V12C
Security System

Programming Guide

Master Code 1936

N8601-2 8/98

ADEMCO

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FA145C PROGRAMMING FORM

<u>**FIELD**</u>   <u>**FUNCTION**</u>   <u>**PROGRAMMED VALUES**</u>   [ ] = Default Value

SYSTEM SETUP (*20-*27)

*20   INSTALLER CODE   `[9][5][1][3]` Enter 4 digits, 0-9 [4] [1] [1] [1]

*21   QUICK ARM ENABLE   † `[1]` [0 = no]; 1 = yes

*22   RF SYSTEM TYPE   `[ ]` [0 = none]; 1 = 5800 (5881) No RF Jam Detection; 4 = 5800 w/Jam Detection

*23   FORCED BYPASS FUNCTION   † `[ ]` [0 = none]; 1 = bypass open zones
2 = bypass open zones + (if in system) zones 17, 30, 31.

*24   RF HOUSE ID CODE   `[ ][ ]` [0][0]; Enter 01-31 only if 5827 or 5827BD keypad is used.

*25   WIRED EXPANSION/RELAY USED   † `[ ]` [0 = none]; 1 = 4219; 2 = 4229; 3 = 4204

26   VOICE MODULE ACCESS CODE   `[ ][ ]` 1st digit: Enter 1–9; 2nd digit: Enter only #+11 for '', #+12 for '#'.
[0] in either position = disabled.

*27   OUTPUT TO LONG RANGE RADIO   † `[ ]` [0 = no]; 1 = yes If yes selected, dialer reports to PRIMARY No. (field 47) will also be sent via LRR. All dialer and LRR reports will be in Contact ID format (overriding field *46 selection).

ZONE SOUNDS AND TIMING (*28-*39)

*28   SINGLE ALARM SOUNDING/ZONE   † `[ ]` [0 = no]; 1 = yes

*29   FIRE SOUNDER TIMEOUT   † `[1]` [0 = fire sounder timeout]; 1 = no fire sounder timeout

*30   ALARM BELL TIMEOUT   † `[2]` 0 = none; [1= 4 min]; 2 = 8 min; 3 = 12 min; 4 = 16 min.

*31   EXIT DELAY   † `[6][0]` [45]; Enter number of seconds (00–99).

*32   ENTRY DELAY #1 (Zone type 01) 60†   `[ ][ ]` [30]; Enter number of seconds (00–99).

*33   ENTRY DELAY #2 (Zone type 02)   † `[ ][ ]` [45]; Enter number of seconds (00–99).

*39   AUDIBLE EXIT WARNING   † `[0]` 0 = no; [1 = yes]

DIALER PROGRAMMING (*40-*50)

In fields *40, *41, *42, *44 enter up to the number of digits shown. Do not fill unused spaces.
Enter 0-9; #+11 for '*'; #+12 for '#'; #+13 for a pause (2 secs).

*40   PABX ACCESS CODE   `[ ][ ][ ][ ][ ][ ]` Enter up to 6 digits.
If fewer than 6 digits entered, exit by pressing * (and press 41, if entering next field). To clear entries from field, press *40*.

*41   PRIMARY PHONE No.   `[1][8][7][7][ ][2][-][5][ ][4][8][6][5][ ][ ][ ]` Enter up to 16 digits.
If fewer than 16 digits entered, exit by pressing * (and press 42, if entering next field). To clear entries from field, press *41*.

*42   SECONDARY PHONE No.   `[1][8][2][2][ ][2][ ][5][8][ ][ ][1][0][2][9][ ]` Enter up to 16 digits.
If fewer than 16 digits entered, exit by pressing * (and press 43, if entering next field). To clear entries from field, press *42*.

*43   SUBSCRIBER ACCT No.   `[3][2][5][9]` Enter 0-9; #+11 for B; #+12 for C; #+13 for D;
#+14 for E; [#+15 for F]. To clear entries from field, press *43*.

Examples: For Acct No. **1234**, enter: `[1] [2] [3] [4]`
For Acct No. **B234**, enter: `[#+11] [2] [3] [4]`

*44   TEST REPORT PHONE No.   `[ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]` Enter up to 16 digits.
If fewer than 16 digits entered, exit by pressing * (and press 45, if entering next field). To clear entries from field, press *44*.

*45   PHONE SYSTEM SELECT   † `[ ]` If Cent. Sta. *IS NOT* on a WATS line:0 = Pulse Dial; [1 = Tone Dial]
If Cent. Sta. *IS* on a WATS line: 2 = Pulse Dial ; 3 = Tone Dial

*46   REPORT FORMAT   `[ ]` Also see field *27.
2 = 4+2 ADEMCO L/S STANDARD   6 or undefined = 4+2 ADEMCO EXPRESS
3 = 4+2 RADIONICS STANDARD   [7 = ADEMCO CONTACT ID REPORTING]

*47   SPLIT/DUAL REPORTING   `[ ]` [0 = Disable (Backup report only)]

TO PRIMARY PHONE No.	TO SECONDARY PHONE No.
1 = Alarms, Restore, Cancel	Other Reports
2 = All Reports except Open/Close, Test	Open/Close, Test
3 = Alarms, Restore, Cancel	All Reports
4 = All Reports except Open/Close, Test	All Reports
5 = All Reports *(Dual Reporting)*	All Reports

TO PRIMARY PHONE No.	TO PAGING No.* (SECONDARY)
6 = All reports except Open/Close	** Alarms, Open/Close, Troubles
7 = All reports	** Alarms, Troubles
8 = All reports	** Alarms, Open/Close, Troubles
9 = All reports except Open/Close	** Open/Close for Users 5–25 (users 5–9 or wireless button zones 10–25)

** A 10-digit code is sent to the pager consisting of a 4-digit Subscriber No., a 3-digit Event code, & a 3-digit User or Zone No. See Installation Instructions for a full explanation of the 10-digit code.

† Entry of a number other than one specified will give unpredictable results

* Can only be used if Primary reporting is Ademco Contact ID.

*48	15 SEC DIALER DELAY (BURG)	† ☐	[0 = no]; 1 = yes		
*49	PERIODIC TEST MESSAGE	† ☐	[0 = none]; 1 = 24 hrs; 2 = wkly; 3 = monthly. Enter Test Code in field *64.		
*50	SESCOA/RADIONICS SELECT	† ☐	[0 = Radionics (0-9, B-F reporting)]; 1 = SESCOA (0-9 only reporting) Select 0 for all other formats.		
*51	CONFIRMATION OF ARMING DING	† ☐	[0 = no]; 1 = yes; 2 = yes, but with RF arming only.		
*52	ZONE 3 RESPONSE TO OPEN	† ☐	[0 = 400 ms nominal]; 1 = 10 ms nominal		

† Entry of a number other than one specified will give unpredictable results.

*56   ZONE ASSIGNMENT/ALARM REPORT CODES   (See explanation on next page) ⟶

ZONE DESCRIPTION	ZONE No. (Zn)	ZONE TYPE (ZT)	ALARM RPT CODE (Hex) (RC)	INPUT DEVICE (In)	ENROLLED RF INPUT (L)
ZONES ON CONTROL:					
Wired Zone 1	0 1	0 1	☐☐ ☐☐	HW	—
Wired Zone 2	0 2	4	☐☐ ☐☐	HW	—
Wired Zone 3	0 3	2	☐☐ ☐☐	HW	—
Wired Zone 4	0 4	3	☐☐ ☐☐	HW	—
Wired Zone 5	0 5	0 3	☐☐ ☐☐	HW	—
Wired Zone 6	0 6	5	☐☐ ☐☐	HW	—
Keypad Panic (✳ & #, or B)	0 7	0 7	☐☐ ☐☐	—	—
Duress	0 8	— —	☐☐ ☐☐	—	—
Expansion Module Failure	0 9	0 5	☐☐ ☐☐	—	—
Keypad Panic (1 & ✳, or A)	9 5	0 9	☐☐ ☐☐	—	—
Keypad Panic (3 & #, or C)	9 6	☐ ☐	☐☐ ☐☐	—	—

EXPANSION ZONES: 4219/4229 can add up to 8 wired expansion zones. With 5881L, up to 8 RF expansion zones also available; 5881M, up to 16; 5881H up to 30 (minus, in the last case, the number of 4219/4229 zones used).

	ZONE No.	ZONE TYPE	ALARM RPT CODE	ENTER FOR [5800 ONLY]	
If 4219/4229, Loop A,	1 0	☐ ☐	☐☐ ☐☐	☐	☐
B,	1 1	☐ ☐	☐☐ ☐☐	☐	☐
C,	1 2	☐ ☐	☐☐ ☐☐	☐	☐
D,	1 3	☐ ☐	☐☐ ☐☐	☐	☐
E,	1 4	☐ ☐	☐☐ ☐☐	☐	☐
F,	1 5	☐ ☐	☐☐ ☐☐	☐	☐
G,	1 6	☐ ☐	☐☐ ☐☐	☐	☐
H,	1 7	☐ ☐	☐☐ ☐☐	☐	☐
	1 8	☐ ☐	☐☐ ☐☐	☐	☐
	1 9	☐ ☐	☐☐ ☐☐	☐	☐
	2 0	☐ ☐	☐☐ ☐☐	☐	☐
	2 1	☐ ☐	☐☐ ☐☐	☐	☐
	2 2	☐ ☐	☐☐ ☐☐	☐	☐
	2 4	☐ ☐	☐☐ ☐☐	☐	☐
	2 5	☐ ☐	☐☐ ☐☐	☐	☐
	2 6	☐ ☐	☐☐ ☐☐	☐	☐
	2 7	☐ ☐	☐☐ ☐☐	☐	☐
	2 8	☐ ☐	☐☐ ☐☐	☐	☐
	2 9	☐ ☐	☐☐ ☐☐	☐	☐
	3 0	☐ ☐	☐☐ ☐☐	☐	☐
	3 1	☐ ☐	☐☐ ☐☐	☐	☐
	3 2	☐ ☐	☐☐ ☐☐	☐	☐
	3 3	☐ ☐	☐☐ ☐☐	☐	☐
	3 4	☐ ☐	☐☐ ☐☐	☐	☐
	3 5	☐ ☐	☐☐ ☐☐	☐	☐
	3 6	☐ ☐	☐☐ ☐☐	☐	☐
	3 7	☐ ☐	☐☐ ☐☐	☐	☐
	3 8	☐ ☐	☐☐ ☐☐	☐	☐
	3 9	☐ ☐	☐☐ ☐☐	☐	☐

Zn = ZONE NUMBER Zone Nos. are from 01 to 39, 95, 96. Some are pre-assigned.
With Field *25 set for auxiliary wired loops (4219 or 4229), use Zone Nos. 10–17 for loops A–H.
With Field *22 set for RF (5800), use Zone Nos. 18-39 for RF if all zones of the 4219/4229 are used,
If all zones of the 4219/4229 are NOT used, the unused zones may be used as RF zones.

ZT = ZONE TYPE

00 = Zone Not Used	05 = Trouble Day/Alarm Night	10 = Interior w/Delay
01 = Entry/Exit #1	06 = 24 Hr Silent	20 = Arm—Stay*
02 = Entry/Exit #2	07 = 24 Hr Audible	21 = Arm—Away*
03 = Perimeter	08 = 24 Hr Aux	22 = Disarm*
04 = Interior Follower	09 = Fire	23 = No Alarm Response
		* 5800 RF Only

DEFAULT VALUES

Zn:	01	02	03	04	05
ZT:	[01]	[04]	[03]	[03]	[09]

Zn:	06	07	95	96
ZT:	[07]	[06]	[00]	[00]

RC = ALARM REPORT CODE Two Hex Digits. For each Hex Digit, enter: 00–09 for 0–9,
10 for A, 11 for B, 12 for C, 13 for D, 14 for E, 15 for F.

If "00" is entered in the first pair of boxes, there will be no report for that zone.

For contact ID reporting, this is an enabling code only. Make any hex digit entry (other than "00") in the first pair of boxes. The second pair of boxes will be ignored.

In = LOOP INPUT DEVICE HW: Hard Wire
Enter 2 for AW: (Aux Wire, 4219 or 4229)

Enter 3 for RF: Supervised RF
Enter 4 for UR: Unsupervised RF
Enter 5 for BR: Button Type RF

These are automatically assigned, except "UR" and "BR" for 5800 RF.

L = ENROLLED RF INPUT Used with (5800) RF Loop Input Devices.

TO PROGRAM SYSTEM STATUS, & RESTORE REPORT CODES (*60-*75):

Enter a code in the *first* box: 1-9, 0, B, C, D, E, or F. Enter "#+10" for 0, "#+11" for B, "#+12" for C, "#+13" for D, "#+14" for E, "#+15" for F.

A "0" (*not* "#+10") in the *first* box will disable a report.

A "0" (*not* "#+10") in the *second* box will result in automatic advance to the next field when programming.

With 4+2 Format: Enter codes in *both* boxes (1st and 2nd digits) for 1-9, 0, or B-F, as described above.

A "0" (*not* "#+10") in the *second* box will eliminate the expanded message for that report.

A "0" (*not* "#+10") in *both* boxes will disable the report.

With Ademco Contact ID Reporting: Enter any digit (other than "0") in the *first* box, to enable zone to report (entries in the *second* boxes will be ignored).

A "0" (*not* "#+10") in the *first* box will disable the report.

Examples:

For Code **32** (Two Digits), enter: [3] [2]

For Code **B2** (Hexadecimal) enter: [# +11] [2]

SYSTEM STATUS REPORT CODES (*60-*68)

*60	TROUBLE REPORT CODE		
*61	BYPASS REPORT CODE		
*62	AC LOSS REPORT CODE		
*63	LOW BATTERY REPORT CODE		
*64	TEST REPORT CODE		
*65	OPEN/EXIT ALARM REPORT CODE		

2nd digit of OPEN REPORT is automatically sent as the user number if 4+2 reporting is selected.

2nd digit of EXIT ALARM REPORT is automatically sent as the 2nd digit of the zone alarm report code programmed in *56, 4+2 reporting is selected.

*66 AWAY/STAY CLOSE REPORT CODE

2nd digit of any CLOSE REPORT is automatically sent as the user number, if 4+2 reporting is selected.

*67	RF XMTR LOW BAT REPORT CODE		
*68	CANCEL REPORT CODE		

RESTORE REPORT CODES (*70-*75)

*70 ALARM RESTORE REPORT CODE

2nd digit is automatically sent as the 2nd digit of the zone alarm report code programmed in *56, if 4+2 reporting is selected.

*71	TROUBLE RESTORE REPORT CODE		
*72	BYPASS RESTORE REPORT CODE		
*73	AC RESTORE REPORT CODE		
*74	LOW BAT RESTORE REPORT CODE		

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*75 RF XMTR LO BAT RST REPORT CODE [ ] [ ]

OUTPUT AND SYSTEM SETUP (*80-*92)

*80 OUTPUT RELAYS — *Program *80 and *81 only*

*81 ZONE LISTS FOR OUTPUT RELAYS — *if Relays are to be used. See next page.*

*82 CUSTOM ALPHA EDITING: (Also entered from field *56): *See procedure in instructions.*

*83 SEQUENTIAL MODE (for enrolling 5800 transmitters): (enrollment can also be accomplished from field *56): See procedure in Installation instructions, under field *56.

*84 AUTO STAY ARM [0 = No], 1 = Yes [ ]

*85 AC LOSS REPORT DELAY 0 = No, [1 = Yes] [ ]
If Yes, AC Loss report will go out with the next dialer attempt.

*86 SERVICE CALL REQUEST 0 = No, [1 = Yes] [ ]

*91 CUSTOM OPTION SELECTION [ ]
(Also see field *98)

[0 = None selected]	4 = AAV (Audio Alarm Veri-fication)†	6 = Sounder Delay + AAV†
1 = Local Lockout		7 = Local Lockout + Sounder Delay + AAV†
2 = Sounder Delay†	5= Local Lockout + AAV†	
3 = Local Lockout + Sounder Delay†		8 = Exit Delay Restart

† Options 2, 3, 4, 5, 6, and 7 cannot be used for UL installations

*92 REPORTS PER ARMED PERIOD [ ]
[0 = 10 max total alarm + alarm restore], 1 = unlimited

DOWNLOAD INFORMATION (*94, *95)

*94 DOWNLOAD PHONE No.

[ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]

Enter up to 16 digits: 0-9; #+11 for '*'; #+12 for '#'; #+13 for a pause. Do not fill unused spaces. If fewer than 16 digits entered, exit field by pressing ✳ (and press 95, if entering next field). To clear entries from field, press ✳94✳.

*95 RING DET COUNT FOR DOWNLOADING [ ]
[0=Disable Station Initiated Download]; 1-14=number of rings (1-9, #+10=10, #+11=11, #+12=12, #+13=13, #+14=14); 15=answering machine defeat (#+15=15)

*96 INITIALIZES DOWNLOAD ID, SUBSCRIBER ACCOUNT No. FOR INITIAL DOWNLOAD: No data entry required.

*97 SETS ALL PROGRAM FIELDS TO DEFAULT VALUES: No data entry required.

TO EXIT PROGRAM MODE (*98 or *99)
Press ✳98 or ✳99 if exiting programming, or next field number if continuing.

*98 EXITS PROGRAMMING MODE and *prevents* re-entry by (or, if Local Lockout has been chosen in field *91, *allows* re-entry *only* by): Installer Code + Code + 0.

*99 EXITS PROGRAMMING MODE and *allows* re-entry by: Installer Code + Code + 0, or by: Power-up + ✳ + #.

OUTPUT RELAYS WORKSHEET FOR FIELDS *80, and *81.

Applicable only if relays are to be used.

Fill in required data and follow detailed programming procedure described in the *PROGRAMMING DATA FIELDS* section of the Installation Instructions.

*80 OUTPUT RELAYS

Notes:
1. Field *25 must be programmed for a 4229 (Relays 01 and 02) or a 4204 (Relays 01 to 04).
2. If an AAV (Audio Alarm Verification) option is selected in field *91, Relay 01 should *not* be programmed here.
3. Tampers of expansion units cannot be used to operate relays.

OUTPUT RELAY	RELAY ACTION (A)	START =either or both-			STOP =either or both-	
		EVENT (EV)	ZONE LIST (ZL)	ZONE TYPE /SYST OP'N (ZT)	"RESTORE of" ZONE LIST (ZL)	ZONE TYPE /SYST OP'N (ZT)
01 SEE NOTE 2 ABOVE	☐	☐	☐	☐☐	☐	☐☐
02	☐	☐	☐	☐☐	☐	☐☐
03	☐	☐	☐	☐☐	☐	☐☐
04	☐	☐	☐	☐☐	☐	☐☐

Where:
A = RELAY ACTION   0 = No Response; 1 = Close for 2 sec; 2 = Close and stay closed; 3 = Pulse on and off
EV = EVENT   0 = Not used; 1 = Alarm; 2 = Fault; 3 = Trouble
ZL = ZONE LIST   1, 2, or 3 (from Field *81) or 0 = Not Used.
    START ZONE LIST :   Upon alarm, fault, or trouble of ANY zone on this list, relay action will START.
    STOP "RESTORE of" ZONE LIST: Upon restore of ALL zones on this list, relay action will STOP.
    It need not be same list as used for START.

ZT = ZONE TYPE/SYSTEM OPERATION

Choices for Zone Types are:

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

Note: *Any* zone in "ZT" going into alarm, fault, or trouble will actuate relay. *Any* zone of that type that restores will stop relay action.

Choices for System Operation are:

20 = Arming–Stay	33 = Any Burglary Alarm	39 = Any Fire Alarm
21 = Arming–Away	34 = Code + # + 7 Key Entry	40 = Bypassing
22 = Disarming (Code + OFF)	35 = Code + # + 8 Key Entry	41 = AC Power Failure
31 = End of Exit Time	36 = At Bell Timeout**	42 = System Battery Low
32 = Start of Entry Time	38 = Chime	58 = Duress

**Or at Disarming, whichever occurs earlier.

*81 ZONE LISTS FOR OUTPUT RELAYS

Record desired zone numbers. More or fewer boxes than shown may be needed, since any list may include *any* or *all* of system's zone numbers.

Zone List 1: Started or stopped by zone numbers (enter 00 to end entries).
☐☐, ☐☐, ☐☐, ☐☐, ☐☐, ☐☐, ☐☐, ☐☐, ☐☐, ☐☐ ...etc.

Zone List 2: Started or stopped by zone numbers (enter 00 to end entries).
☐☐, ☐☐, ☐☐, ☐☐, ☐☐, ☐☐, ☐☐, ☐☐, ☐☐, ☐☐ ...etc.

Zone List 3: Started or stopped by zone numbers (enter 00 to end entries).
☐☐, ☐☐, ☐☐, ☐☐, ☐☐, ☐☐, ☐☐, ☐☐, ☐☐, ☐☐ ...etc.

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

> The following program fields **must be** programmed (as required) before doing any zone programming.
>   *22. RF SYSTEM TYPE
>   *25. WIRED EXPANSION/RELAY USED
> Explanations of these fields are found in the *DATA FIELD DESCRIPTIONS* section in this manual.

General Programming Information

Characteristics for each installation are stored in non-removable, electrically erasable, non-volatile EEROM memory. These must be programmed for the particular installation to establish its specific alarm and reporting features.

It is possible to program the system at any time, even at the installer's premises prior to the actual installation. Simply apply power temporarily to the control and then program the unit as desired.

Important Note: **You cannot enter the programming mode unless the system is disarmed.**

There are two programming modes: data field programming and interactive menu mode programming. Data field programming is used for setting various system options and menu mode programming is used for programming zone information, programming relay outputs, and for entering 5800 series transmitter serial numbers.

> To program the system, you must use a 6139 2-line Alpha keypad connected to keypad terminals on the control (4, 5, 6, & 7). The Alpha keypad need not necessarily remain in the system after programming.

Programming can also be performed remotely from the installer's office/home or on-site, using an IBM personal computer, a modem, and First Alert's *Windows* downloading software. See the *REMOTE PROGRAMMING AND CONTROL (DOWNLOADING)* section in this manual.

Entering the Program Mode

You may use one of the following methods:

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

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

   Method (b) is disabled if you exit the program mode using *98 instead of *99. See "Exiting the Program Mode" paragraph later in this section.

   If a different INSTALLER code is subsequently programmed, use it instead of 4111 to gain access to the Programming mode.

Following entry into the program mode, data field *20 will be displayed (this is the first field in the system). The system will now accept entries for field *20 INSTALLER CODE (the default Installer Code is 4-1-1-1).

Programming a Data Field

1. Press [*] plus **Field No.** (for example, *21), then make the required entry.
2. When you have completely programmed a data field, the keypad will "beep" three times and then automatically display the next data field in sequence. To go to a different field, press [*] plus the desired field No.

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

4. If you try to enter a non-existent field, an Alpha keypad will display **NOT USED** and **EE** (Entry Error). Simply key [*] again plus a valid field number.

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

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

To delete an entry in a field, press [*] plus **Field No.** plus [*]. (Applies only to fields *40 – *42, *44, and *94.)

Interactive Menu Mode Programming (*56, *80, *81, *82 & *83)

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

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

Typical prompt displayed during interactive menu mode programming

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

Menu Mode	Used To Program
*56 Zone Programming	Zone characteristics, report codes, alpha descriptors and serial numbers for 5800 transmitters
*80 Relay Programming	4204 or 4229 Output Relay modules,
*81 Zone List Programming	Zone Lists for 4204 relay activation
*82 Alpha Programming	Zone alpha descriptors
*83 Sequential Mode	5800 series transmitter serial numbers

Loading Factory Defaults

To load the factory defaults at any time (when system is disarmed), enter the programming mode, press *97, then exit the programming mode.

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

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

Programming System Setup Fields

IMPORTANT: The following program fields **must be** programmed before doing any zone programming.

*22 **RF SYSTEM TYPE** (Default is 0).
Enter "1" if 5800 RF system type is being used; "0" if no RF is being used, or "2" if 5800 with RF Jam Detector is being used.

*25 **WIRED EXPANSION/RELAY USED** (Default is 0).
Enter "1" if a 4219 wired expansion module is being used,, "2" for 4229 wired expansion/relay module , "3" for 4204 relay module. ("0" = none.)

Exiting the Programming Mode

*98 **EXITS PROGRAMMING MODE** and *prevents* re-entry by **Installer Code + [8] + [0]**. To enter the programming mode if *98 was used to exit, you must first power the system down. Then power up again, and press [*] **and** [#] both at once, within 50 seconds of powering up.

Note: If any selection made in field *91 includes Local Lockout (options 1, 3, 5, or 7), exiting with *98 will allow entry into the programming mode **only** by using Installer Code + [8] + [0], not by Power-up + [*] and [#], as indicated above.

*99 **EXITS PROGRAMMING MODE** and *allows* re-entry by:
Installer Code + [8] + [0] or by: Pressing [*] and [#] at the same time, within 50 seconds of powering up the system.

Table 1. 5800 Series Transmitter Input Loop Identification

- All of the transmitters illustrated below have one or more unique factory assigned input (loop) ID codes. *Each of the inputs requires its own programming zone* (e.g., a 5804's four inputs require four programming zones).

- All transmitters shown below are Ademco transmitters.

- Transmitter inputs entered as:

   "RF" (Supervised RF) Type send periodic check-in signals, as well as fault, restore and low battery signals. The transmitter must remain within the receiver's range.

   "UR" (Unsupervised RF) Type send all the signals that the "RF" Type does, but the control does not supervise the check-in signals. The transmitter may, therefore, be carried off-premises.

   "BR" (Unsupervised Button RF) Type only send fault signals. Restore or check-in signals are not sent, but low battery signals are sent when a button is pressed. The transmitter may be carried off-premises.
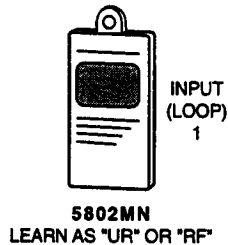
INPUT (LOOP) 3
INPUT (LOOP) 2
INPUT (LOOP) 1
4 (ALWAYS USE)

5801
LEARN AS "UR" OR "RF"

INPUT (LOOP) 1

5802MN
LEARN AS "UR" OR "RF"
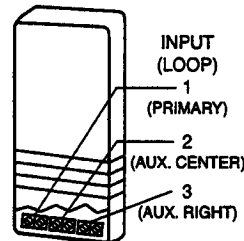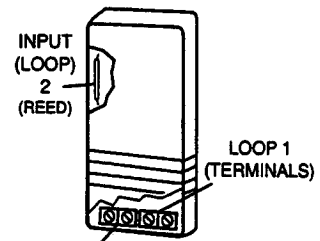
INPUT (LOOP) 1 (PRIMARY)
2 (AUX. CENTER)
3 (AUX. RIGHT)

5817
LEARN AS "RF"

INPUT (LOOP) 2 (REED)
LOOP 1 (TERMINALS)
LOOP 3 (TERMINALS)

5819
LEARN AS "RF"

YOU MUST LEARN THIS BUTTON LOOP 4
LOOP 3
LOOP 2
LOOP 1

5804
LEARN AS "BR"

INPUT (LOOP) 1

5808
LEARN AS "RF"

```
5827
SET HOUSE ID
(DIP SWITCHES)
```

```
5827BD
SET HOUSE ID
(KEYPAD PROGRAMMABLE)
```

INPUT (LOOP) 2 (REED)
LOOP 1 (TERMINALS)

5816
LEARN AS "RF"

INPUT (LOOP) 2 (REED)
LOOP 1 (TERMINALS)
ALTERNATE POSITION FOR LOOP2

5816MN
LEARN AS "RF"

(Green)
(Red)
(Yellow)
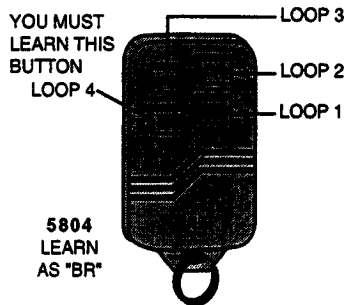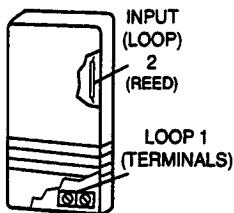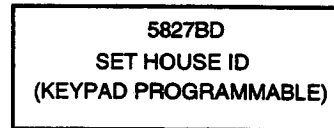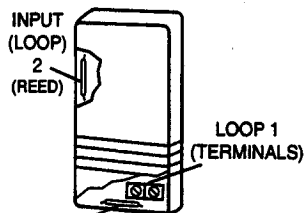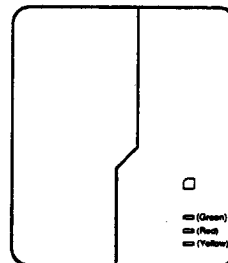
5850 (GBD)
LEARN AS "RF"

INPUT (LOOP) 1 (MOTION)
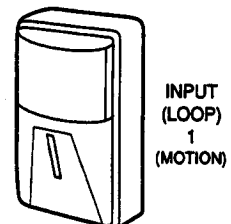
5890
LEARN AS "RF"

ALPHA VOCABULARY LIST
(For Entering Zone Descriptors)

NOTE: Some rarely used words appearing in previously published lists have been deleted from the list below. Use only this list for selecting zone descriptors.

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

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

CHARACTER (ASCII) CHART
(For Adding Custom Words)

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

Type 00 Zone Not Used	Program a zone with this zone type if the zone is not used.
Type 01 Entry Delay #1, Burglary	This zone type provides entry delay whenever the zone is faulted if the control is armed in the AWAY or STAY modes. When the panel is armed in the INSTANT or MAXIMUM modes, no entry delay is provided. Exit delay begins whenever the control is armed, regardless of the arming mode selected. These delays are programmable. This zone type is usually assigned to sensors or contacts on doors through which primary entry and exit will take place.
Type 02 Entry Delay #2, Burglary	This zone type provides a secondary entry delay whenever the zone is faulted if the panel is armed in the AWAY and STAY modes. When the panel is armed in the INSTANT or MAXIMUM modes, no entry delay is provided. This zone type is usually assigned to sensors or contacts on doors through which secondary entry and exit will take place, and where more time might be needed to get to and from the keypad (typically used for a garage, loading dock, or basement door).
Type 03 Perimeter Burglary	This zone type gives an instant alarm if the zone is faulted when the panel is armed in the AWAY, STAY, INSTANT or MAXIMUM modes. This zone type is usually assigned to all sensors or contacts on exterior doors and windows.
Type 04 Interior, Follower	This zone type is active when the panel is armed in the AWAY or MAXIMUM modes. Entry delay (using the programmed entry time) results if the panel is armed in the AWAY mode and the entry/exit zone is faulted first. Otherwise this zone type gives an instant alarm. *Exit* delay is present for *any* arming mode. This zone type is usually assigned to a zone covering an area such as a foyer, lobby, or hallway through which one must pass (upon entry, after faulting the entry/exit zone) to reach the keypad to disarm the system. Since this zone type is designed to provide an instant alarm if the entry/exit zone is not violated first, it will protect an area in the event an intruder hides on the premises prior to the system being armed, or gains access to the premises through an unprotected area. **This zone type is bypassed automatically when the panel is armed STAY or INSTANT.**
Type 05 Trouble by Day/ Alarm by Night	This zone type will give an instant alarm if faulted when armed in the AWAY, STAY, INSTANT or MAXIMUM (night) modes. During the disarmed state (day), the system will provide a latched trouble sounding from the keypad (and a central station report, if desired). This zone type is usually assigned to a zone which contains a foil-protected door or window (such as in a store), or to a zone covering a "sensitive" area such as a stock room, drug supply room, etc. This zone type can also be used on a sensor or contact in an area where immediate notification of an entry is desired.
Type 06 24-hour Silent Alarm	This zone type sends a report to the Central Station but provides no keypad display or sounding. This zone type is usually assigned to a zone containing an Emergency button.
Type 07 24-hour Audible Alarm	This zone type sends a report to the Central Station, and provides a rapid beeping sound at the keypad, and an audible external alarm. This zone type is usually assigned to a zone that has an Emergency button.
Type 08 24-hour Auxiliary Alarm	This zone type sends a report to the Central Station and provides a rapid beeping sound at the keypad. **(No bell output is provided).** This zone type is usually assigned to a zone containing a button for use in personal emergencies, or to a zone containing monitoring devices such as water or temperature sensors, etc.
Type 09 Supervised Fire	This zone type provides a fire alarm on short circuit and a trouble condition on open circuit. The bell output will pulse when this zone type is faulted. This zone type is always active and cannot be bypassed. This zone type can be assigned to control panel wired zone 5 and to wireless zones.

Type 10
Interior w/Delay

This zone type gives *entry* delay (using the programmed entry time), if tripped when the panel is armed in the Away mode, regardless of whether or not an entry/exit delay zone was tripped first. This zone type is also active during MAXIMUM mode, but *no* entry delay is provided (an alarm occurs immediately if the zone is tripped). *Exit* delay is present for *any* arming mode. **This zone type is bypassed automatically when the panel is armed STAY or INSTANT.**

Type 20
Arm–Stay

This is a special-purpose zone type used with 5800 series wireless pushbutton units* which will result in arming the system in the STAY mode when the zone is activated.

Type 21
Arm–Away

This is a special-purpose zone type used with 5800 series wireless pushbutton units* which will result in arming the system in the AWAY mode when the zone is activated.

> * Wireless pushbutton units send the zone number as the user number to the central station when arming or disarming.

Type 22
Disarm

This is a special-purpose zone type used with 5800 series wireless pushbutton which will result in disarming the system when the zone is activated.

Type 23
No Alarm Response

This zone type can be used on a zone when an output relay action is desired, but with no accompanying alarm (e.g., lobby door access).

Data Field Descriptions

The blank programming form in this manual should be used to record the data for this installation.

The following is a list of all data fields in this control (presented in numerical order). This list provides an explanation of each data field, and will serve as a reference for all fields in the system. Defaults (where applicable) are indicated in the text for each field in this list.

*20 INSTALLER CODE   Default is 4-1-1-1.
The Installer code is used to program the system, and to assign the 4-digit Master security code **in the normal operation mode,** via the keypad See "Master Code" in the *SYSTEM OPERATION* section in the Installation Instructions for the procedure.
Enter 4 digits, 0–9.

*21 QUICK ARM ENABLE *(1-Digit Entry)*   Default is 0.
If enabled, the [#] key can be used instead of the security code when **arming** the system. Enter 0 for disabled or 1 for enabled. **This feature will function only if the Master Code is programmed.**

*22 RF SYSTEM TYPE   *(1-Digit Entry)*   Default is 0 (none).
Enter 1 for 5800 RF wireless system (5881* series RF receivers, and 5800 series transmitters required). Enter 0 if no receiver is being used. Enter 2 for 5800 RF with Jam Detection.
* 5882 series RF receivers in Canada.

*23 FORCED BYPASS FUNCTION *(1-Digit Entry)*   Default is 0.
This feature allows all faulted zones to be bypassed automatically.
All zones that are bypassed by this function will be displayed after the bypass is initiated:
0 = No forced bypass; 1 = Allows automatic bypass of all open zones.

*24 RF HOUSE ID CODE *(2-Digit Entry)*   Default is 00 .
If a 5827 or 5827BD Wireless keypad is to be used in a 5800 RF system, a House ID code MUST also be entered (01–31), and the keypad should be set to the same ID. In a 5800 system with no 5827 or 5827BD wireless keypad, enter 00 (no House ID).

*25 WIRED EXPANSION/RELAY USED *(1-Digit Entry)*   Default is 0.
Enter "1" if a 4219 wired expansion module is being used, "2" for 4229 wired expansion/relay module , "3" for 4204 relay module. ("0" = none.)

*26 VOICE MODULE ACCESS CODE   *(2-Digit Entry)*   Default is 00.
The use of an 4285 Voice Module requires a 2-digit code, the first digit being any number from 1 to 9, the second digit being either "*", or "#". For first digit, enter any digit from 1 to 9; for second digit, enter # +11 for "*", or # +12 for "#".
Example: If desired access code is 7*, **7** is the first entry, and **# + 11** (for *) is the second entry.
"00" = Voice Module disabled. **Note:** A "0" in *either* digit will disable the Voice Module.

*27 OUTPUT TO LONG RANGE RADIO *(1-Digit Entry)*   Default is 0.
0= no, 1 = yes. If output to LRR is selected here (1), all messages that are programmed to go to the Primary Phone No. (field *47) will also be sent to the radio (e.g., 7720 PLUS or 7820). These messages will always be in Contact ID format (overriding the selection in field *46). The data line is supervised, as well as certain functions in the radio.
If communication is lost or a trouble develops, a message will be attempted to be sent via both radio and telephone to the central station.
Normal trouble restore report (*71) is sent on restore of the condition.
Note: The Radio should be programmed for device address 3 on the keypad lines.

ZONE SOUNDS AND TIMING (*28–*39)

*28   **SINGLE ALARM SOUNDING PER ZONE**   Default is 0.
(Per Armed Period)   *(1-Digit Entry)*
This field limits external alarm sounding to once per arming period for a given zone. Enter 1 for yes; 0 for no.

UL	For UL installations, enter 0 for unlimited Alarm Soundings

*29   **FIRE SOUNDER TIMEOUT**   *(1-Digit Entry)*   Default is 0.
This field determines whether the external sounder will shut off after time allotted, or continue until manually turned off. Enter 0 (default) for sounder timeout, or 1 for no timeout.

*30   **ALARM BELL TIMEOUT**   *(1-Digit Entry)*   Default is 1.
This field determines whether the external sounder will shut off after time allotted, or continue until manually turned off. Enter as follows:
0 = No timeout; 1 = 4 min (default); 2 = 8 min; 3 = 12 min; 4 = 16 min.

*31   **EXIT DELAY**   *(2-Digit Entry)*   Default is 45.
Exit delay defines the delay period that allows users to leave the premises through a door that has been programmed as an entry/exit door after arming the system without setting off the alarm. Enter the desired number of seconds for the exit delay time as follows: 00 (none) to 99 seconds.

*32   **ENTRY DELAY #1** (Zone Type 01)   *(2-Digit Entry)*   Default is 30.
The system will wait the time assigned before sounding an alarm upon entering through the primary entry door (STAY and AWAY arming modes only).
Enter the desired number of seconds: 00 (none) to 99 seconds.

*33   **ENTRY DELAY #2** (Zone Type 02)   *(2-Digit Entry)*   Default is 45.
The system will wait the time assigned before sounding alarm upon entering through the secondary entry door (STAY and AWAY arming modes only).
Enter the desired number of seconds: 00 (none) to 99. seconds

UL	For UL installations, entry delay can be no greater than 45 seconds.

*39   **AUDIBLE EXIT WARNING** *(1-Digit Entry)*   Default is 1.
If enabled, this field provides an exit warning sound when armed AWAY or MAXIMUM.
Warning sound consists of slow continuous beeps until last 5 seconds, when it changes to fast beeps. The warning sound will end at the termination of selected Exit time.
0 = no; 1 = yes.

DIALER PROGRAMMING (*40–*50)

Fields *40, *41, *42, *44: Enter up to the number of digits shown. Do not fill unused spaces.
Enter 0–9,
+ 11 for '*'
+ 12 for '#'
+ 13 for a pause (2 secs)

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

*41   **PRIMARY PHONE No.** (See Box at Left)
Enter up to 16 digits. If fewer than 16 digits entered, exit by pressing * and next field number (e.g., 42). To clear entries from field, press *41*.
Note: Back-up reporting (8 calls are made to the secondary phone number if no kiss-off is received after 8 attempts to primary number) is automatic only if there is a secondary phone number (field *42).

*42 SECONDARY PHONE No. (See Box on previous page)

Enter up to 16 digits. If fewer than 16 digits entered, exit by pressing *
and next field number (e.g., 43). To clear entries from field, press *42*.
See *Note* in field *41 also. **If you wish to send a report to a pager,
see field *47 .**

*43 SUBSCRIBER ACCOUNT. No.   *(Enter 4 digits).*

Enter digits 0–9, #+11=B, #+12=C, #+13=D, #+14=E, or #+15=F.
See the Programming Form for examples.
Enter 0 as the first digit of a 4-digit account No.
Note: Do not enter "0" as the first digit if you intend to use the Paging
feature (see selections 6–9 in field *47). Some paging systems have voice
mail capability, activated by a leading "0" in the message.
End field by pressing * (and press next field).
This field is also used as the Long Range Radio Subscriber Account #.

*44 TEST REPORT PHONE No. *(Enter up to 16 digits)*

If test reports are to be sent to a specific phone number, enter the
number in this field. If fewer than 16 digits entered, exit by pressing *
and next field number (e.g., 45). To clear entries from field, press *44*.
Note: If this field is left blank, the control will send test reports to the
Primary or Secondary phone numbers, as selected (in field *47).

*45 PHONE SYSTEM SELECT   *(1-Digit Entry)*   Default is **1**.

If Central Station Receiver *is not* on a WATS line:
0 = Pulse Dial; 1 = Tone Dial
If Central Station Receiver *is* on a WATS line:
2 = Pulse Dial; 3 = Tone Dial

> For an explanation of
> these formats, see the
> *SYSTEM
> COMMUNICATION*
> section in the
> Installation Instructions.

*46 REPORT FORMAT   *(1-Digit Entry)*   Default is **7**.

Determine which format is to be used to report to the central station.
The following are the available formats:
2 = 4+2 ADEMCO Lo Speed Standard
3 = 4+2 Radionics Standard
6 = 4+2 ADEMCO Express
7 = ADEMCO Contact ID Reporting
Note: The maximum number of alarm and alarm restore reports
during one armed period is determined by field *92.
See field *27, which may override this field's selection.

*47 SPLIT/DUAL REPORTING   *(1-Digit Entry)*   Default is **0**.

0 = disable (Backup report only). Entries 1 through 9 can be made, as
indicated in the table below. Entries 6 through 9 will send a report to a
pager (in addition to the selected primary phone number), *but you must
enter the pager number as the secondary phone number in field *42.*

	TO PRIMARY PHONE #	TO SECONDARY PHONE #
1 =	Alarms, Restore, Cancel	Other Reports
2 =	All except Open/Close, Test	Open/Close, Test
3 =	Alarms, Restore, Cancel	All reports
4 =	All except Open/Close, Test	All reports
5 =	All reports	All reports
	TO PRIMARY PHONE #	**TO PAGING No.* (Secondary)**
6	All reports except Open/Close	Alarms/Open/Close, Troubles
7	All reports	Alarms, Troubles
8	All reports	Alarms/Open/Close, Troubles
9	All reports except Open/Close	Open/Close for users #5–25‡

> * Can only be used if Primary
> reporting format is Ademco
> Contact ID. If reporting to
> Pager, choose from 6, 7, 8,
> or 9, as desired.

‡ Will report only Users 5–9. If using wireless button-type devices, the zone
number of the arm or disarm button (10–25) will be sent as the user number.

Entries 6 through 9 will send a report to a pager (in addition to the selected primary phone number), but you must enter the pager number as the secondary phone number in field *42.

A 10-digit code is sent to the pager which will take the following format:

† 4-digit Subscriber No. - $\underline{SSSS}$–$\underline{EEE}$–$\underline{NNN}$ = 3-digit User or Zone No.
(as entered in field *43)   +

3-Digit Event Code, as follows:

911 = Alarm (NNN = Zone No.)
001 = Open, System disarmed (NNN = User No.)
002 = Close, System armed (NNN = User No.)
811 = Trouble (NNN = Zone No.)

† The first digit of the Subscriber No. entered in field *43 must be 1–9 (do not use 0); the last 3 digits can be 0–9. Failure to observe this requirement may interfere with paging services.

Example 1. Pager displays: $\boxed{1234-911-004}$

This indicates that Subscriber No. 1234's system is reporting an Alarm (911), due to zone 4 being faulted (004).

Example 2. Pager displays: $\boxed{1234-001-004}$

This indicates that Subscriber No. 1234's system is reporting an opening (001) by User 4 (004).

Note that no restore reports are sent to the pager.

Important: AAV should not be used when Paging or Alarm Reports are being sent to a Secondary number. If this is done, the call to the Secondary number by the communicator after the alarm report will prevent the AAV from taking control of the telephone line, and the AAV "Listen in" session cannot take place.

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*48 15-SECOND DIALER DELAY (BURGLARY) Default is 0.
Single-digit entry. If selected, will provide 15-second delay of burglary alarm report to the central station. Allows time for subscriber to avoid a false alarm transmission.
0 for no delay, or 1 for 15-second delay.

*49 PERIODIC TEST REPORT *(1-Digit Entry)* Default is 0.
Select the desired test report interval.
0 = none; 1 = 24 hours; 2 = weekly; 3 = 30 days.
Test Report code entered in field *64 is sent; reports with Subscriber No.

UL	For UL installations, 24 hours (1) must be selected

*50 SESCOA/RADIONICS SELECT *(1-Digit Entry)* Default is 0.
0 = Radionics (0–9, B–F reporting)
1 = SESCOA (0–9 only reporting)
Select 0 for all other formats.

*51 CONFIRMATION OF ARMING DING *(1-Digit Entry)* Default is 0.
Enter 1 to enable 1/2 second external alarm sounding "ding" when closing report goes in, or at the end of exit delay. Enter 2 for alarm sounding ding with RF arming only (this will work with either a button RF unit or a 5827. A 0 disables the "ding".

*52 ZONE 3 RESPONSE TIME TO OPEN *(1-Digit Entry)* Default is 0.
0 = 400ms nominal; 1 = 10ms nominal.

*56   **ZONE ASSIGNMENT/ALARM REPORT CODES**
(and entering RF Input IDs for the 5800 Wireless System)

This is an interactive menu mode that is used to program zone numbers, zone types, alarm and report codes, and to identify the type of loop input device. This mode can also be used for entering 5800 series transmitter serial numbers and for entering Alpha descriptors for zones (Alpha descriptors can also be entered in menu mode *82).

Refer to the *BASIC HARDWIRED ZONES 1–6* section in the Installation Instructions for detailed hardwired zone programming, and the *WIRELESS (RF) ZONE EXPANSION (5800 RF SYSTEMS)* section for detailed wireless zone expansion programming.

Refer also to the zone assignment table for *56 in the programming form in this manual.

TO PROGRAM SYSTEM STATUS AND RESTORE REPORT CODES (*60 – *68, *70 – *75)

> Enter codes as follows:
> 1–9, 0, B, C, D, E, or F. Enter "# + 10" for 0, "# + 11" for B, "# + 12" for C, "# + 13" for D, "# + 14" for E, "# + 15" for F.
> **With 4+2 Format:** Enter codes in *both* boxes (1st and 2nd digits) for 1–9, 0, or B–F, as described above.
>   A "0" (*not* "# + 10") in the *second* box will eliminate the expanded message for that report.
>   A "0" (*not* "# + 10") in *both* boxes will disable the report.
> **With Ademco Contact ID Reporting:** Enter any digit (other than "0") in the *first* box, to enable zone to report This is an "enabling" code only and is disregarded in the actual reporting to the central office. Entries in the *second* boxes will be ignored.
> A "0" (*not* "# + 10") in the *first* box will disable the report.
> *Examples:*
> For Code 32 (Two Digits), enter: | 3 | | 2 |
> For Code B2 (Hexadecimal) enter: | # + 11 | | 2 |

SYSTEM STATUS REPORT CODES (*60 –*68)

*60   **TROUBLE REPORT CODE** (See box above.)   *(2-Digit Entry)*

*61   **BYPASS REPORT CODE** (See box above.)   *(2-Digit Entry)*

*62   **AC LOSS REPORT CODE** (See box above.)   *(2-Digit Entry)*
Reports with Subscriber No. Timing of this report is random with up to a 48-minute delay. If AC restores before the report goes out, there is no AC restore report.

*63   **LOW BAT REPORT CODE**   (See box above.)   *(2-Digit Entry)*
Reports with Subscriber No.

*64   **TEST REPORT CODE**   (See box above.)   *(2-Digit Entry)*
Periodic Reports with Subscriber No.

*65   **OPEN/EXIT ALARM REPORT CODE, 1st DIGITS**   *(2-Digit Entry)*
Open Report Code: To enable, enter a code (or 0 to disable) in the left-hand box (see box above).
For 4+2 reporting, 2nd digit = User #.

Exit Alarm Report Code: To enable, enter a code (or 0 to disable) in the right-hand box (see box above). If enabled:
ANY ALARM FROM AN EXIT OR INTERIOR ZONE OCCURRING WITHIN TWO MINUTES AFTER THE END OF THE EXIT DELAY will send a special message indicating exit alarm to the central station, and a zone indication and "Exit Alarm" or "EA" is displayed on the keypad.
IF AN EXIT OR INTERIOR ZONE CONTAINS A FAULT AS THE EXIT DELAY ENDS, the local bell and keypad sound continuously.

(Continued)

a) *If the subscriber then disarms the system before the ensuing ENTRY delay ends*, no message is transmitted to the central station, but a zone indication and "Canceled Alarm" or "CA" is displayed on the keypad.

b) *If the system is not disarmed before that entry delay ends*, a special message indicating Exit Alarm is sent to the central station and a zone indication and "Exit Alarm" or "EA" is displayed on the keypad.

For 4+2 reporting, a 2nd digit is sent, and is the same as the 2nd digit of the zone alarm report code programmed in field ∗56.

For Contact ID reporting, Event code 374 and the zone number is sent.

There is no restore message for Exit Alarm report.

∗66   AWAY/STAY CLOSE REPORT CODE   *(2-Digit Entry)*
(See box on previous page.)
To enable, enter a code (or 0 to disable) in either or both boxes.
For 4+2 reporting, 2nd digit for each = User # .

∗67   RF XMTR. LOW BATTERY REPORT CODE   *(2-Digit Entry)*
(See box on previous page).

∗68   CANCEL REPORT CODE   *(2-Digit Entry)*
(See box on previous page.)

RESTORE REPORT CODES (∗70 – ∗75)

∗70   ALARM RESTORE REPORT CODE
(See box on previous page). For 4+2 reporting, a 2nd digit is automatically sent, and is the same as the 2nd digit of the zone alarm report code programmed in field ∗56.

∗71   TROUBLE RESTORE REPORT CODE   *(2-Digit Entry)*
(See box on previous page). This is sent when a trouble in a zone is restored.

∗72   BYPASS RESTORE REPORT CODE   *(2-Digit Entry)*
(See box on previous page). This is sent when a zone that has been bypassed is un-bypassed.

∗73   AC RESTORE REPORT CODE   *(2-Digit Entry)*
(See box on previous page) . Reports with Subscriber No.

∗74   LOW BAT RESTORE REPORT CODE   *(2-Digit Entry)*
(See box on previous page). Reports with Subscriber No.

∗75   RF XMTR. LOW BATTERY RESTORE CODE   *(2-Digit Entry)*
(See box on previous page). This is sent when a transmitter that previously sent in a low battery message has sent a message indicating it no longer has a low battery condition.

∗80   OUTPUT RELAYS
This is an interactive menu mode that is applicable only if 4204 or 4229 relays are to be used ("2" or "3" in field ∗25). See the *RELAY OUTPUTS* section in the Installation Instructions for a detailed programming procedure. Also refer to the OUTPUT RELAY table for field ∗80 in the Programming Form in this manual.

∗81   ZONE LISTS FOR OUTPUT DEVICES
This is an interactive menu mode that is applicable only if field ∗25 is programmed for a 4204 or 4229 relay. Refer to the *RELAY OUTPUTS* section in the Installation Instructions for a detailed programming procedure. Also refer to the ZONE LISTS FOR OUTPUT RELAYS table for ∗81 in the Programming Form in this manual.

*82   CUSTOM ALPHA EDITING
See *the ALPHA DESCRIPTION PROGRAMMING* section in the Installation Instructions for a detailed procedure.

*83   SEQUENTIAL MODE
See the *SEQUENTIAL MODE* section in the Installation Instructions for procedures for enrolling serial numbers of 5800 wireless transmitters.

*84   AUTO STAY ARM   *(1-Digit Entry)*   Default is **0**.
If the system is armed in the AWAY mode, but an exit zone has not been tripped by the end of the exit delay, the system will automatically arm in the STAY mode. 0 = No, 1 = Yes.

*85   AC LOSS DELAY   *(1-Digit Entry)*   Default is **1**.
An AC loss report will not be communicated immediately, but will be sent along with the next transmission of a report, whatever it may be; however, it will not be sent if AC has been restored by that time .

*86   SERVICE CALL REQUEST   *(1-Digit Entry)*   Default is **1**.
This option enables the [*] and [#] keys to function either as the usual panic keys, or to send a special message to the central station stating that "service" is requested. **This only applies when Contact ID format is enabled.** The Contact ID 3-digit event report code sent will be "616". 0 = No, 1 = Yes.
Note: The "D" key on wired keypads (if present) will always provide this feature, regardless of the selection in this field. The other three panic keys (A, B, and C) will provide panic functions, as usual.

*91   CUSTOM OPTION SELECTION   *(1-Digit Entry)*   Default is **0**.
Select one of the following:

0 = None selected	5 = Local lockout + AAV
1 = Local lockout	6 = Sounder delay + AAV
2 = Sounder delay	7 = Local lockout + Sounder delay
3 = Local lockout + Sounder delay	+ AAV
4 = AAV (Audio Alarm Verification)	8 = Exit delay restart

> **UL**   In UL installations, AAV options (4, 5, 6, & 7) and Sounder Delay options (2 & 3) cannot be used.

Local lockout: Exiting by *98 will allow re-entry into programming mode at the keypad *only* by: Installer Code + 8 + 0 (not by: Power-up + [*] & [#]).

Sounder delay: Delays the external sounder by 15 seconds for Fire and Burglary. Internal sounder is immediate on alarm. Communicator (dialer) delay is still set by field *48.

AAV (Audio Alarm Verification): Cuts off internal and external sounders for that alarm at termination of communicator report of alarm, and causes Output Relay 01 to energize for 2 seconds to trigger AAV Unit.

> AAV should not be used when Paging or Alarm Reports are being sent to a Secondary number. If this is done, the call to the Secondary number by the communicator after the alarm report will prevent the AAV from taking control of the telephone line, and the AAV "Listen in" session cannot take place.

*92   NUMBER OF REPORTS PER ARMED PERIOD   Default is **0**.
(1-Digit Entry). This option can be used to limit the number of messages (alarm & alarm restore reports) sent to the central station in an armed period. "0" limits reports to a total of 10; "1" allows an unlimited number of reports.

> **UL**   "1" (unlimited number of reports) must be selected for UL installations.

Data Field Descriptions

DOWNLOAD INFORMATION (*94, *95)

*94 DOWNLOAD PHONE NUMBER

Enter up to 16 digits: 0–9, # +11 for "*", # + 12 for "#", # + 13 for a pause. Do not fill unused spaces. If fewer than 16 digits is entered, exit field by entering * (and press 95, if entering next field). To clear entries from field, press *94*.

*95 RING DETECTION COUNT FOR DOWNLOADING

Enter number of rings before control picks up phone line (or 0 or 15). Refer to the chart below and program this field accordingly.

Voice Module	Answering Machine	Downloading	Field *95
Yes	No	No	Set for value other than "0" (1–14). This will enable the control panel to answer the phone call. Otherwise, it will not be possible to access the Voice Module
Yes	Yes	No	Set for a value higher than the number of rings for which the answering machine is set. Example: if machine is set for 4 rings, use a value of 5 or higher. This is recommended so that the Voice Module can still be accessed if the answering machine is turned off and does not answer the phone call.
Yes	No	Yes	Set for value other than "0" (1–14).
Yes	Yes	Yes	Enter "15" to bypass answering machine. * See Note below.
No	No	No	Enter "0".
No	Yes	No	Enter "0".
No	No	Yes	Enter 1–14.
No	Yes	Yes	Enter 15. See Important Note below.

* **Important Note:** If "15" is entered in field *95 to bypass an answering machine, and an 4285 Phone Module is included in the installation, you should note the following. When calling in from an off-premises phone (to receive a status report or execute a command), the user should make the initial call, allow 1 to 3 rings only, and hang up. Then call in again – the Phone Module will now seize the line, and 2 long tones will heard, followed by the usual voice prompt for the 2-digit phone access code. If this procedure is not followed, Phone Module operation will not be possible.

*96 INITIALIZE DOWNLOAD ID AND SUBSCRIBER ACCT. No. FOR DOWNLOADING (No data entry required; press *96)

*97 SET ALL PROGRAM FIELDS TO DEFAULT VALUES
(No data entry required; pressing *97 automatically loads all Ademco defaults).

TO EXIT PROGRAMMING MODE (*98 or *99)

*98 EXITS PROGRAMMING MODE and *prevents* re-entry by : INSTALLER Code + 8 + 0.
To re-enter the programming mode if *98 was used to exit, you must first power the system down. Then power up again, and depress [*] **and** [#] both at once, within 50 seconds of powering up.
Note: If selections 1, 3, 5, or 7 were made in field *91, re-entry into the programming mode if *98 was used to exit is possible *only* by Installer Code + 8 + 0, and *not* as described above (by powering up and pressing [*] and [#] within 50 seconds).

*99 EXITS PROGRAMMING MODE and *allows* re-entry by: INSTALLER Code + 8 + 0 or by method described in the paragraph above (power down, power up and depress [*] and [#] both at once, within 50 seconds of powering up).

General Information

The V12C can be remotely programmed from an IBM compatible Personal Computer (PC), a HAYES Modem, and First Alert's *Windows* Software (as specified below).

Programming the control from a remote location is protected against compromise by someone attempting to defeat the system, using multi-levels of security protection:

1. **Security Code Handshake:** An 8-digit download ID code must be matched between the control and the downloader.

2. **Site-Initiated Remote Programming:** Telco Hand-off feature allows the technician at the site to call the downloading facility from the control panel phone line, initiate a site download (Installer or Master Code + # + 1), and the control will immediately be on-line with the modem at the downloading facility. Also, if a local computer has a modem, the telephone line terminals of the control can be connected to the modem, and a direct download connection can be established with the new downloader program.

3. **Station-Initiated Remote Programming:** The operator calls the site from your office to initiate the download call. The control hangs up and then calls back the PC via the preprogrammed telephone number. The unit can then be uploaded, downloaded, or controlled from your office.

   The control can also be set for no callback by the downloader.

4. **Data Encryption:** Data passed between the PC and the control is encrypted for security so that it is very difficult for a foreign device tapped into the phone line to take over communication and substitute system compromising information.

UL	Downloading is not permissible for UL installations unless an installer is present at the installation site.

Equipment Required

At the premises:

- V12C and wired keypad.

At the installer's office/home:

- An IBM PC compatible computer.

- *Either* a HAYES brand SMARTMODEM 1200 [Level 1.2 or higher external or Level 1.1 or higher (with 4 position DIP switch) internal style], *or* a HAYES brand Optima 24 Plus FAX96 Modem.

- *Windows* Downloading Software Diskette (at revision level 1.0.0.)

- Appropriate interconnecting cables.

Remote Programming Information

The downloading system can perform many functions when in communication with the control unit. Besides uploading and downloading, the status of the system can be observed and various commands can be initiated, as follows:

- Arm the System in the Away Mode; Disarm the System.

- Bypass a Zone.

- Shut Down Communication (dialer) Functions (non-payment of monitoring fees in an owned system).

- Shut Down all Security System Functions (non-payment for a leased system).

(Continued)

- Inhibit Local Keypad Programming (prevents account takeover).
- Read: Arming Status, AC Power Status, Lists of Faulted Zones, Bypassed Zones, Zones Currently in Alarm, Zones Currently in Trouble, and RF Sensors with Low Battery Conditions.

Note: After the control and the PC have established valid communication, each keypad on the system will become inactive and will display "CC" or "MODEM COMM.". The control, however, will still be scanning its zones and looking for alarms. If an alarm does occur, after communication is broken off, alarms are sounded and the proper dialer reports are sent to the central station. The keypads will become active after the download communication is terminated.

The detailed operation of the download functions is covered in the installation instructions for the Windows Downloading Software Diskette.

Remote Programming Advisory Notes

- Alarm and trouble reporting may be delayed during the time that the system and the Downloader are linked to each other following a valid exchange of codes, but the proper message will get through to the Central Station after the link is broken.
- Keypad entries are ignored during the time interval stated above.
- A copy of the program downloaded may be produced from the IBM PC compatible computer, using the product's internal report generator, when an optional printer is connected (consult your PC manual for proper printer and connections).
- Program Upload or Download Time—Approximately one minute and fifteen seconds for a complete program.
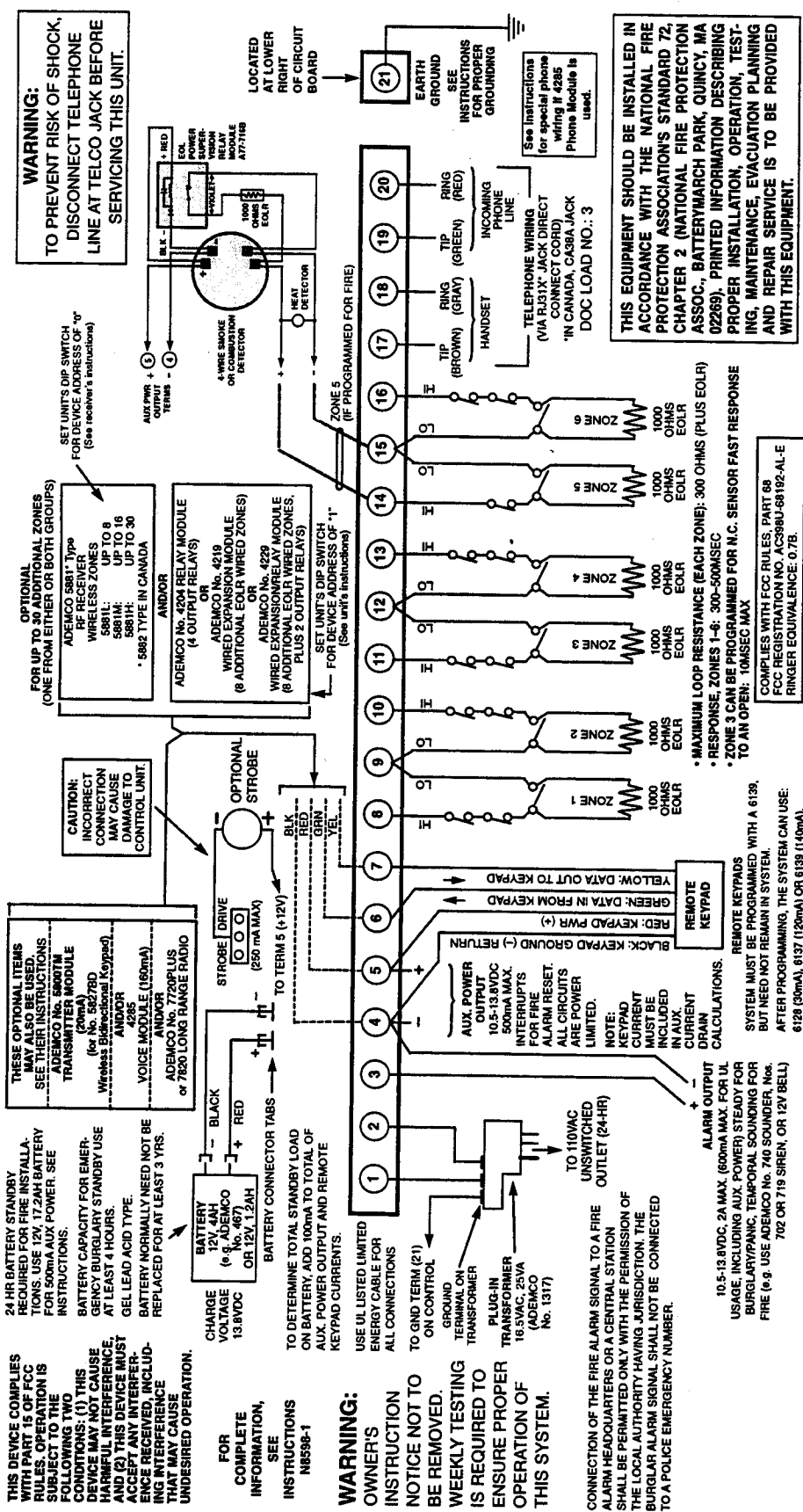
V12C SUMMARY OF CONNECTIONS DIAGRAM