

FIRE BURGLARY INSTRUMENTS TM INC.

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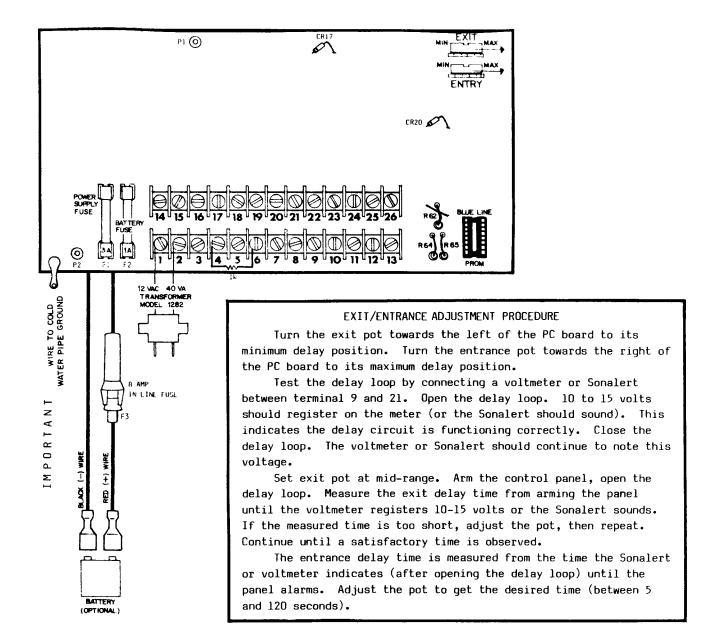
"WE DO WHAT THEY DON'T"

Printed in U.S.A.

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BELL CUT-OFF/RECYCLE ADJUSTMENT PROCEDURE

Panel is shipped with 30 second bell cut-off recycle. Cut R62 for 15 minutes. If the loop is closed (instant, or delay) the bell will stop and the system will recycle. If the loop remains open, the bell will stop but the system will not recycle until the loop is restored. With the loop open and the bell cut off, the secondary back-up system is now active. A closure on this circuit will cause the alarm to activate.

CAUTION:

TEST PANEL UPON INSTALLATION WITH AC POWER ONLY. DO NOT CONNECT BATTERY UNTIL THE INSTALLATION IS COMPLETE. TEST FOR DC CONNECT LUG TO EARTH GUARD.

INSTALLATION

Wire the control panel as shown on page 8 and 9. Any N.C. protective loop that is not used must be jumpered. Cut the resistors that require cutting. Plug 12 VAC 40 VA Class II transformer into 120 VAC 60 Hz power outlet that is powered 24 hours per day. Use 18 gauge or larger wire. Connect transformer to terminals 1 and 2. Do not apply 110 VAC directly to control panel. Set exit and entry delay timers. Connect Red and Black leads to standby battery.

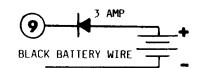
TO SELECT QUADRANT TO BE USED ON 1215

QUADRANT	R64	R65
1	connected	connected
2	cut	connected
3	connected	cut
4	cut	cut

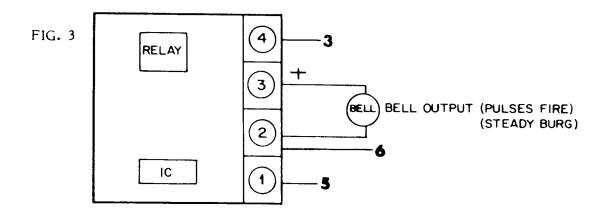
terminals DOO 'n functions

TERMINALS	DESCRIPTION		
1 & 2	12V AC 40 VA Input: Connect Model 1282 transformer (supplied) to 24 hour electrical outlet. Use 18GA wire at 15 ft. max.		
3(+) & 6(-)	Burglary Bell Output: 12 volts available on burglary and audible panic. Bell cutoff time is 30 secs (for test purposes,) or 15 minutes.		
4 & 6	Normally Closed Audible Panic Circuit: 24 hour normally closed circuit to be used with either momentary or maintained panic devices wired in series with 1000—resistor.		
4 & 17	Normally Open Audible Panic Circuit: 24 hour normally open circuit to be used with either momentary or maintained panic devices. If N.O. audible panic is used and N.C. panic is not used, 1000 resistor must be wired across terminals 4 & 6. If N.O. audible panic is used and N.C. audible panic is used, 1000 resistor must be wired in series with normally closed panic devices on terminals 4 & 6. A closure on this circuit will cause activation of the burglary channel of the digital dialer and provide a burglary bell output. Can be reset by activating the key switch, provided loop is restored.		
5(+) & 6(-)	Fire Bell Output: 12 volts available when fire circuit is activated.		
7(+) + 20(-)	12 Volt Regulated Output: For powering motion detectors, digital key pads and other voltage sensitive equipment. Current capability is 300ma at less than 100mv P-P ripple.		
9(+) + 11(-)	12 Volt Non-Regulated Output: Total current draw from panel is 1.5 amps (including regulated output), therefore, whatever current is not being drawn by devices connected to the other terminals will be available here.		
8 & 9(+)	Keyswitch Terminals: Normally open circuit used to arm/disarm control panel and activate opening and closing channel of digital dialer. Activated by a momentary closure across these terminals. Due to loop lock-out feature panel will not arm and closing signal will not be transmitted if a loop is violated while system is disarmed.		
9(+) & 10	Silent Panic Circuit: 24 hour normally open circuit to be used with either momentary or maintained panic devices. A closure on this circuit will cause an activation of the panic channel of the digital dialer.		
9(+) & 21(-)	Sonalert Output: Provides early warning indication for delay circuit.		
9(+) & 22(-)	Green L.E.D. Output: Loop status LED will be on when all loops are set in disarmed condition. Panel can not be armed, if LED is off due to loop lock-out feature. In armed condition, LED will always be off.		
9(+) & 23(-)	Red L.E.D. Output: Arm/memory LED will come on steady in the armed condition. During and after an alarm this LED will flash until the panel is disarmed.		

TERMINALS	DESCRIPTION	
9 & 26	Secondary "Back-Up" Loop: Use open circuit devices only. If a protective loop is still violated after the panel goes into bell cut-off this circuit becomes active. A closure on this circuit will cause the bell to ring again for the specified amount of time. Local alarm only, there is no dialer transmission.	
11 & 12	Delay Loop: Normally closed circuit used for exit/entrance delay. When armed, an open on this circuit after the exit time has expired will sound the sonalert and cause the entrance time to begin timing out. After the entrance time expires the burglary bell and burglary channel of the digital dialer will be activated. Maximum resistance is 2000 ohms. Exit and entrance times are adjustable from 0-2 minutes.	
11 & 13	Auxiliary Input: A closure on this normally open silent circuit will activate the auxiliary channel of the digital dialer. This is a 24 hr. channel.	
24 & 25	Instant Loop: Wire closed circuit devices in series with these terminals. When armed, an open on this circuit will cause activation of the burglary bell and burglary channel of the digital dialer. Maximum resistance is 2000 ohms.	
11 & 24	Instant Loop: Wire open circuit devices in parallel across these terminals. When armed, a closure on this circuit will activate the burglary bell and the burglary channel of the digital dialer.	
14, 15 & 16	Phone Line Connection: Connect tip to 14 and ring to 15. Home phone is connected to 15 and 16. FCC# AE398E-70112-AL-R, ringer equivalence (0.0B). Use Model 368 to connect to telephone company supplied RJ31X. 14. GREEN, 15. RED & GRAY, 16. BROWN.	
17 & 19	Remote Fire Reset: Wire a normally closed push button (Model 666) to these terminals to be used to reset the fire output and smoke detectors. Reset switch must be added to operate fire circuit.	
18 & 19	Fire Loop: A closure on this loop will activate the fire bell output and the fire channel of the digital dialer.	
19(+) & 20(-)	Smoke Detector Power: 12 volt output for powering smoke detectors. Can be reset by activating fire reset button.	
GROUNDING LUG	Located in lower left hand corner of the P.C. board. This lug must be connected to electrical or cold water ground for lightning protection.	
WIRES	Red/Black: These are the battery wires. Red(+) and Black (-). Should the battery be connected backwards, the charging circuit is protected by the F2 fuse. If F2 fuse blows, the regulated output becomes battery dependent. An 8 amp fuse is in series with the red (+) battery lead on this control panel. This fuse will blow, IF the regulated OR unregulated outputs are accidently shorted. NOTE: If the unregulated output (Terminals 9 or 17) are shorted, the standard 3 amp fuse will also blow out. If using a dry cell or power pack rather than a rechargeable battery the wiring connections below should be used instead of the red and black wires.	

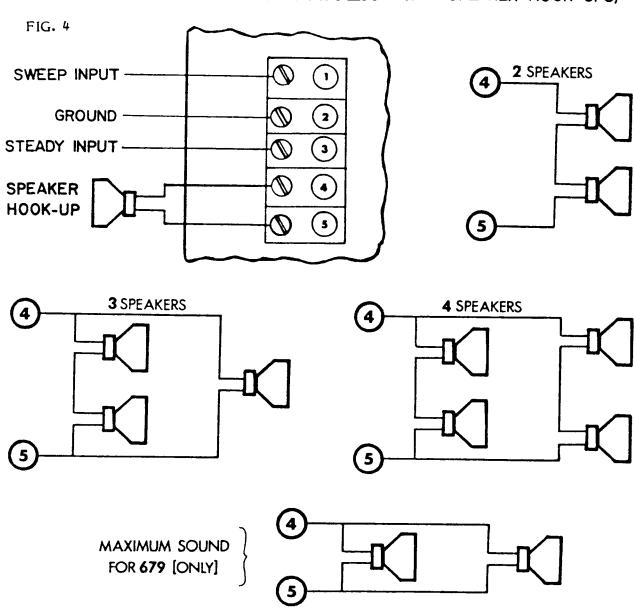


681-12 FIRE BELL PULSING MODULE

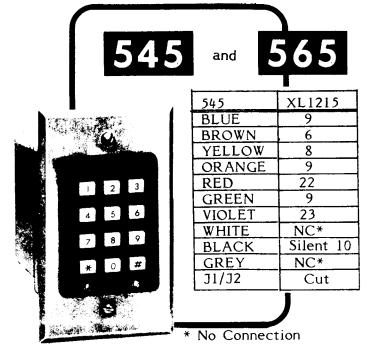


OPTIONAL MODEL 679

2-CHANNEL SIREN DRIVER (8 - SPEAKER HOOK-UPS)



OPTIONAL REMOTES

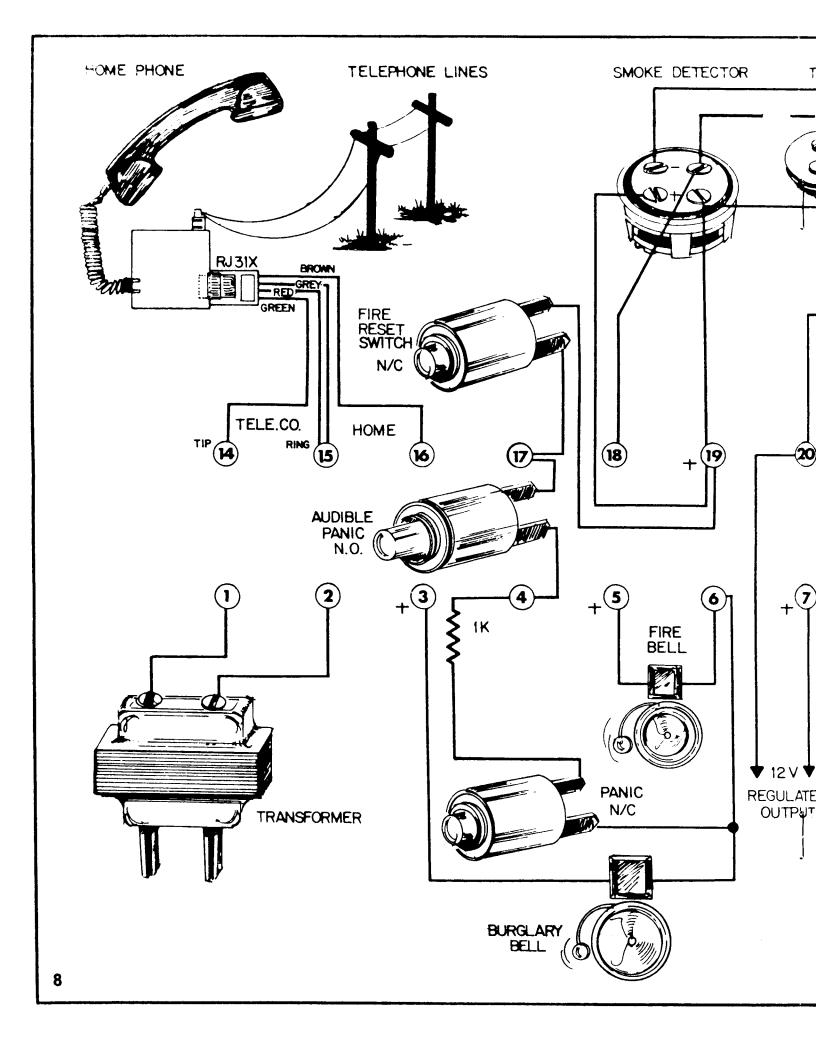


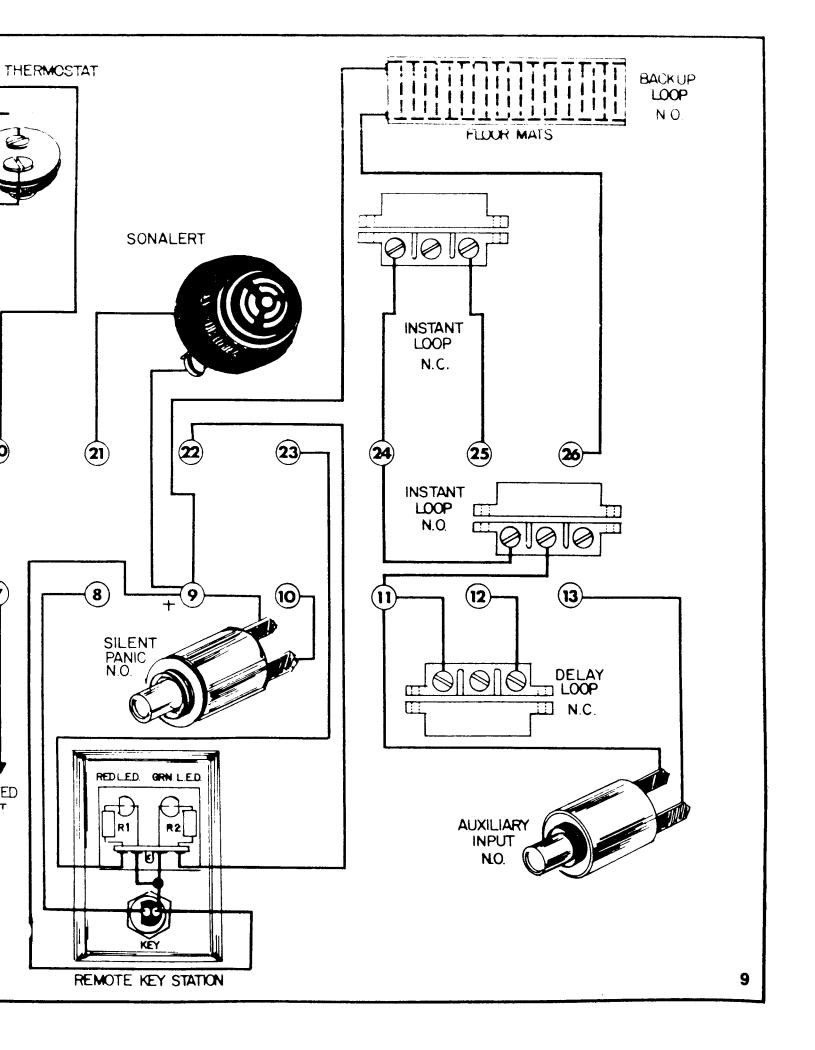
IF ANY ADDITIONAL INFORMATION IS REQUIRED, REFER TO THE INSTALLATION INSTRUCTION INTENDED FOR THAT PARTICULAR REMOTE.

		INCORPORATION AND PROPERTY OF THE PROPERTY OF
.5	546	XL1215
	BROWN	21
	RED	8
	ORANGE	9
	YELLOW	No Connection
	BLACK	9
	WHITE	23
	WHITE/RED	9
10	WHITE/BROWN	22
	WHITE/YELLOW	9
	WHITE/ORANGE	6
	WHITE/GREEN	9
	WHITE/BLUE	4-Audible Panic
		10-Silent Panic
	BLUE	No Connection
	GREEN	No Connection
(YELLOW/BROWN	Normally Closed
Shunt	YELLOW/ORANGE	Common
Contacts	YELLOW/RED	Normally Open
,	Jl	Α
	J2	A

551 1 2 3 4 5	XL1215 9 6 23 22 NC* 8	1 2
7	4-Audible Panic / 10-Silent Panic	
8	RED WIRE FROM 550	7 8
9	BLACK WIRE FROM 550	
10	N.C. Contact To be used to shunt certain areas of protection. Contacts Common will lock-in. Yellow LED will follow.	550
12	N.O. Contact	
JI GREEN	CONNECTED	
J2 RED	CONNECTED	WHEN USING 550/551
J3 WHITE	For AMBUSH, leave as shipped, cut for PANIC. Do the same on 550	NO OTHER REMOTES CAN BE USED.

^{*} No Connection





programming

The XL1215 contains a digital dialer which uses a program chip (prom). Understanding the programming instructions, which follow, is essential because many outputs are possible with each activation. The dialer will transmit codes for either momentary or maintained inputs and restores. If a maintained input is aborted during transmission a choice of either an abort code, restore code or complete aborting of the transmission is programmable. The prom can also be programmed to test the dialer at 18 hour intervals, beginning from the last transmission. The dialer is also capable of accessing three different receivers, with each activation, and will shut down after being kissed-off by one or all receivers, depending on programming.

CAUTION: THERE SHOULD BE NO POWER ON THE XL-1215 WHEN PROM IS INSERTED. PLUGGING IN PROM WITH POWER ON THE PANEL, WILL CAUSE THE DIALER TO TRANSMIT OUT OF PROGRAM.

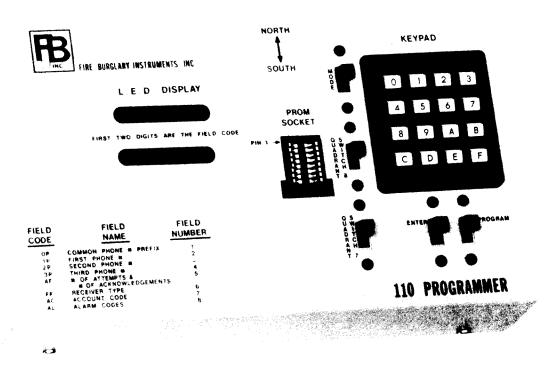
RJ31X

Before using the digital dialer, the telephone company shall be requested to install a USOCRJ31X jack on the telephone line. Give the telephone company the FCC registration (AE398E-70112-AL-R) & the ringer equivalence (0.0B) numbers for the XL1215. Connect the XL1215 to an approved modular plug (#368) to mate with the RJ31X as shown on page 9.

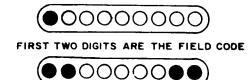
Should the XL1215 cause harm to the telephone network, the telephone company may temporarily discontinue service until the problem is corrected. Notice of such action will be given by the telephone company.

Should the telephone company make any changes to its facility or other requirements that could render the XL1215 incompatible, the customer shall be given adequate notice by the telephone company, in writing. Upon receipt of this information from the customer, the manufacturer shall advise the customer as to what actions must be taken to maintain uninterrupted service.

The Model XL1215 may not be connected to party lines or coin lines. If trouble is experienced, the XL1215 shall be disconnected from the phone line, by means of the plug shown to determine if the XL1215 is malfunctioning. If the XL1215 is malfunctioning, do not reconnect until the problem has been corrected. This control panel can not be used in conjunction with a "call waiting" phone system.



L.E.D. DISPLAY



MODE SWITCH:

Allows the programmer to make chips for 100B dialers, as well as the newer computer-based dialers.

QUADRANT SWITCHES 7 & 8:

Divide the prom into 4 separate segments, allowing four different programs to be stored on the prom. The switches are set to the prom segment in use.

ENTER SWITCH:

Prepares the programmer to receive a command. Switch must be pressed before moving into another field in the memory bank.

PROM SOCKET:

A blank prom placed in this socket can be burned with any information in the memory bank or a master prom can be placed in the socket and all of its information can be inserted into the memory bank. The 110 uses a National Semiconductor DM74S387N or MM1635140 J or P chip.

KEYPAD:

Used to enter information into memory and to move from field to field in memory.

PROGRAM SWITCH:

Takes the information in the memory bank and burns it onto a prom in the prom socket.

L.E.D. DISPLAY:

The first two digits display the field currently accessed. Field may be programmed for 11 digits or less. See programming instructions.

The filled holes in the display above are blank.

Programming Information

The prom used is a Model F102 (74S387) and is programmed on our Model 110 programmer as follows:

- 1) Plug in the 110 programmer. OP should appear on the LED display.
- 2) Set Mode Switch, Quadrant Switch 7 and Quadrant Switch 8 to the desired positions.

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

The first digit of the OP field will determine the dialer transmission for the fire channel. When the fire loop is activated the fire relay will latch in providing a fire bell output and cause a fire channel transmission. Depending on the programming of the prom, if the fire circuit is reset before the transmission is complete the dialer can either abort, send a restore code or an abort code. Select one of the following digits in the first location of the field.

Digit	Dialer Function		
1	Fire Code w/Stop Dialing on Abort		
2	Fire Code w/Restore Code on Abort		
3	FireCode w/Abort Code on Abort		

If fire is not used program digit 1.

All options may have restore programmed later in the procedure.

4) The second digit of the OP field will determine the dialer transmission for the panic channel. The silent panic channel can be activated with either a momentary or maintained closure with abort, restore code or abort code on abort depending on the programming. This code will also determine if and when the dialer will transmit a test code. If a test code is desired it will be sent at 18 hour intervals after the last transmission.

The proper digit to program in the second location of the OP field is as follows:

DIGIT	SILENT PANIC INPUT	DIALER OUTPUT	SELF TEST
0	Momentary	Panic Code/No Abort	None
1	Maintained	Panic Code w/Stop Dialing on Abort	None
2	Maintained	Panic Code w/Restore Code on Abort	None
3	Maintained	Panic Code w/Abort Code on Abort	None
4	Momentary	Panic Code/No Abort	18 Hr.
5	Maintained	Panic Code w/Stop Dialing on Abort	18 Hr.
6	Maintained	Panic Code w/Restore Code on Abort	18 Hr.
7	Maintained	Panic Code w/Abort Code on Abort	18 Hr.

If both Silent Panic and Self Test ARE NOT USED, program DIGIT 1
If Silent Panic is NOT USED, but Self Test IS USED, program DIGIT 5
All options may have restore programmed later in the procedure.

5) The third digit will determine the operation of the burglary channel which includes the instant loop, delay loop, audible panic and bell tamper.

Digit	Dialer Function
1	Burglary Code w/Stop Dialing on Abort
2	Burglary Code w/Restore on Abort
3	Burglary Code w/Abort Code on Abort

All options may have a restore programmed later in the procedure.

6) The fourth digit will determine the operation of the auxiliary channel of the digital dialer.

Digit	Auxiliary Input	Dialer Output
0	Momentary	Auxiliary Code/No Abort
1	Maintained	Auxiliary Code w/Stop Dialing on Abort
2	Maintained	Auxiliary Code w/Restore on Abort
3	Maintained	Auxiliary Code w/Abort Code on Abort

All options may have restore programmed later in the procedure.

- 7) Beginning with the fifth digit of the OP field, if a common prefix is needed for all receivers, (9, area code, etc.) it may be keyed in here. If a time delay is needed before or between digits, key in "C" where the delay (3 secs.) is needed.
- 8) Press ENTER switch, then 9. 1P should appear on the LED display. Key in the first telephone number. Up to 11 digits may be used.
 - Information must be entered in this field -
- 9) Press ENTER switch, then 9. 2P should appear on the LED display. Key in the second telephone number. Up to 11 digits may be used. If no number is needed, leave blank.
- 10) Press ENTER switch, then 9. 3P should appear on the LED display. Key in the third telephone number. Up to 11 digits may be used. If no numer is needed, leave blank.
- 11) Press ENTER, then 9. AF should appear on the LED display. The first digit in this field will determine the number of attempts the dialer will make to reach the receiver.

See chart below:

No. of Attempts	Use Digit	No. of Attempts	Use Digit	No. of Attempts	Use Digit	
1	1	7	7	12	С	
2	2	8	8	13	D	
3	3	9	9	14	Е	
4	4	10	0	15	Α	
5	5	11	В	unlimited	F	
6	6				•	

IMPORTANT: When F is pressed, the number does not display, but the space is left blank. The second digit in the field will determine the number of receivers the dialer must access before it shuts down. Select as follows:

12) Press ENTER, then 9. FF should appear on the LED display. This field will determine receiver format. One digit must be keyed in for each phone number programmed. See chart for selecting the proper reciever code:

Use Digit
1
1
1
1
1
3
3
4
5
6
7

Information must be entered in this field.

- 13) Press ENTER, then 9. AC should appear on the LED display. Key in a 3 or 4 digit account code. A 4 digit account code can only be used with a receiver that is capable of handling it.
 Information must be entered in this field -
- 14) Press ENTER, then 9. AL should appear on the LED display. Key in digits for the following alarms.

(Program an "F", which leaves a blank, for any row NOT BEING USED)

Row	Description	Code
1	Fire	0-9 or F
2	Silent Panic	0-9 or F
3	Burglary	0-9 or F
4	Auxiliary	0-9, A or F
5	Closing	0-9, C or F
6	Opening	0-9, B or F
7	Restore - Fire	0-9, E or F
8	Restore - Silent Panic	0-9, E or F
9	Restore - Burglary	0-9, E or F
10	Restore - Auxiliary	0-9, E or F
11	Abort Code/Test Code	0-9, D or F

NOTE	For English	Language	Printout of Codes use:		
	Α	-	Trouble		
	В	-	Opening		
	С	-	Closing		
	D	_	Abort		
	E	-	Restore		
Use "A" if Auxiliary channel is being used to monitor trouble such as high or low temperature.					

- 15) CHECK THE DATA. All information has now been entered into the fields. By pressing ENTER, then 9, the information, (Which is now in memory), can be checked and corrected if necessary. If a field must be changed or corrected, to go to that field, press ENTER, then the corresponding field number. The correct information may now be keyed in.
- 16) If all data is correct, a blank prom can now be inserted and "Burned" by pressing the Program switch momentarily. If the prom burns correctly, the word "FINISH" will appear on the LED display. If a different program is already on that quadrant, or if the prom is "Burned" incorrect, the words "NO CAN DO" will appear on the LED display. If "FINISH" does not display, that particular quadrant of the prom is not accepting the program and cannot be used again.

As required by the FCC, we are providing the following statement.

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

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications helpful: "How to Identify and Resolve Radio-TV interference problems". This booklet is available from the U.S. Government printing office, Washington, D.C. 20402, Stock No. 004-000-00345-4.

