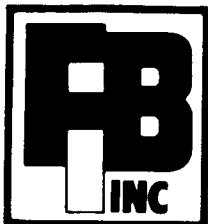


XL1218

Programming Instructions



**Fire Burglary
Instruments, Inc.**

50 Engineers Road, Hauppauge, New York 11788

NEW YORK
(516) 582-6161



OUT OF STATE
(800) 645-5430



REV. B May '85

COMPUTER PART NO. I-2143

This device will only operate properly if programmed correctly. Many of the panels functions including zone types and operations, audible or silent outputs etc. are prom programmable. Therefore, it is imperative that these instructions are read and followed very carefully. Many of the options available will require programming in several different locations of different fields. It is advisable to utilize the BLANK PROGRAMMING SHEET MARKED WITH LOCATIONS (L1, L2, etc.) to write out the entire program before attempting to actually program. The first and MOST IMPORTANT decision which must be made prior to programming is what each of the 4 general purpose zones are planned to be. There are several options such as 24 hr. alarm zones, 24 hr. trouble zones, or controlled zones (burglary zones which are armed & disarmed). The charts and descriptions on Page 7 thru 9 will help with the decision. It will be necessary to program on AT LEAST 2 QUADRANTS of the prom, sometimes 3 and 4. Proceed with the program as follows:

110 Programmer Switch Setting:

MODE SWITCH	QUADRANT SW. 8	QUADRANT SW. 7	QUADRANT SELECTED
North	South	South	1
North	South	North	2
North	North	South	3
North	North	North	4

R68 Quad Selection Jumper Setting			
2 Quad Program		3 or 4 Quad Program	
Quad 1 & 2	Connected	Quad	Connected
Quad 3 & 4	Cut	1, 2, 3, 4	

NOTE: The Prom should NOT be in the Programmer at this time!

OP FIELD

Step 1: Plug in the 110 programmer, OP should appear in the LED display. Set the mode switch in the NORTH position. Set the quadrant 7 & 8 switches in the south (quad. 1) position. THIS OP field may be used for a common phone prefix (area code for all numbers etc.) for all three phone numbers. If a time delay is needed before or between digits, key in "C" where the delay (3 sec. each "C") is needed.

1P FIELD

Step 2: Press the momentary ENTER switch then #9, and 1P should appear in the LED display. Key in the first telephone number of the first Receiver. Up to 11 digits may be used. Information must be entered in this field.

2P FIELD

Step 3: Press the ENTER switch then #9, and 2P should appear in the LED display. Key in the second telephone number for the second receiver. Up to 11 digits may be used. If there is no second phone number leave this field blank.

3P FIELD

Step 4: Press the ENTER switch then #9 and 3P should appear in the LED display. Key in the third telephone number for the third receiver. Up to 11 digits may be used. If there is no third phone number, leave this field blank.

AF FIELD

Step 5: Press the ENTER switch then #9, and AF should appear in the LED display. The first location in this AF field marked L1 on your blank program sheet will determine the number of attempts the digital communicator will make at all the phone numbers in the event the receiver or receivers are busy. Select one of the following digits from the chart below as desired:

# OF ATTEMPTS	DIGIT	# OF ATTEMPTS	DIGIT	# OF ATTEMPTS	DIGIT
1	1	7	7	13	D
2	2	8	8	14	E
3	3	9	9	15	A
4	4	10	0	Unlimited	F
5	5	11	B		
6	6	12	C		

The second location in this AF field marked L2 will determine: (A) Whether any one receiver to kiss-off the dialer is sufficient or if it will be necessary for all receivers to kiss-off the dialer if more than one phone number has been selected. (B) Whether expanded reporting (ER), universal restore (UR), universal alarm codes (UAL), universal abort codes (UA), and universal trouble codes (UT), format will be used. The definition of these formats and how to PROGRAM for them is explained in the EXPANDED FORMATS booklet! Select one of the following digits for all functions desired from the following chart:

DIGIT	FUNCTIONS
0	any one receiver (standard format)
1	any one receiver UR, UT, UAL, UA,
2	any one receiver, ER
4	all receivers
5	all receivers UR, UT, UAL, UA
6	all receivers ER

FF FIELD

Step 6: Press the ENTER switch then #9, and FF should appear in the LED DISPLAY. Select one receiver type per telephone number programmed. L1 of this field corresponds to the receiver at phone number 1. L2 and L3 are for phone numbers two and three. If only one phone number is used leave L2 and L3 blank. Make selection from the following chart. Note: All receivers MUST HAVE KISSOFF TONE.

DIGIT	RECEIVER TYPE
0	Radionics 2300hz, 20pps w/parity
1	Franklin, SESCOA, DCI, Radionics, 2300hz, 20pps, Osborne Hof.Quikal
2	Radionics 1400hz, 20pps w/parity
3	Adcor CDR50, Radionics 1400hz, 20pps.
5	Ademco
7	Silent Knight (slow)
8	Radionics 2300hz, 40pps w/parity
F	Silent Knight UL compatible

AC FIELD

Step 7: Press the ENTER switch, then #9, and AC should appear in the LED display. Key in a 3 digit subscriber account number.

AL FIELD

Step 8: Press the ENTER switch, then #9, AL should appear in the LED display. Select numbers in the appropriate locations from the chart below for the following ALARM CODES. It is imperative to know what type of zones (Controlled, 24 hr. alarm, 24 hr. trouble) each will be, at this time. Zones selected as 24 HR. TROUBLE ZONES and Location L11 MUST have an "F" programmed in this field unless UT is desired (see Expanded Formats). The actual zone types will be programmed later in the 2P and 3P fields of Quadrant 2. Program an "F" (which leaves a blank and increments to the next location) for any zones not being used.

LOCATION	DESCRIPTION	CODE
L1	1218R Keypad Ambush	0-9 or F
L2	1218 Keypad Panic	0-9 or F
L3	Always F	F
L4	Fire Zone Alarm Code	0-9 or F
L5	Zone 1 Alarm Code	0-9, or F
L6	Zone 2 Alarm Code	0-9, or F
L7	Zone 3 Alarm Code	0-9, or F
L8	Zone 4 Alarm Code	0-9, or F
L9	Always F	F
L10	Always F	F
L11	Always F (unless UT is desired)	Always F (or 0-9) (if UT desired)

NOTE: The L11 location in this field will be the Common Trouble ZONE Code when UT is desired.

Step 9: After completing Step 8 place the Prom chip, Model F102 (DM745387N or 63S140N) into the programmer with the blue dot down, and depress the PROGRAM switch momentarily. FINISH should appear in the LED display. If "NO CAN DO" appears in the LED display, and ONLY A 2 QUADRANT PROGRAM IS PLANNED to operate the system, R68 should be cut and all information must be redone beginning at quadrant 3 and finishing in quadrant 4. (NOTE: IT WILL BE NECESSARY TO USE MORE THAN 2 QUADRANTS OF THE PROM ONLY IF UAL, UC, UO, EC or EO are desired.

Step 10: If FINISH is displayed in Step 9, remove the prom chip from the 110 socket and place it back in its antistatic tube temporarily. Move the switch marked Quadrant 7 to the north position and leave Quadrant 8 switch south which is Quadrant 2 on the prom.

OP FIELD QUAD 2

Step 11: Press the ENTER switch and #0, OP should appear in the LED display. In this field we select the closing and opening codes if desired, and the TROUBLE CODES for all zones that may have a trouble transmission. If the zones are selected (in 2P Quad 2) as Controlled zones a trouble code may be transmitted when the zone is bypassed. The Trouble transmission can occur UPON bypassing when the system is unarmed, OR, when a zone is bypassed the transmission will occur upon arming. Zones (selected in 2P and 3P of this quad) which are desired to be 24 HR. TROUBLE ZONES and the COMMON TROUBLE ZONE MUST have their actual Trouble Alarm codes programmed in this field. 24 HR. ALARM ZONES CAN NOT send a Trouble code, an "F" must be programmed into their locations. The Common Trouble Zone will report the SAME CODE for Fire Trouble, loss of AC (for at least 90 sec.) or low battery condition. Select the appropriate codes from the following chart. NOTE: If R83 resistor jumper is left connected, the Common Trouble Zone will report on Fire Trouble or low battery condition, however, loss of AC Power will NOT result in a dialer transmission.

If R83 is cut, the Common Trouble Zone will report on Fire Trouble or loss of AC (for approximately 90 seconds). However, a low battery condition will NOT result in a dialer transmission. See diagram in Hook-up Instructions for the location of R83.

NOTE: Controlled zones are burglary zones which are armed and disarmed. They will be selected in 2P & 3P of this Quad.

LOCATION	DESCRIPTION	CODE
L1	Closing	0-9, C or F
L2	Opening	0-9, B or F
L3	Always F	Always F
L4	Zone 1 Trouble Code	0-9, A or F
L5	Zone 2 Trouble Code	0-9, A or F
L6	Zone 3 Trouble Code	0-9, A or F
L7	Zone 4 Trouble Code	0-9, A or F
L8	Always F	F
L9	Always F	F
L10	Common Trouble Zone Code	0-9, A or F
L11	Always F	Always F

For Radionics English Language Printout of Codes Use:

A ----- Trouble
B ----- Opening
C ----- Closing

1P FIELD QUAD 2

Step 12: Press the ENTER switch then #9, 1P should appear on the LED display. In this field select the ACTUAL RESTORE CODES for all the zones in the event a restore on abort or standard restores are desired. The ACTUAL ABORT CODE and 24 HOUR AUTOMATIC TEST CODE is programmed in this field if these options are desired. Select one of the following codes for the locations desired in this field. If any location is not desired program an "F" which will leave a blank.

1 P FIELD QUAD 2 CONTINUED

LOCATION	DESCRIPTION	CODE
L1	Fire Zone Restore Code	0-9, E or F
L2	Zone 1 Restore Code	0-9, E or F
L3	Zone 2 Restore Code	0-9, E or F
L4	Zone 3 Restore Code	0-9, E or F
L5	Zone 4 Restore Code	0-9, E or F
L6	Always F	F
L7	Always F	F
L8	Common Trouble Restore Code	0-9 E or F
L9	24 hr. Automatic test code & Abort Code	0-9,D or F
L10	Always F	F
L11	Always F	F

For Radionics English Language Printout of Codes Use: E ----- Restore
D ----- Abort

2 P FIELD QUAD 2

The first location in this field marked L1 will determine what the Fire Zone will do in the event that it is aborted. An abort on this zone is accomplished by depressing the EXTERNAL FIRE RESET BUTTON BEFORE THE FIRE ALARM CODE reaches the Central Office. Select one of the following Digits for the L1 location. If the Fire Zone is not used program a D in this location.

DIGITS	FIRE ZONE OPERATION ON ABORT
C	Fire Code / No abort
D	Fire Code / Stop dialing on abort
E	Fire Code / Restore code on abort
F	Fire Code / Abort Code on abort

THE SECOND THRU FIFTH LOCATIONS in this field marked L2-L5 correspond to zones 1-4 respectively. One Digit from the following chart MUST be programmed for EACH of these zones in their specific locations. These locations will determine what TYPE each zone will be and their operation, in the event of an abort. These zones may be 24 hour alarm, 24 hour trouble, Controlled Interior, or Controlled Delay or Instant. 24 hour AUDIBLE alarm zones can be aborted by depressing the KEYPAD [*/] BUTTON. 24 hour SILENT zones and 24 HOUR TROUBLE ZONES can be aborted by NOT MAINTAINING the input violation to their terminals. Controlled zones can be aborted by disarming. Abort action MUST take place prior to the ALARM codes transmission of these zones reaching the Central Office. Select one Digit in each of these locations for zones 1-4 from the following chart. NOTE: If any of these zones are not used program a 5 in their locations. NOTE: ZONE 1 MAY NOT BE PROGRAMMED AS A 24 HOUR TROUBLE ZONE.

2 P FIELD QUAD 2 CONTINUED

DIGIT	ZONE TYPES	OPERATION OF ZONES ON ABORT
0	Controlled Interior	No Abort
1	Controlled Interior	Stop dialing on abort
2	Controlled Interior	Restore Code on abort
3	Controlled Interior	Abort code on abort
4	Controlled Delay or Instant	No abort
5	Controlled Delay or Instant	Stop dialing on abort
6	Controlled Delay or Instant	Restore code on abort
7	Controlled Delay or Instant	Abort code on abort
9	24 HR. Trouble Zone	Stop dialing on abort
A	24 HR. Trouble Zone	Restore on abort
B	24 HR. Trouble Zone	Abort code on abort
C	24 HR. Alarm Zone	Momentary/ No abort
D	24 HR. Alarm Zone	Stop dialing on abort
E	24 HR. Alarm Zone	Restore code on abort
F	24 HR. Alarm Zone	Abort code on abort

THE EIGHTH LOCATION in this field marked L8 will determine the operation of the Common Trouble Zone. This zone will transmit its alarm code if any of the following conditions exist: Loss of AC power for at least 90 seconds, Low Battery Condition, if the battery voltage falls to approximately 10 volts, or Fire Trouble.

NOTE: If R83 resistor jumper is left connected, the Common Trouble zone will report on Fire Trouble or low battery condition, however, loss of AC Power will NOT result in a dialer transmission.

If R83 is cut, the Common Trouble zone will report on Fire Trouble, or loss of AC for approximately 90 seconds. However, a low battery condition will NOT result in a dialer transmission. See diagram in Hook-up Instructions for location of R83. Program digit 9 in this location for proper operation of the Common Trouble Zone.

DIGIT	OPERATION OF COMMON TROUBLE ZONE
9	maintained/stop dialing on abort

THE SIXTH, SEVENTH AND NINTH THRU ELEVENTH LOCATIONS marked L6, L7, and L9-11 MUST be programmed an "F".

3 P FIELD QUAD 2

Step 14: Press the ENTER switch, then #9, 3P should appear on the LED display.

The first location in this field marked L1 will determine what type of audible output there will be when the Fire zone is activated. The Fire zone can sound the Burglary bell, pulsing, or steady. Select one of the following Digits as desired.

3 P FIELD QUAD 2 CONTINUED

DIGIT	FIRE ZONE OUTPUT
0	Pulsing Burglary Bell
1	Steady Burglary Bell

THE SECOND THRU FIFTH LOCATIONS in this field marked L2-L5 will determine:
 (A) whether zone 1-4 will be Delay or Instant if they have been selected as Controlled DELAY OR INSTANT zones in the 2P field of this quadrant. (B) whether they will transmit a trouble code when bypassed, a trouble code when the system is armed, if bypassed, or no trouble code at all. (C) whether zones 1-4 will be DAY ZONES (ring the sonalert if violated, unarmed). (D) what type of outputs will occur if these zones are 24 hr. trouble zones or 24 hr. alarm zones. One digit MUST be programmed in EACH of these LOCATIONS L2-L5 for EACH of zones 1-4 respectively.

Select one of the following CHARTS below to correspond with what type EACH zone is. (previously selected in 2P of this quad) THEN select the appropriate digit for EACH zones operation. NOTE: CHART "D" DOES NOT APPLY TO ZONE 1.

NOTE: Trouble code UPON ARMING can be selected ONLY if a closing code is used. (Closing code is programmed in the OP field Quad 2 or multiple closings UC or EC in Quad 4)

CHART A

DIGIT	CONTROLLED DELAY OR INSTANT (STEADY BURG. BELL OUTPUT)
2	Delay/Zone Trouble Code upon arming if bypassed/Day Zone
3	Delay/Zone Trouble Code upon arming if bypassed
4	Delay/Zone Trouble Code when bypassed/Day Zone
5	Delay/Zone Trouble Code when bypassed
6	Delay/Day Zone
7	Delay
A	Instant/Zone Trouble Codes upon arming if bypassed/Day Zone
B	Instant/Zone Trouble Code upon arming if bypassed
C	Instant/Zone Trouble Code when bypassed /Day Zone
D	Instant/Zone Trouble Code when bypassed
E	Instant/Day Zone
F	Instant

CHART B

DIGIT	CONTROLLED INTERIOR ZONES
A	Interior/Zone Trouble code upon arming if bypassed/Day Zone
B	Interior/Zone Trouble code upon arming if bypassed
C	Interior/Zone Trouble code when bypassed/Day Zone
D	Interior/Zone Trouble code when bypassed
E	Interior/Day Zone
F	Interior

3 P FIELD QUAD 2 CONTINUED

CHART C

DIGIT	24 HR. ALARM ZONES
4	Pulsing Burglary Bell
5	Steady Burglary Bell
6	Silent (NO RING BACK)*
7	Silent (WITH RING BACK)

CHART D

NOTE: This chart does not apply to Zone 1

DIGIT	24 HR. TROUBLE ZONES
0	Pulse Sonalert
1	Steady Sonalert
2	Silent (WITH RING BACK)

*NOTE: ALL TRANSMISSIONS TO THE CENTRAL OFFICE WILL HAVE RING BACK (SONALERT PULSES SEVERAL TIMES) TO INDICATE THE CENTRAL OFFICE HAS RECEIVED THE TRANSMISSION SUCCESSFULLY, UNLESS OTHERWISE SPECIFIED.

THE EIGHTH LOCATION of this field marked L8 will determine the type of output the Common Trouble zone will have when violated. Select one of the following digits.

DIGIT	COMMON TROUBLE ZONE OUTPUT
0	Pulse Sonalert
1	Steady Sonalert
2	Silent (WITH RING BACK)

THE SIXTH, SEVENTH AND NINTH THRU ELEVENTH LOCATIONS marked L6, L7 and L9-L11 MUST be programmed an "F".

A F FIELD QUAD 2

Step 15: Press the ENTER switch, then #9, AF should appear in the LED display. The first location in this field marked L1 will determine the following: (A) Touch tone or Rotary dialing (B) Whether bell test is desired or not (last digit of Arming Code activates bell momentarily if system arms)(C) Whether 24 Hour automatic test code will be sent, (Auto test resets after every transmission) and (D) Whether quad switching is desired. Quad switching will be necessary if UAL, UC, UO, EC or EO formats are used. Do not select quad switching until reading the Expanded Formats Booklet. Select one of the following digits for this location.

A F FIELD QUAD 2, LOCATION L1 CONTINUED

DIGIT	FUNCTIONS
0	Touchtone dialing, quad switching, Bell test, 24 Hr. auto test
1	Touchtone dialing, quad switching, Bell test
2	Touchtone, quad switching, 24 hr. automatic test
3	Touchtone, quad switching
4	Touchtone, Bell Test, 24 Hr. auto test
5	Touchtone, Bell Test
6	Touchtone, 24 Hr. auto test
7	Touchtone dialing
8	Rotary dialing, quad switching, Bell test, 24 Hr. auto test
9	Rotary, quad switching, Bell test
A	Rotary, quad switching, 24 Hr. auto test
B	Rotary, quad switching
C	Rotary, Bell test, 24 Hr. auto test
D	Rotary, Bell test
E	Rotary, 24 Hr. Auto Test
F	Rotary Dialing

THE SECOND LOCATION in this field marked L2 will determine: (A) Whether the 1218R keypad panic will be audible or silent, (B) if the opening code will be sent ONLY after an alarm condition has occurred, (C) Whether Universal Closing (UC) and Universal Opening (UO) or Expanded Closing (EC) and Expanded Opening (EO) format will be used in the event that more than one closing/opening signal will be sent. As many as 4 different closing and opening codes can be sent if desired on installations where multiple personnel are arming and disarming this system. (UC, UO, EC, & EO, explanation and programming is explained in Expanded Formats Booklet). If only one set of closing/opening or no closing/opening codes are desired do not select the UC, UO, EC, & EO option. Select an appropriate digit from the following chart. NOTE: There will be NO ring back on keypad panic if it is programmed as SILENT.

DIGIT	FUNCTIONS
8	Keypad Panic AUDIBLE,
9	Keypad Panic AUDIBLE, UC & UO or EC & EO
A	Keypad Panic AUDIBLE, opening code after alarm <u>ONLY</u> .
B	Keypad Panic AUDIBLE, opening code after alarm <u>ONLY</u> , UC & UO or EC & EO
C	Keypad Panic SILENT,
D	Keypad Panic SILENT, UC & UO or EC & EO
E	Keypad Panic SILENT, opening code after alarm <u>ONLY</u>
F	Keypad Panic SILENT, opening code after alarm <u>ONLY</u> , UC & UO or EC & EO EO

FF FIELD QUAD 2

Step 16: Press the ENTER switch, then #9, FF should appear in the LED display. There are three locations in this field marked L1, L2, & L3. L1 is Fall Back Exit Time, L2 is Fall Back Entrance Time, and L3 is Bell Cut-Off Time. Select one digit in each of these locations for the desired times from the following chart:

NOTE: Exit and Entry times may be changed by the subscriber if desired when programming the 1218R Keypad. However, if all power AC and DC are lost THESE times will be active again. These times are active on power up.

DIGIT	L1 Fall Back Exit Time	L2 Fall Back Entrance Time	L3 Bell Cut-Off Time
0	0 seconds	0 seconds	0 minutes
1	10 seconds	10 seconds	3 minutes
2	20 seconds	20 seconds	6 minutes
3	30 seconds	30 seconds	9 minutes
4	40 seconds	40 seconds	12 minutes
5	50 seconds	50 seconds	15 minutes
6	60 seconds	60 seconds	18 minutes
7	70 seconds	70 seconds	21 minutes
8	80 seconds	80 seconds	24 minutes
9	90 seconds	90 seconds	27 minutes
A	100 seconds	100 seconds	30 minutes
B	110 seconds	110 seconds	33 minutes
C	120 seconds	120 seconds	36 minutes
D	130 seconds	130 seconds	39 minutes
E	140 seconds	140 seconds	42 minutes
F	150 seconds	150 seconds	UNLIMITED

AC FIELD QUAD 2

Step 17: Press the ENTER switch, then #9, AC should appear in the LED display. There are four locations in this field marked L1-L4. A four digit FALLBACK ACCESS CODE must be entered in these locations. This code will be used to allow the 1218R Keypad to enter into ITS program mode by USER 1. This code is also USER 1'S actual arm/disarm code. User 1 may change his code while programming at the keypad, voiding out this access code. However, if all power, AC and DC is lost on this system it will be necessary for User 1 to reprogram the keypad using THIS code again. Enter any four digit code (only numbers 0-8) desired in these locations. NOTE: Number 9 MAY NOT be used anywhere in this code.

A L FIELD QUAD 2

Step 18: Press the ENTER switch, then #9, AL should appear in the LED display. The first location of this field marked L1 MUST be programmed with an F. THE SECOND THROUGH FIFTH LOCATIONS of this field marked L2-L5 correspond to zones 1-4 respectively. If any of these zones are CONTROLLED ZONES, the following options may be programmed here for each of these zones. (A) Bell lock out THIS ZONE: If the bell is tripped by any of the Controlled zones, after the bell cutoff time expires the bell will not retrigger when that SAME zone is violated, until the system is disarmed and rearmed. However, the dialer WILL retrigger. (B) Bell lock out ALL ZONES: Each Controlled zone may be programmed, that if it is violated, and the bell rings, when bell cutoff time expires, the bell WILL NOT retrigger again for any Controlled zone, until disarmed and rearmed. The dialer WILL retrigger when each zone is violated. (C) If Controlled zones have not been programmed as DAY ZONES, they may be programmed to trigger the sonalert for a 1 second pulse on violation, while the system is disarmed (chime feature). Program ONE DIGIT from the following chart for EACH ZONE 1-4 in their respective locations. If any of zones 1-4 are anything other than Controlled zones, an "F" MUST be programmed in their locations.

NOTE: Some of the Controlled zones may be programmed to Bell lock out only themselves, while other Controlled zones may be programmed to Bell lock out all Controlled zones as desired.

NOTE: When ANY BELL LOCKOUT feature is programmed, the Communicator will report ALARM CODES as the zones are RETRIGGERED if these zones have been programmed for momentary/no abort operation in the 2P FIELD, QUAD 2. Otherwise these zones will respond as if aborted, when RETRIGGERED momentarily.

DIGIT	FUNCTIONS
2	Bell lock out this zone, 1 sec. Sonalert
3	Bell lock out this zone
4	Bell lock out all zones, 1 sec. Sonalert
5	Bell lock out all zones
6	1 second Sonalert
F	None of these options

THE SIXTH THRU ELEVENTH LOCATIONS in this field marked L6-L11, MUST each be programmed "F".

Step 19: After Step 18 has been completed plug the prom chip back into the programmer with its blue dot DOWN. Depress the PROGRAM switch momentarily. The word FINISH should appear in the LED display.

If UAL, UC, UO, EC, EO and Quad switching have NOT been selected in the program, the prom chip may be inserted into the XL1218 blue dot UP and you may proceed with the Keypad Programming section, and panel installation.

CAUTION: THERE SHOULD BE NO POWER ON THE XL1218 WHEN THE PROM IS INSERTED.

If UAL is desired it will be necessary to program Quad 3 in the Prom chip and read EXPANDED FORMATS. If UC, UO or EC, EO are desired it is necessary to read Expanded Formats.

QUADRANT 1

Common Phone Prefix

O	P												
L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11			

1st Phone

1	P												
L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11			

2nd Phone

2	P												
L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11			

3rd Phone

3	P												
L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11			

Attempts

Receiver Kiss Off

A	F		
L1	L2		

Receiver 1 Type

Receiver 2 Type

Receiver 3 Type

F	F			
L1	L2	L3		

Account Number

A	C				
L1	L2	L3	L4		

Key Ambush
Key Panic
Always F

Fire Code
Zone 1 Code
Zone 2 Code
Zone 3 Code
Zone 4 Code
Always F
Always F

Always F unless
the CT desired for
Zone

A	L			F						F	F		
L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11			

*CT = COMMON TROUBLE

QUADRANT 2

Closing Code
Opening Code
Always F
Zone 1 Trouble Code
Zone 2 Trouble Code
Zone 3 Trouble Code
Zone 4 Trouble Code
Always F
Always F
*CT Trouble Code
Always F

O	P			F				F	F		F		
L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11			

Fire Restore
Zone 1 Restore
Zone 2 Restore
Zone 3 Restore
Zone 4 Restore
Always F
Always F
*CT Restore
24 Hr Test
48001 Code
Always F
Always F

1	P							F	F		F	F	
L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11			

Fire Zone
Zone 1
Zone 2
Zone 3
Zone 4
Always F
Always F
*CT Zone
Always F
Always F
Always F

2	P							F	F	9	F	F	F
L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11			

Fire Zone
Zone 1
Zone 2
Zone 3
Zone 4
Always F
Always F
*CT Zone
Always F
Always F
Always F

3	P							F	F		F	F	F
L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11			

Dialing Type, 24 Hr Test, Bell Test Quad Switch

Keypad Panic Silent/Aud. Opening Always/Alarm Only

A	F		
L1	L2		

Fall Back Exit Time

Fall Back Entrance Time

Bell Cut Off Time

F	F			
L1	L2	L3		

Fall Back Code

A	C				
L1	L2	L3	L4		

#9 may not be used

Always F
Zone 1
Zone 2
Zone 3
Zone 4
Always F
Always F
Always F
Always F
Always F
Always F

A	L	F						F	F	F	F	F	F
L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11			

PROGRAMMING SHEET

QUADRANT 3

Zone Codes

Ambush
Panic
Always F
Fire Zone
Zone 1
Zone 2
Zone 3
Zone 4
Always F
Always F
Always F

O	P			F						F	F	F
L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11		

1	P											
L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11		

2	P											
L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11		

3	P											
L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11		

A	F		
L1	L2		

F	F		
L1	L2	L3	

CLOSING ACCOUNT #

A	C			
L1	L2	L3	L4	

A	L											
L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11		

QUADRANT 4

Universal Closing Code
or E.C. Codes

User 0
User 1
User 2
User 3
Always F

O	P					F	F	F	F	F	F	F
L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11		

User Codes

User 0
User 1
User 2
User 3
Always F

1	P					F	F	F	F	F	F	F
L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11		

Universal Opening Code
or E.O. Codes

User 0
User 1
User 2
User 3
Always F

2	P					F	F	F	F	F	F	F
L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11		

User Codes

User 0
User 1
User 2
User 3
Always F

3	P					F	F	F	F	F	F	F
L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11		

A	F		
L1	L2		

F	F		
L1	L2	L3	

OPENING ACCOUNT #

A	C			
L1	L2	L3	L4	

A	L											
L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11		

SAMPLE RESIDENTIAL PROGRAM

QUADRANT 1

Common Phone Prefix

O P

L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11

1st Phone

1 P **5 8 2 6 1 6 1**

L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11

2nd Phone

2 P

L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11

3rd Phone

3 P

L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11

Attempts

Receiver Kiss Off

A F **0 0**

L1 L2

Receiver 1 Type

Receiver 2 Type

Receiver 3 Type

F F **5**

L1 L2 L3

Account Number

A C **4 5 6**

L1 L2 L3 L4

Key Ambush
Key Panic
Always F
Fire Code
Zone 1 Code
Zone 2 Code
Zone 3 Code
Zone 4 Code
Always F
Always F
Always F unless
the CT desired for
Zone

A L F **2 F 1 3 4 5 6 F F F**

L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11

*CT = COMMON TROUBLE

QUADRANT 2

Closing Code
Opening Code
Always F
Zone 1 Trouble Code
Zone 2 Trouble Code
Zone 3 Trouble Code
Zone 4 Trouble Code
Always F
Always F
*CT Trouble Code
Always F

O P F F F F F F F F F F 7 F

L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11

Fire Restore
Zone 1 Restore
Zone 2 Restore
Zone 3 Restore
Zone 4 Restore
Always F
Always F
*CT Restore
24 Hr Test
Always F
Always F

1 P 9 9 9 9 9 F F 9 F F F

L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11

Fire Zone
Zone 1
Zone 2
Zone 3
Zone 4
Always F
Always F
*CT Zone
Always F
Always F
Always F

2 P E 6 6 6 2 F F 9 F F F

L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11

Fire Zone
Zone 1
Zone 2
Zone 3
Zone 4
Always F
Always F
*CT Zone
Always F
Always F
Always F

3 P 0 7 E F F F F F 0 F F F

L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11

Dialing Type, 24 Hr Test, Bell Test Guard Switch

Keypad Panic Silent/Aud. Opening Always/Alarm Only

A F 7 8

L1 L2

Fall Back Exit Time

Fall Back Entrance Time

Bell Cut Off Time

F F 3 3 A

L1 L2 L3

Fall Back Code

A C 1 2 3 4

L1 L2 L3 L4

Always F
Zone 1
Zone 2
Zone 3
Zone 4
Always F
Always F
Always F
Always F
Always F
Always F

A L F F F F F F F F F F F F

L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11

SAMPLE COMMERCIAL PROGRAM

QUADRANT 1

Common Phone Prefix

O P 1 8 0 0
L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11

1st Phone

1 P 5 8 2 6 1 6 1
L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11

2nd Phone

2 P 2 3 4 8 2 8 2
L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11

3rd Phone

3 P
L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11

Attempts

Receiver Kiss Off

A F 0 0
L1 L2

Receiver 1 Type

Receiver 2 Type

Receiver 3 Type

F F 1 5
L1 L2 L3

Account Number

A C 4 5 6
L1 L2 L3 L4

Key Ambush
Key Panic
Always F
Fire Code
Zone 1 Code
Zone 2 Code
Zone 3 Code
Zone 4 Code
Always F
Always F
Always F unless
the CT desired for
Zone

A L 2 2 F 1 3 4 5 6 F F F
L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11

*CT = COMMON TROUBLE

QUADRANT 2

Closing Code
Opening Code
Always F
Zone 1 Trouble Code
Zone 2 Trouble Code
Zone 3 Trouble Code
Zone 4 Trouble Code
Always F
Always F
*CT Trouble Code
Always F

O P 7 0 F F F F F F F 8 F
L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11

Fire Restore
Zone 1 Restore
Zone 2 Restore
Zone 3 Restore
Zone 4 Restore
Always F
Always F
*CT Restore
*CT Restore
Always F
Always F

1 P 9 9 9 9 9 F F 9 F F F
L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11

Fire Zone
Zone 1
Zone 2
Zone 3
Zone 4
Always F
Always F
*CT Zone
Always F
Always F
Always F

2 P D 5 5 5 5 F F 9 F F F
L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11

Fire Zone
Zone 1
Zone 2
Zone 3
Zone 4
Always F
Always F
*CT Zone
Always F
Always F
Always F

3 P 0 7 6 F F F F F F F F
L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11

Dialing Type, 24 Hr Test, Bell Test Quad Switch

Keyed Panic Silent/Aud. Opening Always/Airra Only

A F D C
L1 L2

Fall Back Exit Time

Fall Back Entrance Time

Bell Cut Off Time

F F 3 3 A
L1 L2 L3
Fall Back Code

A C 1 2 3 4
L1 L2 L3 L4

Always F
Zone 1
Zone 2
Zone 3
Zone 4
Always F
Always F
Always F
Always F
Always F
Always F

A L F 3 3 3 3 F F F F F F F F
L1 L2 L3 L4 L5 L6 L7 L8 L9 L10 L11