 4127, BUT WITH ENHANCED STYLING AND BACKLIT KEYS
- SURFACE OR FLUSH MOUNTING

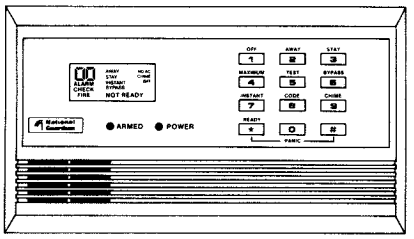
4137
STANDARD (Fixed Word) CONSOLE



- CAN USE WITH 3010, OR 3010-2 CONTROL (4 wires)
- SIMILAR TO 4137, BUT WITH PROGRAMMABLE, ALPHA-NUMERIC 2 LINE ENGLISH LANGUAGE, BACKLIT LCD DISPLAY
- SELF-HELP FEATURE

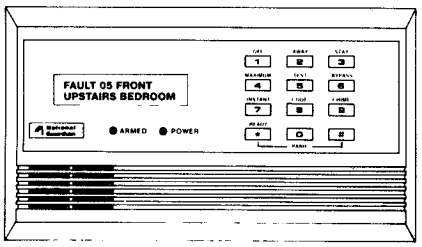
5137
ALPHA CONSOLE

SELF-CONTAINED CONTROL/COMMUNICATOR/CONSOLES



- SELF-CONTAINED (RESEMBLES 4137 STANDARD CONSOLE)
- CAN BE SURFACE OR FLUSH MOUNTED
- FIXED WORD, ENGLISH LANGUAGE/ZONE NUMBER, BACKLIT LCD DISPLAY
- BUILT-IN 85dB SOUNDER
- BACKLIT KEYPAD
- ACCOMMODATES PLUG-IN DIALER BOARD (4171XM OR 4171XT-XM)
- 9 WIRED ZONES, EXPANDABLE FOR UP TO 64 ZONE POLLING LOOP AND/OR WIRELESS OPERATION BY ADDING 4171XT-XM DIALER BOARD AND 4152LMB LOOP MODULE
- CAN ADD REMOTE CONSOLE(S), ECONOMY OR STANDARD

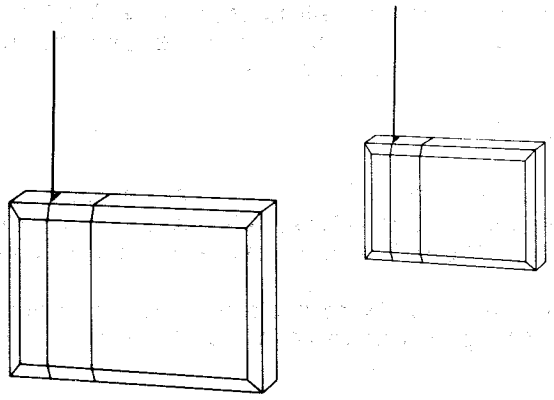
***Controlink*® 3010-1 FIXED WORD CONSOLE/CONTROL**
(Ademco No. 4130XM)



- SIMILAR TO 3010-1 CONSOLE/CONTROL, BUT HAS PROGRAMMABLE, ALPHANUMERIC 2 LINE ENGLISH LANGUAGE, BACKLIT LCD DISPLAY (RESEMBLES 5137 ALPHA CONSOLE)
- SELF-HELP FEATURE
- CAN ADD REMOTE CONSOLE(S), ECONOMY, STANDARD, OR ALPHA

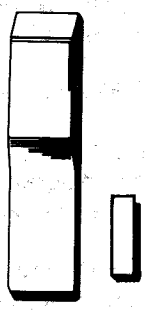
***Controlink*® 3010-2 ALPHA CONSOLE/CONTROL**
(Ademco No. 5130XM)

WIRELESS EQUIPMENT



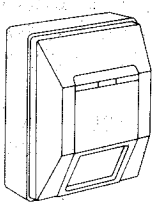
- 4280 IDENTIFIES UP TO 63 WIRELESS TRANSMITTERS PLUS A WIRELESS KEYPAD (5727)
  4280-8 IDENTIFIES UP TO 8 WIRELESS TRANSMITTERS PLUS A WIRELESS KEYPAD (5727)
- 200 FT NOMINAL INDOOR RANGE
- BUILT IN GO/NO-GO SIGNAL STRENGTH TEST (PATENTED)
- USE 2 PER SYSTEM
- 2 WIRE CONNECTION TO CONTROL
- 2 SNIFFER MODES, FOR HOUSE ID AND TRANSMITTER ID CHECKS
- WITH INSTRUCTIONS

4280 or 4280-8
WIRELESS RECEIVER (USE 2)



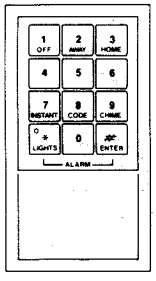
- SLIMLINE DESIGN
- MAGNET AND BUILT-IN REED SWITCH (5711WM ONLY)
- SELECTABLE FOR OPEN CIRCUIT
- SELECTABLE FOR FAST RESPONSE
- USES 9V BATTERY
- WITH INSTRUCTIONS

5711WM or 5711
DOOR/WINDOW TRANSMITTER



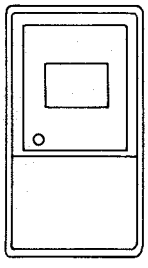
- PULSE COUNT OPTION
- 3 MINUTE LOCKOUT BETWEEN TRANSMISSIONS, TO CONSERVE BATTERY
- USES 9V BATTERY
- WITH INSTRUCTIONS

5775
PASSIVE INFRARED DETECTOR/TRANSMITTER



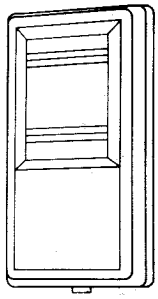
- BUILT-IN PANIC (24HR, SILENT OR AUDIBLE)
- TRANSMISSION VERIFICATION LED

5727
WIRELESS KEYPAD



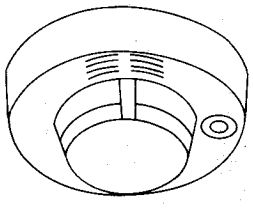
- 24 HR, SILENT OR AUDIBLE
- SINGLE BUTTON OPERATION

5701
PANIC TRANSMITTER



- NORMAL OR FAST RESPONSE
- OPEN OR CLOSED CIRCUIT
- TAMPERED COVER
- WHITE OR BROWN

5715WH/BR
UNIVERSAL TRANSMITTER



- BUILT-IN ALARM SOUNDER
- BUILT-IN AUDIBLE LOW-BATTERY WARNING
- ONE PIECE DESIGN
- WITH INSTRUCTIONS

5706
PHOTOELECTRIC SMOKE DETECTOR/ TRANSMITTER

WIRED ZONES (up to 9) can be used with the system. See the *Technical Reference Manual* for complete information.

POLLING LOOP DEVICES can be used, up to the system's total capacity of 64 zones. See the *Technical Reference Manual* for complete information.

EXPANSION FOR WIRELESS OPERATION

To expand the system for use of wireless devices and/or a 2-wire polling loop, a 4147XT-XM Dialer Board, and a 4152LMB Loop Module must be installed in the control, as shown below. (The 4171XT-XM is factory installed in the *Controlink*® 3010 Control Panel.)

4171XT-XM DIALER BOARD INSTALLATION

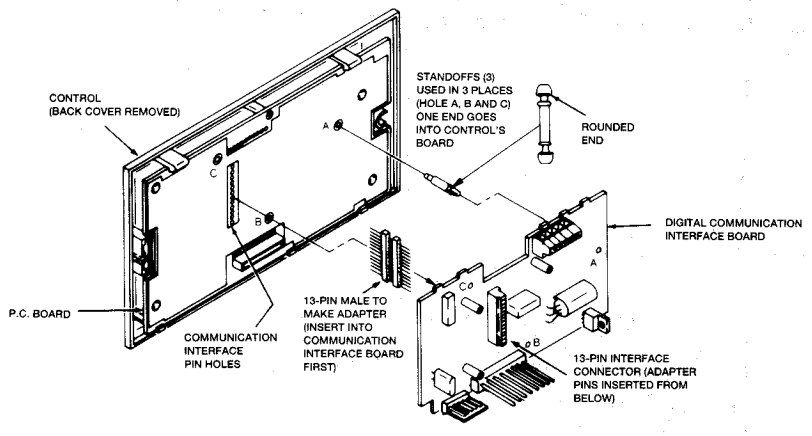
Remove the Console/Control's back cover and discard. Insert three small standoffs (supplied) into the three holes on the Control board (marked A, B and C on the diagram) pressing each until they "snap" into place. Insert the 13-pin male-to-male adapter (supplied) into the interface socket pin holes on the underside of the Dialer board as shown.

Guide the adapter pins into the pin holes on the Control board, while aligning the standoffs with their respective holes in the Dialer board. Be sure the adapter pins are properly entering the Control board holes, and press down until the pins are fully seated and the standoffs "snap" into place.

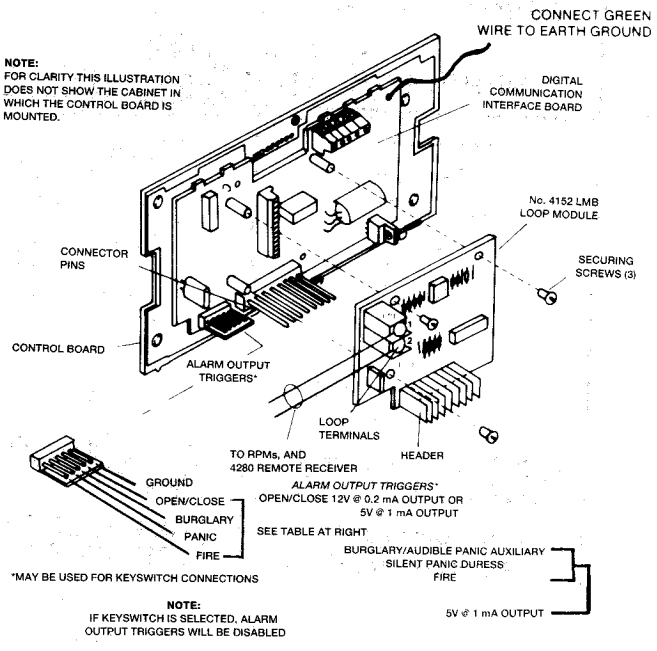
4152LMB LOOP MODULE INSTALLATION

Note the 8 square-shaped connector pins on the dialer board. Position the 4152LMB board over that board so that these pins engage the mating sockets (header) on the underside of the 4152LMB. Press the 4152LMB down until the pins are fully seated. Secure the 4152LMB by means of 3 screws (supplied).

Wires from the 4280/4280-8 receivers are connected to Terminals 1 and 2 on the 4152LMB (as are wires from a 4208 zone expander and remote point modules, if used...see the *Technical Reference Manual* for full information).

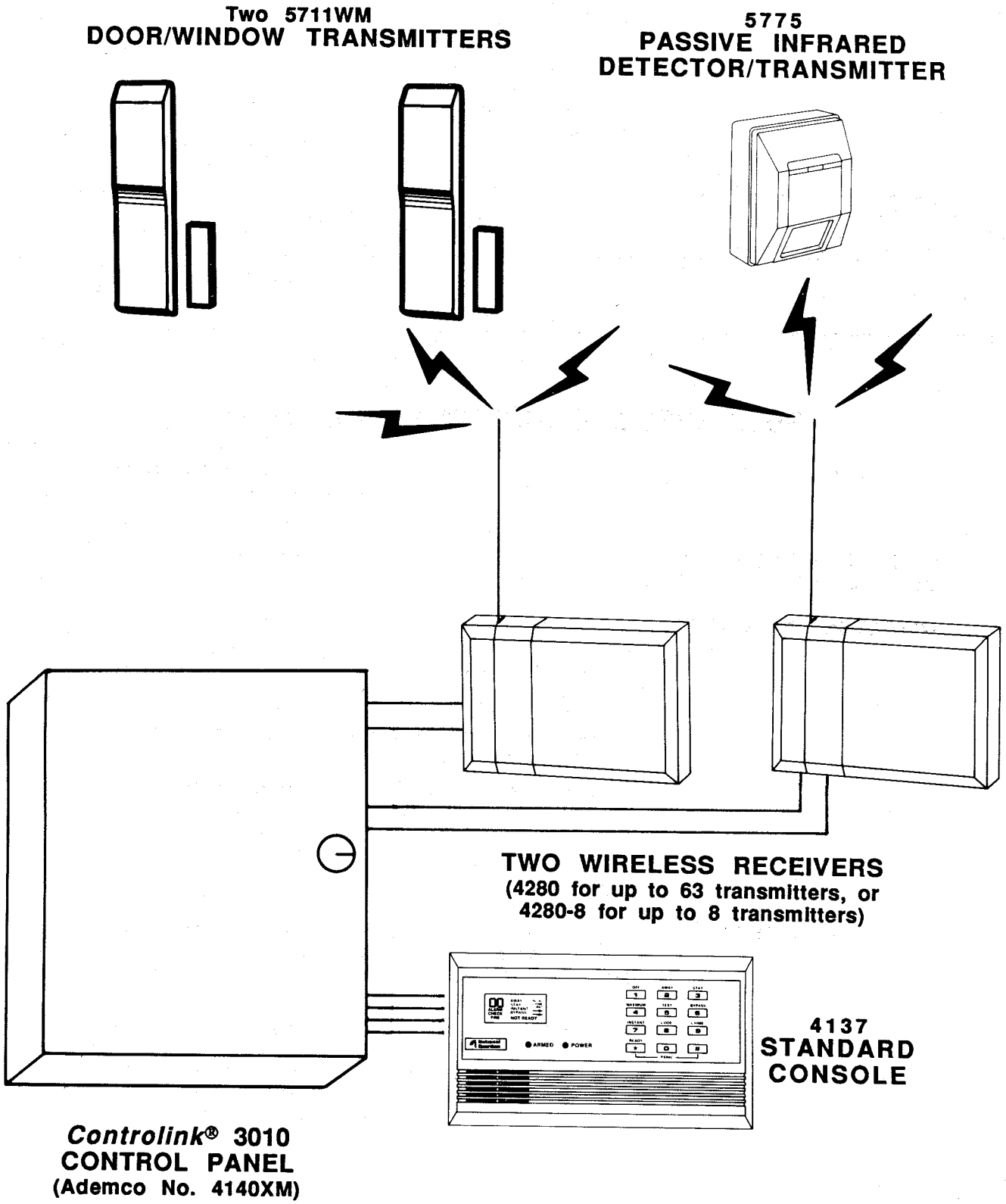


INSTALLING DIALER BOARD



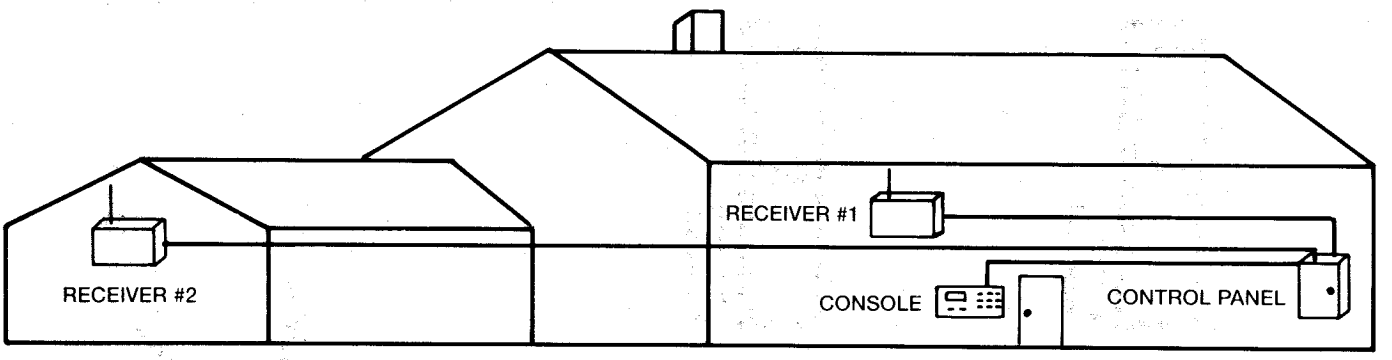
INSTALLING LOOP MODULE

TYPICAL WIRELESS SYSTEM



BASIC 3 ZONE SYSTEM

LOCATION



SUGGESTED EQUIPMENT LOCATIONS

CONTROL PANEL: The best location is usually near the incoming phone block and close to an AC outlet (probably in the basement or on the first floor).

CONSOLE/CONTROL OR REMOTE CONSOLE: A location that is convenient to the user during entry and exit should be used.

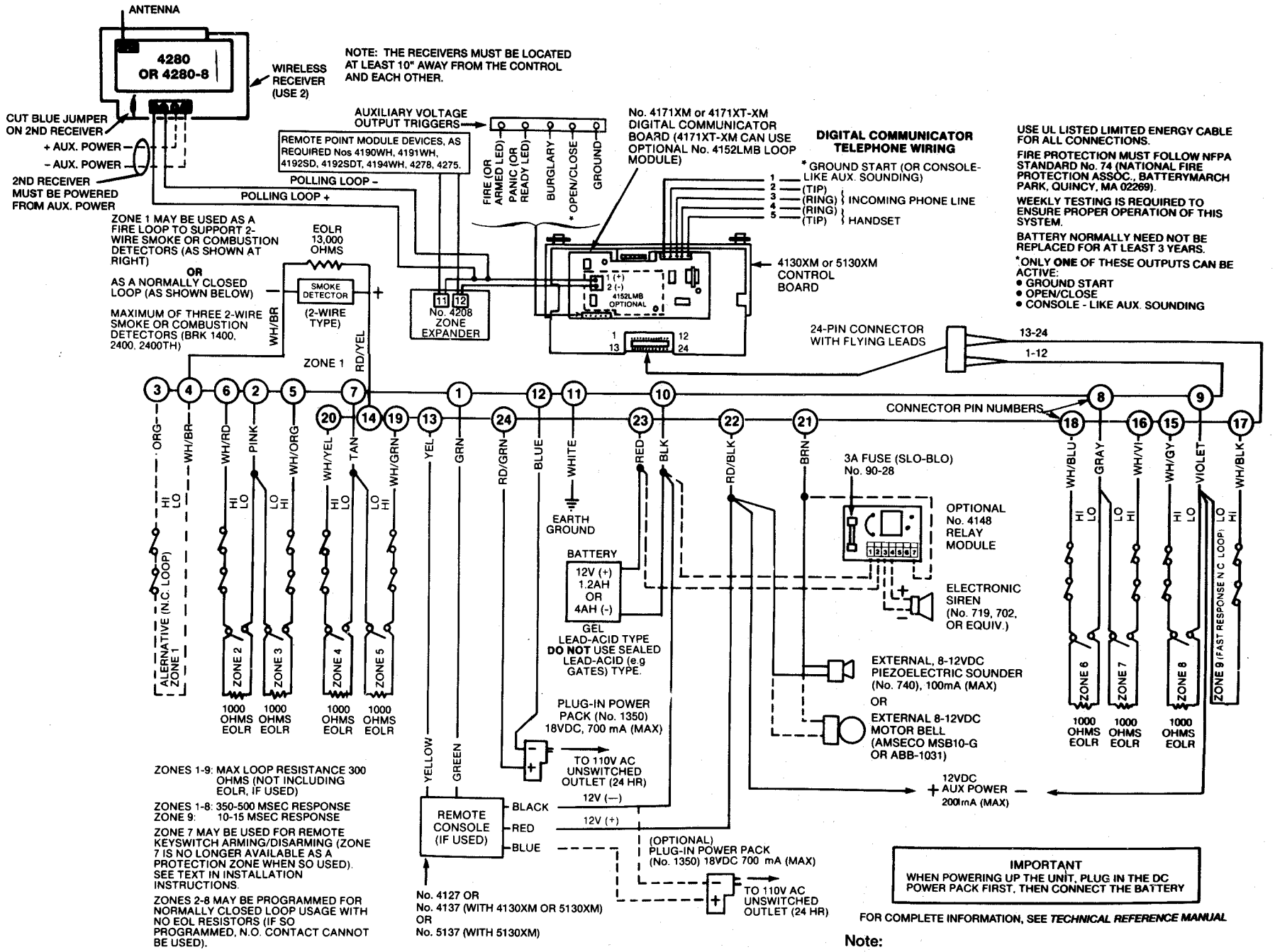
WIRELESS RECEIVERS: Locate the two receivers to provide redundant coverage, as described in the instructions that accompany the receivers. Central, high locations within the premises, either on the first or second floor, are recommended (not the basement, in large installations). Do not locate near any large metal object. Do locate at least 10 feet away from the control, from each other, and from any remote consoles.

Permissible wiring runs (2 wire) **per receiver:**

up to 2400 ft using #16 gauge
up to 1500 ft using #18 gauge
up to 950 ft using #20 gauge
up to 650 ft using #22 gauge

TRANSMITTERS: The indoor range in most residential buildings is approximately 200 feet. Keep at least 4 inches away from any large metal object and do not locate any transmitter inside of a metal enclosure.

Note: Before permanently mounting the transmitters in their proposed locations, use the Go/No Go (Signal Strength) Test described on page 17 herein, (and in the instructions with the receivers), to verify that the locations will be suitable for transmissions to the receivers.



Note:

Controlink® 3010 CONTROL PANEL
Summary of Connections
is shown on label in that control's cabinet

SUMMARY OF CONNECTIONS
Controlink® 3010-1 and 3010-2 CONSOLE/CONTROLS

MOUNTING

CONSOLE/CONTROLS AND REMOTE CONSOLES

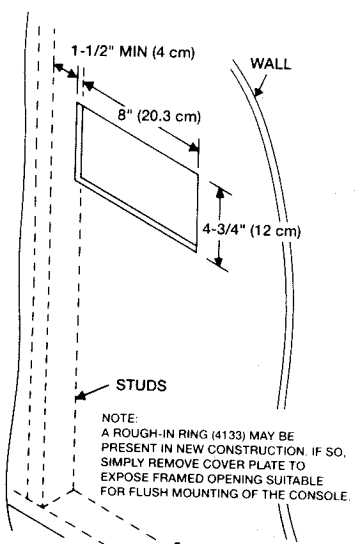
***Note:** Field wiring to the console/control and remote consoles must be completed before they can be mounted.*

SURFACE MOUNTING

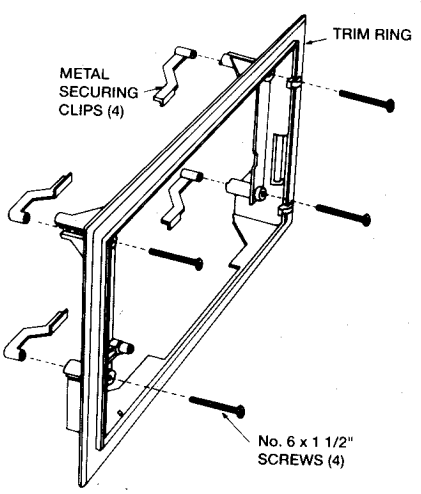
1. **Use the template provided** (on a separate sheet) to mark the positions on the wall for the screw mounting holes and the cut-out for the wiring. Cut the wiring hole.
2. **Route the interface wiring through the cut-out in the wall.**
3. **Remove the console's back cover.** First remove the securing screw from behind the front nameplate.
4. **Pass the interface wiring through the opening in the back cover** and through the 4143 Expansion Ring (if used), **then mount the back cover** to the wall surface with screws.
5. **Splice the interface wiring to the console wires** (or to the wires on the interface connector supplied with Standard Consoles). Insulated solderless wire splices may be used.
6. **Attach the body of the console to the wall-mounted back cover.** It is properly attached when it "snaps" into place. Use the securing screw (previously removed) to secure the console to its back cover.

FLUSH MOUNTING WITH TRIM RING

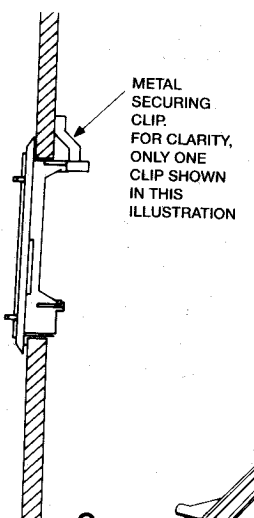
1. **Cut an opening in the wall (see Diagram A below).** Use the template provided to mark the opening.
2. **Insert the four screws through the trim ring holes and thread them into the securing clips as shown in "B".** Use only two or three turns of each screw, allowing the clips to hang freely.
3. **Install the trim ring in the wall opening with the hinge clasps to the right (see "D").** Straighten the trim ring and tighten each clip's screw, making sure that each clip moves down into its guide track (see "C").
4. **Install the console as follows:** Remove the console's back cover (see SURFACE MTG. Step 3 above). Engage the hinge clasps on the trim ring with the notches in the back (right-hand side) of the console's front panel. Swing the left side of the panel toward the trim ring (the panel will pivot on the hinge clasps), and press firmly until the panel "snaps" closed.
5. **Secure the left side of the panel** with the securing screw supplied. Replace the nameplate.



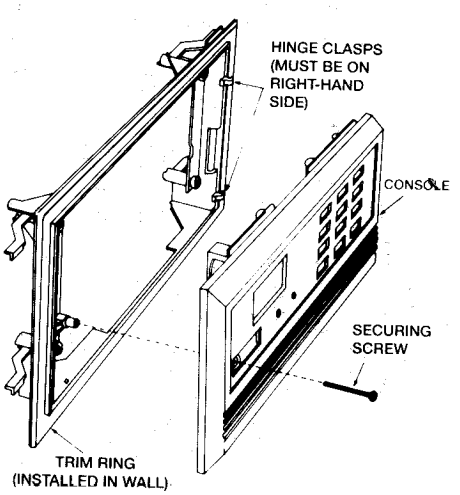
A



B



C



D

POWERING

POWER-UP PROCEDURE

1. **Wire the 1350 (1360) DC POWER PACK first** (before the battery), making sure polarity is correct and the terminal strip (or harness) is connected to the control as shown in the Summary of Connections diagram. *Do not plug in the power pack or connect the battery at this time.*

2. **Connect all auxiliary devices,** such as consoles, PIRs, etc.

3. **Ground Connections:** In order for the protective devices in this product to be effective, the designated earth ground Lead or Terminal must be terminated in a good earth ground. The following are examples of good earth grounds available at most installations:
   Metal Cold Water Pipe: Use a non-corrosive metal strap firmly secured to the pipe to which the ground lead is electrically connected and secured.
   AC Power Outlet Ground: Available from 3-prong, 125VAC power outlets only. To test the integrity of the ground terminal, use a three-wire circuit tester with neon lamp indicators, such as the UL Listed Ideal Model 61-035, or equivalent, available at most electrical supply stores.

3. **Plug the 1350 (1360) into an AC outlet.** Check that the Auxiliary Voltage measures between 13.5 and 14.0VDC. If under 13.5V, too much current is being drawn from the control. See the SPECIFICATIONS section of the *Technical Reference Manual* for the current draw of each device.

4. **Connect the battery** as shown in the Summary of Connections diagram. Do not connect the battery if Auxiliary Voltage is below 13.5V, as this will prevent the battery from being fully charged.

PROGRAMMING

PROGRAMMING THE SYSTEM

1. **ENTER THE PROGRAMMING MODE** in either of these two ways:

   A. **Immediately (within 30 seconds) after powering up the system,** depress the keypad's [*] and [#] keys at the same time.

   or

   B. **With power previously applied,** enter the INSTALLER CODE + [8] + [0] + [0].

   Note: The INSTALLER CODE is initially "4140" for the 3010 (or "4130" for the 3010-1, or "5130" for the 3010-2), but may subsequently be changed (via programming field *00...see page 11).

2. **INITIALIZE THE CONTROL TO ONE OF THE PROGRAMMING DEFAULTS**

   The system is shipped with a set of pre-programmed values that are designed to meet the needs of many installations. These can be changed by the installer to suit specific needs if desired. Alternatively, one of four sets of pre-programmed communication default values can be loaded by the installer, each set designed for a specific communication format. These too can be changed to suit the needs of a particular installation.

   Changes to these pre-programmed values can be programmed directly from the keypad, or remotely from a computer terminal using DOWNLOADING. See the *Technical Reference Manual* for instructions.

   Load one of the default programming sets by using the following chart. (**Note**: One of these sets *must* be entered *before* any other field entries are made.) A complete list of the default values can be found in the *Technical Reference Manual.*

PRESS	TO LOAD THIS PROGRAMMING SET
*97	Standard Default Values
*94*80	Standard Low Speed 3+1/4+1
*94*81	Expanded Low Speed 3+1/4+1
*94*82	Ademco High Speed
*94*83	Expanded 4+2

3. PROGRAMMING PROCEDURE

The control has two sets of programming fields. One set contains the fields indicated by *00 through *90 on the Programming Form. The other contains the fields indicated by 1*00 through 1*49 on the Programming Form.

The *00-*90 Set is accessible as soon as the control enters the programming mode. Fixed-Word consoles will simply display the field address. Alpha consoles will display: PROGRAM MODE and a hyphen will be displayed in front of subsequently entered field addresses.

To **program** a field within this set, enter: **[*] + Address (00-90)**. For example: [*] + [3] + [3] when assigning the Primary Phone Number. Then make the required entry. The console will beep when a field has been completely programmed and will automatically display the next data field in numerical order.

To **view** a field, enter: **[#] + Address**. For example: [#] + [3] + [3] to view the Primary Phone Number. The field's entries will be displayed, but no changes to these entries can be made.

To switch to the 1*00-*1*49 Set, enter: [*] + [9] + [4]. The word CHECK will be displayed at Fixed-Word consoles if this set has been accessed. Alpha consoles will display: ALT PROGRAM MODE and a "1" will be displayed in front of subsequently entered field addresses.

To **program** a field within this set, enter: **[*] + only the last two digits of the Field Address.** For example: [*] + [1] + [9] for field 1*19. Then make the required entry.

To **view** a field, enter: **[#] + only the last two digits of the Field Address**. For example: [#] + [1] + [9] for field 1*19.

To return to the *00-*90 Set, if desired, enter: [*] + [9] + [9], noting that the word CHECK disappears from the display (or ALT PROGRAM MODE changes to PROGRAM MODE).

For Alpha consoles and controls, English language descriptions of the zones and a custom installer message (which appears when the system is ready to arm) can be programmed. Refer to the *Technical Reference Manual* for details.

4. **TO EXIT THE PROGRAM MODE** enter: **[*] + [9] + [9]** ONCE (if exiting from the *00-*90 Set) or TWICE (if exiting from the 1*00-1*49 Set).

If necessary, the PROGRAM MODE may be re-entered by entering: **INSTALLER CODE + [8] + [0] + [0].**

Note: Re-entry to PROGRAM MODE via the installer code can be prevented by entering: **[*] + [9] + [8]** when exiting (preceded by an entry of: **[*] + [9] + [9]** if exiting from the 1*00-1*49 Set). Then PROGRAM MODE can only be re-accessed by depressing the [*] and [#] keys at the same time, within 30 seconds after power-up.

PROGRAMMING FORM

INSTALLER CODE *00
(ENTER 0-9)

MASTER CODE *01
(ENTER 0-9)

RESPONSE TYPE *02
(ENTER 00-10)

00 = unused zone
01 = E/E #1
02 = E/E #2
03 = Perimeter
04 = Interior Follower
05 = Trouble by day/ Alarm by night
06 = 24 hr Silent
07 = 24 Hr Audible
08 = 24 hr Auxiliary
09 = Fire
10 = Interior Delay

* If Zone 7 is to be used for key switch Arm/Disarm operation, enter 10.

ZONES 1 2 3 4 *02
ZONES 5 6 7 8
ZONES 9 10 11 12 *03
13 14 15 16
17 18 19 20 *04
21 22 23 24
25 26 27 *05 0 0
SHORT 1 & * 3 & # * & #

DESIGNATE RIGHT ZONE USAGE *06
0 or 1; 0 for 4208, 4139, 4191,4192SD,4194,4275 usage and for left loop on4190WH and PIR on 4196; 1 for right loop on 4190WH and auxiliary loop on 4196.
10 11 12 13 14 15 16
17 18 19 20 21 22 23 24 *07
25 26 27 28 29 30 31 32 *08

ENTRY DELAY #1 *09
X 15 secs (00 - 15)

EXIT DELAY #1 *10
X 15 secs (00 - 15)

ENTRY DELAY #2 *11
X 15 secs (00 - 15)

EXIT DELAY #2 *12
X 15 secs (00 - 15)

ALARM SOUNDER TIME DURATION *13
X 2 mins. (01 - 15)

NOT USED *14 0
MUST BE 0.

KEYSWITCH ENABLE *15
1 = Yes, 0 = No

CONFIRMATION OF ARMING DING ENABLE *16
1 = Yes, 0 = No

AC LOSS TRBL SOUND *17
1 = Yes, 0 = No

AC PWR LOSS ALARM *18
1 = Yes, 0 = No

CONTROL ALARM SOUNDER DISABLE *19
1 = Yes, 0 = No Makes no difference for 4140

NOT USED *20 0
(MUST BE ZERO)

NO FIRE TIME-OUT *21
1 = Yes, 0 = No

NOT USED *22

MULTIPLE ALARMS *23
1 = Yes, 0 = No

DISABLE TAMPER DETECTION IN EXPANSION ZNS 10-64 *24
1 = Yes, 0 = No

DISABLE DURESS IN HIGH SPEED FORMAT *25
1 = Yes, 0 = No

INTERNAL ALARM SOUND SELECTION *26
1 = sweeping; 0 = louder, steady; makes no difference for 4140XM

TEST REPORT INTERVAL *27
0 = no report; 1 = 12 hrs.; 2 = 24 hrs.;3 = 168 hrs

POWER-UP IN PREVIOUS STATE *28
1 = Yes, 0 = No

QUICK ARM *29
1 = Yes, 0 = No

TOUCH-TONE DIAL *30
1 = Yes, 0 = ROTARY

PABX CODE *31
00 - 09; B - F (11-15)

PRIM SUBSCRIBER # *32
00 - 09; B - F (11-15)

PRIMARY PHONE # *33
0 - 9

SEC PHONE # *34
0-9

CS DOWNLOAD# *35
0-9

CS ID# *36
00 - 09; A - F (10 - 15)

DOWNLOADING COMMANDS ALLOWED *37
1 = Yes, 0 = No

1 DIALER SHUTDOWN
2 SYSTEM SHUTDOWN
3 NOT USED 0
4 REMOTE BYPASS
5 REMOTE DISARM
6 REMOTE ARM
7 UPLOAD PROGRAM
8 DOWNLOAD PROGRAM

(cont'd)

PRIORITY ZONE *38
01 - 31 (00 If all zones are bypassable)

OPEN/CLOSE REPORT ENABLE *39
1 = Yes, 0 = No

USER 9 10 11 12 13 14 15 16

PROGRAM TAMPER RPT *40
(1st digit) 01 - 15 (00 - no report)

USE EOLRs ON ZONES 2-8 *41
1 = N.C. loops, 0 = EOLR supervision

DIAL TONE PAUSE *42
0 = 5 secs., 1 = 11 secs, 2 = 30 secs.

DIAL TONE DETECT *43
1 = Yes, 0 = No; JUST PAUSE

RING DETECT COUNT *44

00 = no ring detect; **01 - 14** for ring counts of 1 - 14; **15 when** telephone answering machine is connected to the same phone line

PRIM ACK WAIT *45
0 = 30 secs. ; 1 = 60 secs.

PRIM XMIT FORMAT *46
0 = ADEMCO LO; 1 = SESCOA/RAD
2 = ADEMCO HI SPEED

SEC ACK WAIT *47
0 = 30 SECS; 1 = 60 SECS.

SEC XMIT FORMAT *48
0 = ADEMCO LO; 1 = SESC/RAD
2 = ADEMCO HI SPEED

CHECKSUM VERIFY *49
1 = Yes, 0 = No

SESCOA/RADIONICS SELECTION *50
0 = Radionics format w/ 0 - 9, B - F reporting;
1 = SESCOA format w/ 0-9 reporting

DUAL REPORTING *51
1 = Yes, 0 = No

USER 1 2 3 4 5 6 7 8

OPEN/CLOSE REPORT ENABLE *52
1 = Yes, 0 = No

4+2 ZONE (MAX. OF 27 ZONES) FORMAT SELECTION *53
0 = a non-expanded zone configuration.
1 = 4+2 reporting by zone for a zone expanded system.

4+2 ZONE (MAX. OF 9 WIRED ZONES) FORMAT SELECTION *54
1 = 4+2 format;
0 = 3+1/4+1 or ADEMCO Hi Speed format

ALARM REPORT *55
0 = Standard; 1 = Expanded

RESTORE REPORT *56
0 = Standard; 1 = Expanded

BYPASS REPORT *57
0 = Standard; 1 = Expanded

TROUBLE REPORT *58
0 = Standard; 1 = Expanded

OPEN/CLOSE REPORT *59
0 = Standard; 1 = Expanded

LOW BAT; AC LOSS REPORT *60
0 = Standard; 1 = Expanded

(cont'd)

CHANNEL ASSIGNED TO EACH ZONE *61 (Enter 01 - 15; 00 = no code reporting)

ZONE 1 2 3 4 5 6 7 8

*62

ZONE 9 10 11 12 13 14 15 16

*63

ZONE 17 18 19 20 21 22 23 24

*64

ZONE 25 26 27 DURESS SHORT 1 & * 3 & # * & #

ALARM CODES FOR EACH CHANNEL *65 *66
(Enter 01 - 15; 00 = no code reporting)

CH1		CH9	
CH2		CH10	
CH3		CH11	
CH4		CH12	
CH5		CH13	
CH6		CH14	
CH7		CH15	
CH8		NOT USED	0 0

NON-ALARM CODES *67 *68
(Enter 01 - 15; 00 = no code reporting)

AC LOSS		OPEN	
AC LOSS 2nd DIGIT		CLOSE	
TRBL		LO BAT	
TRBL RESTR		L BAT 2nd #	
BYPASS		TEST	
BYPASS RESTR		PWR UP	
RESTR CODE FOR ALRM, AC, LO BAT		CANCEL	

ZONE TYPES 1-10 RESTORE REPORT ENABLE *69
(1= YES; 0 = NO)

1 2 3 4

*70 5 6 7 8

*71 9 10

4+2 EXPANDED FORMAT ZONES 1-8 REPORTS *72 *76
(Enter 01 - 15; 00 = no code reporting)

	1st DIGIT	2nd DIGIT
ALRM		Z1
TRBL		Z2
BYPASS		Z3
ALRM RESTR		Z4
TRBL RESTR		Z5
BYPASS RESTR		Z6
		Z7
		Z8

4+2 EXPANDED FORMAT ZONES 9-16 REPORTS

(Enter 00 - 15; 00 = no channel reporting)

*73

	1st DIGIT
ALRM	
TRBL	
BYPASS	
ALRM RESTR	
TRBL RESTR	
BYPASS RESTR	

*77

	2nd DIGIT
Z9	
Z10	
Z11	
Z12	
Z13	
Z14	
Z15	
Z16	

4+2 EXPANDED FORMAT ZONES 17-24 REPORTS

(Enter 01 - 15; 00 = no code reporting)

*74

	1st DIGIT
ALRM	
TRBL	
BYPASS	
ALRM RESTR	
TRBL RESTR	
BYPASS RESTR	

*78

	2nd DIGIT
Z17	
Z18	
Z19	
Z20	
Z21	
Z22	
Z23	
Z24	

4+2 EXPANDED FORMAT KEYPAD PANICS/ZONES 25-27/ XPDR SUPVSRY

(Enter 01 - 15; 00 = no code reporting)

*75

	1st DIGIT
ALRM	
TRBL	
BYPASS	
ALRM RESTR	
TRBL RESTR	
BYPASS RESTR	

*79

	2nd DIGIT
Z25	
Z26	
Z27	
DURESS	
WIRING SHORT, ZONE EXP.	
1 & * PANIC	
3 & # PANIC	
* & # PANIC	

4+2 EXPANDED FORMAT NON-ALARM CODES

(Enter 01 - 15; 00 = no code reporting)

*80

	1st DIGIT	2nd DIGIT
CLOSE REPORT		
OPEN REPORT		
LOW BATT REPORT		
LOW BATT RESTORE RPT		
TEST REPORT		

4+2 EXPANDED FORMAT NON-ALARM CODES (CONT'D)

(Enter 01 - 15; 00 = no code reporting)

*81

	1st DIGIT	2nd DIGIT
POWER-UP REPORT		

*2nd digit is also second digit for program tamper code (see *40)

AC LOSS REPORT		
AC RESTORE REPORT		
CANCEL REPORT		

(cont'd)

SWINGER SHUTDOWN *82
01-15 ALARMS

TEST REPORT START *83
01-31 HRS.; 00 = INSTANT

KISSOFF WAIT *84
1 = ADEMCO High speed on WATS;
0 = other formats or if local telco lines are being used.

DO NOT USE *85 must be zero

ZONE EXPANDER TYPE *86
1 = No. 4208;
0 = other VECTOR type RPM's

ENTRY WARNING *87
1 = CONT.; 0 = 3 BEEPS

BURG. ALARM COMM DELAY *88
1 = 16 SECS.; 0 = NO DELAY

NOT USED *89 0 must be zero

SEC. SUBSCRIBER # *90
00 - 09; B- F [11 - 15]

ACCESS THE FOLLOWING ADDRESSES (100 - 148) BY ENTERING *94 WHILE IN THE PROGRAMMING MODE. ONLY THE LAST 2 DIGITS OF EACH ADDRESS MUST BE KEYED.

OPEN/CLOSE REPORT ENABLE *100
1 = YES, 0 = NO

USER	17	18	19	20	21	22

ASSIGN RESPONSE TYPE FOR ZONES: (SEE FLDS.02 - 05)

*101 ZNS 28 - 32

Z28	
Z29	
Z30	
Z31	
Z32	

*102 ZNS 33 - 40

Z33	
Z34	
Z35	
Z36	
Z37	
Z38	
Z39	
Z40	

*103 ZNS 41 - 48

Z41	
Z42	
Z43	
Z44	
Z45	
Z46	
Z47	
Z48	

*104 ZNS 49 - 56

Z49	
Z50	
Z51	
Z52	
Z53	
Z54	
Z55	
Z56	

*105 ZNS 57 - 64

Z57	
Z58	
Z59	
Z60	
Z61	
Z62	
Z63	
Z64	

*108 ASSIGN RESP. TYPE 2ND 4280

0	0
0	0
0	0
0	0
0	0
0	0
0	0
Z88	2nd 4280 NOT REC XMTR SIG

*106 NOT USED *107 NOT USED

*109 ASSIGN RESP. TYPE 1ST & 2ND 4280

Z89	2ND 4280 NOT RESP./ BAD CONN TO PANEL
Z90	1ST 4280 NOT RECEIVING XMITTER SIGNALS
Z91	1ST 4280 NOT RESP./ BAD CONN TO PANEL

DESIGNATE RIGHT ZONE USAGE (SEE *06 FOR CHOICES)

*110 ZN 33 - 40 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |

*111 ZN 41 - 48 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 |

*112 ZN 49 - 56 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 |

*113 ZN 57 - 64 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 |

*114, *115, *116, *117 NOT USED

SELECTION OF WIRELESS FOR: (1 = YES, 0 = NO)

*118 ZN 1 - 8 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

*119 ZN 9 - 16 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |

*120 ZN 17 - 24 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |

*121 ZN 25 - 32 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |

*122 ZN 33 - 40 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |

*123 ZN 41 - 48 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 |

*124 ZN 49 - 56 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 |

*125 ZN 57 - 63 | 57 | 58 | 59 | 60 | 61 | 62 | 63 |

*126 1ST 4280 RF XPNDR SELECT ☐
1 = YES, 0 = NO

*127 2ND 4280 RF XPNDR SELECT ☐
1 = YES, 0 = NO

*128 RF XMITR LO BAT ANNUN ☐
1 = IMMED, 0 = WHEN DISARMED

*129 RF XMITR LO BAT RPT ☐
1 = YES, 0 = NO

*130 4280 SUP CHK-IN MON. INTRV ☐☐ X 2 HOURS
01 - 15

*131 RF XMTR CHK-IN MON. INTRV ☐☐ X 2 HOURS
01 - 15

*132 ADEMCO H.S. CONTACT RPT FMT ☐
1 = YES, 0 = NO

*133 TT DIAL W/ ROTARY BACKUP ☐
1 = YES, 0 = NO

*134 COMM SPLIT REPORTING ☐
0= NO, 1 = ALARMS PRIM/OTHERS SEC, 2 = OP/CL, TST SEC, OTHERS PRI

CHANNEL ASSIGNED TO EACH ZONE
(ENTER 01 - 15, 00 = NO CODE REPORTING)

*135 ZN 28 - 32

Z28	
Z29	
Z30	
Z31	
Z32	

*136 ZN 33 - 40

Z33	
Z34	
Z35	
Z36	
Z37	
Z38	
Z39	
Z40	

*137 ZN 41 - 48

Z41	
Z42	
Z43	
Z44	
Z45	
Z46	
Z47	
Z48	

CHANNEL ASSIGNED TO EACH ZONE (01 - 15, 00 = NO CODE ENTRY)

*138 ZNS 49 - 56

Z49	
Z50	
Z51	
Z52	
Z53	
Z54	
Z55	
Z56	

*139 ZNS 57 - 64

Z57	
Z58	
Z59	
Z60	
Z61	
Z62	
Z63	
Z64	

*140, *141 NOT USED

*142 ASSIGN CHNNL TO 2ND RCVR FAULT

0	0
0	0
0	0
0	0
0	0
0	0
0	0
Z88	2ND 4280 NO XMTR CHECK-IN FAULT

*143 CHANNEL ASSIGNED TO RF RCVR FAULTS

Z89		2ND 4280 NOT FUNCTIONAL
Z90		1ST 4280 NO XMTR CHECK-IN FAULT
Z91		1ST 4280 NOT FUNCTIONAL

*144 WIRELESS KEYPAD TAMPER DETECT ENABLE ☐
1 = YES, 0 = NO

*145 ENABLE CONSOLE ANNUN DURING EXIT DELAY ☐
1 = YES, 0 = NO

*146 AUX. OUTPUT FUNCTION ENABLE ☐
0 = GND START, 1= OP/CL TRGR, 2= CONSOLE SOUNDS

*147 ENABLE CHIME ANNUN ON EXTERNAL ALARM SNDR ☐
1 = YES, 0 = NO

*148 WIRELESS KEYPAD DISABLE ☐ 1 = YES, 0 = NO

*149 DISABLE RF XMITR CHECK-IN FAIL TRBL SOUNDING ☐
1 = YES, 0 = NO

HEXADECIMAL TO NUMERIC ENTRY CONVERSION

0 = 10 (REPORT CODES)

0 = 00 (SUBS ID, PABX OR CS ID)

1= 01 2= 02 3 = 03 4= 04 5= 05 6= 06 7=07

8= 08 9= 09 B= 11 C= 12 D= 13 E= 14 F= 15

A = 10 (CS ID only)

HOUSE ID NUMBER

SELECTING A HOUSE ID NUMBER

The DIP switches on the wireless receivers must be set to a unique house ID number. By having 31 different house ID numbers (1-31) available, many wireless systems can be installed in close proximity to each other without affecting performance because of communication interference. The house ID number selected for the wireless receivers must also be assigned to all of the wireless transmitters.

HOUSE ID "SNIFFER" MODE

The proper house ID to use for this system is determined by placing the system in the house ID *"sniffer"* mode early in the installation.

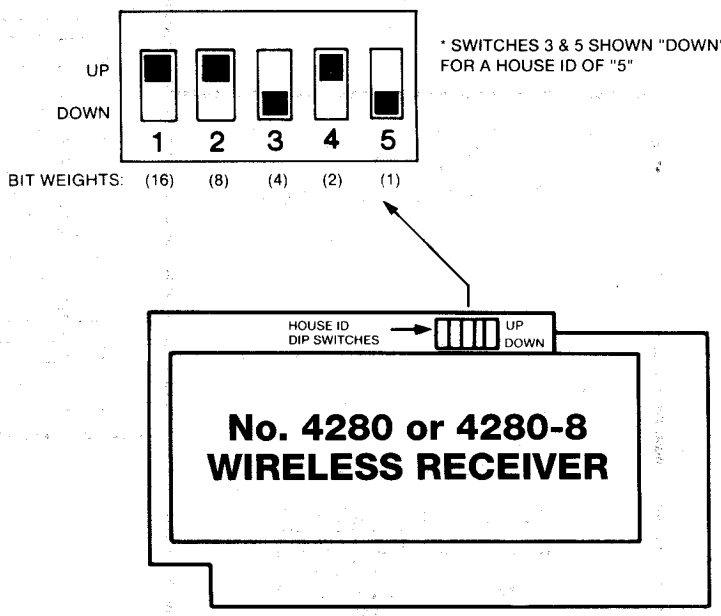
Enter the house ID *sniffer* mode by first setting the switches in the wireless receivers for a house ID of 00 (all switches up) and then keying: **INSTALLER CODE + [#] + [2]**. Allow the system to remain in this mode for at least 60 minutes and the console will display the house ID numbers of any neighboring systems (less than 60 minutes would be acceptable where the likelihood of the presence of nearby systems is small). A house ID number should be selected that is different from any that are displayed. Set the switches in the wireless receivers and all transmitters to the selected house ID in accordance with the table below.

To exit the house ID *sniffer* mode, enter: **INSTALLER CODE + [OFF]** .

HOUSE ID SWITCH SETTINGS FOR ALL WIRELESS DEVICES

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

← HOUSE ID OF 00 (ALL SWITCHES UP) IS RESERVED FOR "SNIFFER" MODE.



TRANSMITTER ID NUMBERS

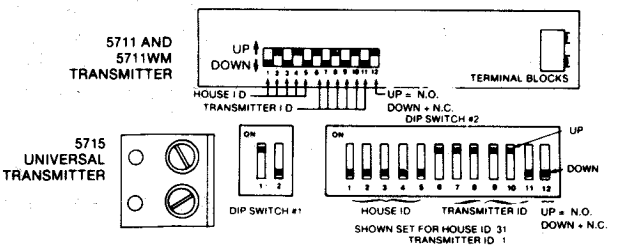
SELECTING THE WIRELESS TRANSMITTER ID NUMBERS

The wireless receivers support up to 8 (4280-8) or 63 (4280) uniquely identified wireless transmitters plus a wireless keypad (5727). The transmitter ID is selected by setting the DIP switches on each transmitter. This page describes the ID Ranges that various transmitters may be set to and how to set the DIP switches on them. House ID information is shown on the previous page.

TRANSMITTER ID "SNIFFER" MODE

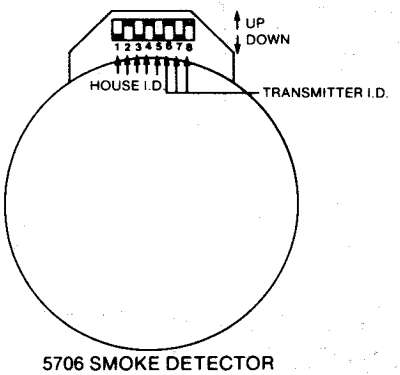
To check that all transmitters have been set for the proper house ID as well as their own transmitter ID, place the system in the transmitter *sniffer* mode by entering: **INSTALLER CODE + [#] + [3].** Each properly set transmitter's number will be displayed at the console, over the course of the next 2 hours, as each transmitter checks in. To speed up the process, each transmitter can be faulted to cause its transmission to be sent immediately.

To exit the transmitter *sniffer* mode, enter: **INSTALLER CODE + [OFF].**



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

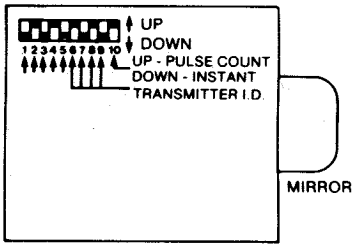
TRANSMITTER I.D.	DIP SWITCH SETTINGS 6	7	8	9	10	11
33	dn	UP	UP	UP	UP	dn
34	dn	UP	UP	UP	dn	UP
35	dn	UP	UP	UP	dn	dn
36	dn	UP	UP	dn	UP	UP
37	dn	UP	UP	dn	UP	dn
38	dn	UP	UP	dn	dn	UP
39	dn	UP	UP	dn	dn	dn
40	dn	UP	dn	UP	UP	UP
41	dn	UP	dn	UP	UP	dn
42	dn	UP	dn	UP	dn	UP
43	dn	UP	dn	UP	dn	dn
44	dn	UP	dn	dn	UP	UP
45	dn	UP	dn	dn	UP	dn
46	dn	UP	dn	dn	dn	UP
47	dn	UP	dn	dn	dn	dn
48	dn	dn	UP	UP	UP	UP
49	dn	dn	UP	UP	UP	dn
50	dn	dn	UP	UP	dn	UP
51	dn	dn	UP	UP	dn	dn
52	dn	dn	UP	dn	UP	UP
53	dn	dn	UP	dn	UP	dn
54	dn	dn	UP	dn	dn	UP
55	dn	dn	UP	dn	dn	dn
56	dn	dn	dn	UP	UP	UP
57	dn	dn	dn	UP	UP	dn
58	dn	dn	dn	UP	dn	UP
59	dn	dn	dn	UP	dn	dn
60	dn	dn	dn	dn	UP	UP
61	dn	dn	dn	dn	UP	dn
62	dn	dn	dn	dn	dn	UP
63	dn	dn	dn	dn	dn	dn



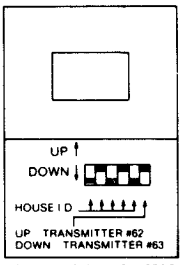
5706 SMOKE DETECTOR

TRANSMITTER I.D.	DIP SWITCH SETTINGS 6	7	8
48	UP	UP	UP
49	UP	UP	dn
50	UP	dn	UP
51	UP	dn	dn
52	dn	UP	UP
53	dn	UP	dn
54	dn	dn	UP
55	dn	dn	dn

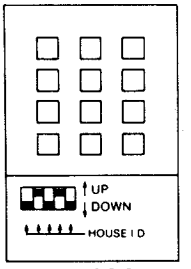
TRANSMITTER I.D.	DIP SWITCH SETTINGS 6	7	8	9
32	UP	UP	UP	UP
33	UP	UP	UP	dn
34	UP	UP	dn	UP
35	UP	UP	dn	dn
36	UP	dn	UP	UP
37	UP	dn	UP	dn
38	UP	dn	dn	UP
39	UP	dn	dn	dn
40	dn	UP	UP	UP
41	dn	UP	UP	dn
42	dn	UP	dn	UP
43	dn	UP	dn	dn
44	dn	dn	UP	UP
45	dn	dn	UP	dn
46	dn	dn	dn	UP
47	dn	dn	dn	dn



5775 PIR



5701 PANIC TRANSMITTER



5727 KEYPAD

TESTING

GO/NO GO (SIGNAL STRENGTH) TEST

Use this test to help determine the best location for each wireless transmitter before mounting it permanently in place. During the test, the receivers' sensitivity is reduced by half, thus assuring strong reception of signals during normal operation of the system.

1. **Place the system in the Test Mode (enter: SECURITY CODE + [5]) and remove both receivers' covers.**

2. **Place transmitters temporarily in their proposed locations.** If wire is to be run from any transmitter, temporarily connect an equivalent length of wire to its screw terminals.

3. **Trip each transmitter, one at a time.** A successful test will result in *both* receivers "hearing" the transmitter. This will be indicated by the console beeping *three* times and displaying the transmitter ID. **Only one beep indicates** that only the "first" receiver heard the transmitter and **two beeps indicate** that only the "second" receiver heard the transmitter. **If necessary, reorient or relocate the transmitter to obtain a successful test** (sometimes moving only a few inches will be necessary). ***Note:*** *Do not conduct these tests with your hand wrapped around the transmitter.*

4. **To exit this mode replace the receivers' covers and enter: SECURITY CODE + [OFF].**

AFTER THE INSTALLATION IS COMPLETE, THE SECURITY SYSTEM SHOULD BE THOROUGHLY TESTED, AS FOLLOWS:

USING TEST MODE

1. **With the system in the disarmed state, check that all zones are intact.** If "NOT READY" (Fixed-Word consoles) or "DISARMED-Press [*] to show faults" (Alpha consoles) is displayed, press the [*] key to show the descriptors of the faulted zone(s). Restore any faulted zones so that "READY" (Fixed-Word consoles) or "****DISARMED**** READY TO ARM" (Alpha consoles) is displayed.

2. **Place the system in the Test Mode (enter: SECURITY CODE + [5]).** The external sounder, if used, should sound for 3 seconds and then turn off. The system is operating on the back-up battery only at this time.

   Notes: **A.** The system will not enter the Test mode if the battery voltage is too low, if the battery is not connected, or if any communication messages are waiting to be transmitted.

   B. As a reminder that the system is in the Test mode, the Console will sound a single beep at 15-second intervals if no protection zones are violated.

   C. In the Test mode, no alarm reports will be sent to the central station. Also, the external sounder, if used, will not be activated.

3. **Activate each sensor, one at a time.** Each action should produce three beeps from the Console and the descriptor for the protection zone should appear on the Console display while activated.

   Notes: **A.** Open and close each protected door and window in turn.

   B. Walk in front of any interior motion detectors. Note that wireless PIRs have a 3 minute lockout between transmissions to conserve battery life.

   C. For smoke detectors, follow the test procedure provided by the manufacturer, to ensure that all detectors are operational and are functioning properly. Note that a 2-wire smoke detector display will not clear until the Test Mode is exited.

4. **To exit the Test Mode, enter: SECURITY CODE + [OFF].**

ARMED SYSTEM TEST

IMPORTANT! A message will be sent to the central station during the following tests. Notify them in advance that a test will be in progress.

Note: A display of "COMM. FAILURE" (Alpha consoles) or "FC" (Fixed-Word consoles) indicates a failure to communicate (no Kissoff by the receiver at the central station after the maximum number of transmission attempts is tried).

1. **Arm the system and fault one or more zones.** Silence alarm sounder(s) each time by entering: SECURITY CODE + [OFF]. Check that Entry/Exit delay zones provide the assigned delay times.

2. **Check the keypad-initiated alarms,** if programmed in field *05, by pressing the Panic keys ([*] and [#], [1] and [*] and/or [3] and [#]. If the system has been programmed for audible emergency, the console will emit a loud, steady alarm sound. The word "ALARM" and a descriptor "99" will be displayed for [*] and [#] (or."95" for [1] and [*], or "96" for [3] and [#]). Silence the alarm by entering: SECURITY CODE + [OFF]. If the system has been programmed for silent panic, there will be no audible alarms or displays; however, a report will be sent to the central station.

3. **Notify the central station when all tests are finished and verify results with them.**

TURNING THE SYSTEM OVER TO THE USER

IMPORTANT!: In the spaces provided in the User's Manual, record the Entry and Exit Delay times, and those functions that have been programmed into the available pairs of Panic keys ([*] and [#], [1] and [*], [3] and [#]).

1. **Fully explain the operation of the system to the user** by going over each of its functions as well as the User's Manual supplied.

2. **In particular, explain the operation of each zone** (entry/exit, perimeter, interior, fire, etc.). Be sure the user understands how to operate any emergency feature(s) programmed into the system.

3. **Make sure the user understands the importance of testing the system at least weekly,** following the procedure provided in the User's Manual.

TO THE INSTALLER

Regular maintenance and inspection (at least annually) by the installer and frequent testing by the user are vital to continuous satisfactory operation of any alarm system.

The installer should assume the responsibility of developing and offering a regular maintenance program to the user, as well as acquainting the user with the proper operation and limitations of the alarm system and its component parts. Recommendations must be included for a specific program of frequent testing (at least weekly) to insure the system's operation at all times.

WARNING
THE LIMITATIONS OF THIS WIRELESS 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 may be blocked or reflected by metal before they reach the alarm receiver. Even if the signal path has been recently checked during a weekly test, blockage can occur if a metal object is moved into the path.
- A user may not be able to reach a panic or emergency button quickly enough.
- While smoke detectors have played a key role in reducing residential fire deaths in the United States, they may not activate or provide early warning for a variety of reasons in as many as 35% of all fires, according to data published by the Federal Emergency Management Agency. Some of the reasons smoke detectors used in conjunction with this System may not work are as follows. Smoke detectors may have been improperly installed and positioned. Smoke detectors may not sense fires that start where smoke cannot reach the detectors, such as in chimneys, in walls, or roofs, or on the other side of closed doors. Smoke detectors also may not sense a fire on another level of a residence or building. A second floor detector, for example, may not sense a first floor or basement fire. Finally, smoke detectors have sensing limitations. No smoke detector can sense every kind of fire every time. In general, detectors may not always warn about fires caused by carelessness and safety hazards like smoking in bed, violent explosions, escaping gas, improper storage of flammable materials, overloaded electrical circuits, children playing with matches, or arson. Depending on the nature of the fire and/or location of the smoke detectors, the detector, even if it operates as anticipated, may not provide sufficient warning to allow all occupants to escape in time to prevent injury or death.
- Passive Infrared Motion Detectors can only detect intrusion within the designed ranges as diagrammed in their installation manual. Passive Infrared Detectors do not provide volumetric area protection. They do create multiple beams of protection, and intrusion can only be detected in unobstructed areas covered by those beams. They cannot detect motion or intrusion that takes place behind walls, ceilings, floors, closed doors, glass partitions, glass doors, or windows. Mechanical tampering, masking, painting or spraying of any material on the mirrors, windows or any part of the optical system can reduce their detection ability. Passive Infrared Detectors sense changes in temperature; however, as the ambient temperature of the protected area approaches the temperature range of 90° to 150°F, the detection performance can decrease.
- Alarm warning devices such as sirens, bells or horns may not alert people or wake up sleepers if they are located on the other side of closed or partly open doors. If warning devices are located on a different level of the residence from the bedrooms, then they are less likely to waken or alert people inside the bedrooms. Even persons who are awake may not hear the warning if the alarm is muffled by noise from a stereo, radio, air conditioner or other appliance, or by passing traffic. Finally, alarm warning devices, however loud, may not warn hearing-impaired people.
- Telephone lines needed to transmit alarm signals from a premises to a central monitoring station may be out of service or temporarily out of service. Telephone lines are also subject to compromise by sophisticated intruders.
- Even if the system responds to the emergency as intended, however, occupants may have insufficient time to protect themselves from the emergency situation. In the case of a monitored alarm system, authorities may not respond appropriately.
- This equipment, like other electrical devices, is subject to component failure. Even though this equipment is designed to last as long as 20 years, the electronic components could fail at any time.

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

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

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

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

FEDERAL COMMUNICATIONS COMMISSION (FCC) STATEMENT

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

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

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

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

"Interference Handbook"

This booklet is available under Stock No. 004-000-00450-7 from the U.S. Government Printing Office, Washington, DC 20402.

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

National Guardian®

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