EAGLE 6000 ALARM CONTROL PANEL & DIGITAL COMMUNICATOR



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WI482 6190

# DESCRIPTION

The EAGLE 6000 is a microcomputer based six-zone residential control panel with provisions for Panic and a variety of reporting features. The system is contained within a wall-mounted enclosure and includes an integral digital communicator and a multifunction keypad with numeric display.

The keypad will accept up to four programmable Arm/Disarm Codes to arm and disarm the control panel. The keypad also serves as a programmer for code entry and feature selection. Two programming modes enhance system flexibility: the Dealer mode provides full feature customization, while the User mode allows limited programming for those features most likely to be changed or used only occasionally. The unit's nonvolatile **EEPROM** memory will permanently store the program, keypad codes, and transmission information, even after a lengthy power failure.

# **SPECIFICATIONS**

Operating Temperature: Input Power: Recommended Transformers: Loop Voltage:	O-49 °C (32-120 °F) 16Vac, Class 2 step-down transformer ALTR1614 (14.4VA) or ALTR1620 (20VA) 10 to 13Vdc
Loop Current:	
Loop Resistance:	300 onms max. series resistance/loop
Alarm Outputs	
Relay Output:	12Vdc, 1.0A maximum
Contact Ratings:	24Vdc/2A (resistive);
	Relay Output selectable for dry contacts
Auxiliary Output:	12Vdc regulated
Combined Standby Current:	(Remote Power + Auxiliary Output)
	300mA maximum with ALTR1614 and 4AH battery
	450mA maximum with ALTR1620 and 6AH battery
Remote Station	
Current:	25mA typ.
Maximum Number:	5
Recommended Battery:	4AH Rechargeable, sealed lead-acid
Standby Time:	4 hours minimum at maximum combined standby current
Fuses	
Aux Power/Remote Power	$1\Delta$ $1\Delta G$ (F2)
Alarm Output:	$2\Lambda$ $1\Lambda C$ (E1)
Housing Dimonsions:	$11.0 \times 10.2 \times 2.1^{\circ}$ HyWyD
Housing Dimensions.	$(11.4 \times 12.5 \times 5.1 \times 7.9 \text{ mm HyWyD})$
China in a Wisisht	$(20.4 \times 51.2 \times 7.00000, HXWXD)$
Smpping weight:	Approx. / ID (3.1Kg)

## **INSTALLATION**

Note: For operation of keypad controls and indicators, refer to User's Guide (01135).

**Mounting** Choose mounting location accessible to (a) continuously-powered ac source, (b) cold-water-pipe ground ideally no further away than 10 feet, and (c) telephone lines (keep telephone wiring away from speaker wires). Remove knockouts for cables. Place control panel at convenient viewing height. The chassis may be used as a template to mark the mounting holes. It will accommodate a variety of mounting screw sizes; #10 Type A screws are recommended.

A keypad should be placed near the exit/entry door. If another keypad is to be located at control panel, remove the knockout in the control-panel door. If a keypad is not mounted in the front door, affix the self-adhesive logo onto the keypad knockout. The front door is secured by means of the three Phillips-head sheet metal screws supplied.

**Grounding.** Connect control-panel grounding screw to metal cold water pipe. *Do not* use gas pipe, plastic pipe or ac ground connections. Use at least 16-gauge wire. Make run as short and direct as possible, with no sharp bends in wire.

**Power-Up Sequence** (1) Connect ac power. (2) Install backup battery (required). (3) Connect telephone cord to RJ31X jack.

**AC-Failure Indication.** Loss of ac power is indicated by all LEDs flashing simultaneously. Holding down Key [9] (until beep) will temporarily reset LEDs to check zone status and to arm system.

Arming & Disarming System. When any Arm/Disarm Code is entered, Armed LED will either come on (control panel armed) or go off (control panel disarmed). If a wrong code is entered, system will fail to respond. *Wait at least 2 seconds* before trying again.

**Keypad Panic**. Tripped by simultaneously pressing Keys [\*] and [#].

**Testing The System** .After installation is completed, test system as follows:

(1) Call central station to inform them of test. (2) Initiate an alarm, preferably on a zone that activates a steady siren. (3) Verify proper signalling, and call central station to confirm their receipt of a good transmission.

#### PROGRAMMING

**NOTE:** Instructions for User Keypad Programming are given in the User's Guide (01135). **Default Program. The** following default program is factory installed. It is the installer's responsibility to change, add, and/or delete features, in accordance with these programming instructions to customize the system to suit the application and conform to local codes.

Arm/Disarm Code 1: 1,2,3,4 Entry Delay: 20 seconds Exit Delay: 20 seconds Auto-Bypass: Zones 1-6 Selective Bypass: Zones 1-4 Group Bypass: Zones 2,3 24-Hour Protection: Zone 5 Auto-Reset: Zones I-6 Alarm Output: Zones I-6 Output Time-Out: 10 minutes Pulsing Output: Zone 6 50mS Loop Response: Zone 5 Enable Keypad Panic on Zone 5 Auto-Reset After Output 1 Timeout Line-Seizure **Time\***: 2 seconds Anti-Jam Time\*: 15 seconds Redial Delay Time\*: 4 seconds Wait for Handshake\*: 35 seconds Redial Attempts\*: 9

\*Must be programmed for communication

**Dealer Keypad Programming.** To access Dealer Program Mode, connect jumper between Terminals 3 and 6. Hold down Key [8] until all LEDs light. Keypad now functions as follows:

Key [1]:	Advances character in display (1-9, 0, b, C, d, E, and F).
Key [2]:	Clears display.
Key [3]:	Advances display to next section of a multisection location.
Keys [*] and [#]:	Exits Program Mode (with jumper removed from Terminals 3 & 6).

**Note:** Do not remove power while in the Program Mode.

Access feature to be programmed by entering its address (see Keypad Programming Sheet). A beep will sound, indicating that feature is ready to be programmed. Enter required data using Key [1]. If number displayed is wrong, press Key [2] to clear display. Use Key [3] to advance to next digit of a multidigit address. After programming is completed, remove jumper between Terminals 3 and 6, then press Keys [\*] and [#] to exit the Program Mode. (Caution: Pressing them again – after the LEDs go out – will activate Panic!)

### *Example:* Program Zones 1-6 to Report on Alarm.

Referring to Keypad Programming Sheet, Report on Alarm is at B29, a two-section location. Circle respective data values for Zones 1-6 (1,2,4,8 for section 1; 1, 2 for section 2) on programming sheet, part of which is reproduced below. Add up each section to obtain entries to be programmed ("15" for section 1: "3" for section 2).

FEATURE	ZONE			NO LOW CLO			CLO/OPN BY USER		
	1 2 3 4	516	AC	BAT	OPN	1	2	3	4
<b>REPORT ON ALARM</b>	B29	B29	B45			B45			
	(1) (2) (4) (8)	$\bigcirc 1) \bigcirc 2$	1	2	4	1	2	4	8
	Sect. 1	Sect.2							

**Note: The** programmed entry can be only one character, thus two-digit data totals (such as "15", above) must be converted to a single character. From the following conversion chart, note that "15" is displayed and programmed as an "F".

Entry Total:	10	11	12	13	14	15
Display:	0	b	С	d	Е	F

To program data entries obtained ("F" for section 1; "3" for section 2), install jumper between Terminals 3 and 6. Hold down Key [8] until all LEDs light (Program Mode). Press Keys [B], [2], then Key [9] to access location B29 (Report on Alarm). Press Key [1] repeatedly until "F" (entry for section 1) is displayed. Press Key [3] to advance display to next section. Press Key [1] repeatedly until "3" (entry for section 2) is displayed.

This completes programming for location B29. Either (a) access another location to continue programming or (b) remove jumper between Terminals 3 and 6 and press Keys [\*] and [#] to exit Program Mode.

# **KEYPAD PROGRAMMING RECORD SHEET FOR THE EAGLE 6000**

NOTE: 1. DO NOT REMOVE POWER WHILE IN THE PROGRAM MODE. 2. LOCATIONS B11 THROUGH B17 MAY BE ACCESSED IN USER-PROGRAM MODE

	· · · · · · · · · · · · · · · · · · ·				
ARM/DISARM CODE 1	B11	↓   E	ENTRY DE	LAY TIME	<u> B15 </u>
ARM/DISARM CODE 2	B12		EXIT DEL	AY TIME	<u>B16</u>
		↓ ↓	x10 SE	CONDS	
ARM/DISARM CODE 3	B13	ļ [8	ENABLE O	NE-BUTTON	
	┼──┼─┼──	Į Į	AKMING		
ARM/DISARM CODE 4	B14	+  '	PRE-AL	U-SECOND ARM	
		+ 			<del></del>
	ZONE	NC	o  low <u> c</u>	LO CLO/OPN BY L	JSER
FEATURE	1 2 3 4	5 6 /	ACBATO	PN 1 2 3	4
REPORT ON ALARM	B29 F	B29_3	845 Ø	B45	
	1 2 4 8		1 2 4	4 1 2 4	8
REPORT ON RESTORE	B39	B39	B49	B49	
	1 2 4 8	1 2 1	1 2 1	4 1 2 4	8
DAY ZONE	859	B59			· ·
DATI LONE	1121418				
PRIORITY		B61			
PRIORITI	1 2 4 1 8				
AUTU-BTPASS					
SELECTIVE BYPASS	805	803			
	1 2 4 8				
GROUP BYPASS	<u>B64</u>	<u>B64</u>			
	1 2 4 8				
24-HOUR ZONE	B65	B65			
	1 2 4 8	1 2			
AUTO-RESET	<u> </u>	<u>B66</u>			
	1 2 4 8	1 2	I	DELAY TIME	
ABORT DELAY	B67	B67	B78	ABORT DELAY	
	1 2 4 8	1 2		(x 5 seconds)	
ALARM OUTPUT	B68 F	B68.3	B73	OUTPUT 1 TIME-0	
	1 2 4 8	112	171	(x 5 minutes)	
10ms LOOP PESPONSE*	B71	B71	++		
	1121418		*411 70	NES 750ms IE N	FITHER
FORE LOOD RESPONSES	p72			ESDONSE DROCRAN	
JUNS LOUP RESPONSE"			LOOP K	ESPONSE PROGRAM	*****
	B5/7	<u>B2/</u>	<del>,  </del>		
	112418	1 1 2 1 4	4 I _		
NOT USED		$\mathbf{X} \mathbf{X} \mathbf{X}$	<u>\</u>		
(DO NOT PROGRAM)	_/ / / /	( )	\ <u></u>		
DOUBLE REPORTING			<b>١</b>	DISABLE SWING	JER
	/ / /	\ \	\	SHUTDOWN	
OPENING REPORT AFTER	1 1	<u>۱</u> ۱		AUTO RESET AI	FTER
ALARM		\ \	۱	TIME-OUT	
ENABLE KEYPAD PANIC	/	۱.		PULSING OUTPU	JT
ON ZONE 5	i	Ň		(ZONE 6 ONI	LY)
		<u> </u>			
LINE SETZURE TIME		LAY TIME	<b>B77</b>	REDIAL ATTEN	IPTS   R58 T
v1 SECOND			17451		
		HANDSHAKE	湯	4	 v1 v14
			127		
X3 SECUNDS (C		103			

NOTE: NUMBERS IN PARENTHESES INDICATE RECOMMENDED PROGRAMMING. THESE LOCATIONS MUST BE PROGRAMMED FOR COMMUNICATION.

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# **KEYPAD PROGRAMMING RECORD SHEET FOR THE EAGLE 6000**

# **Communicator Transmission Information**

	Т			-				<b>I</b>	ſ
		0		E A	F	0		LOU	
ALARWY I RUUBLE CUDES		2	3	4	3	0	AU I		
	BZI	BZZ	<b>B</b> Z3	BZ4	BZ3	BZ6	<b>B41</b>	<b>B4</b> Z	
Single Digit:	>					3	-	8	-
Extended/Iwo Digit>	_					9		σ	ļ
RESTORE CODES	T	1			-76		1-77	10/7	r
	<u>B31</u>	<u>B32</u>	<u>833</u>	<u>B34</u>	B35	<u>B36</u>	<u>B46</u>	<u>1847</u>	
Single Digit>	·上						ļ		-
Extended/Two Digit>	▶						I		L
• • • • • • • • • • • • • • • • • • • •									
OPENING/CLOSING CODES				Force	9				
C	C <u>losi</u>	ng		Arm	<b>r</b>	0	peni	<u>n</u> g	Must be programmed if
	<u>B43</u>	1		B44	L		<u>B48</u>	1	Closings are reported.
Single Digit>	>	1	_		L			1	
5 5	•	•							
SUBSCRIBER I. D. NUMBERS									
	Т	el ep	hone	#1			Tel	epho	ne #2
	_	Aları	n I.(	).			Al	arm 1	1.D.
	T	B	51		Т	Т		854	
Format Pre-Di	al A	cces	s Di	al-1	[one				
Rcvr Data Delay	ý N	umbe	r D	etec	tion			Te	tephone Number
Telephone 1 I B52 I I								B53	
951	1	1	1	IF	1	1	115	210	
+++++++++++++++++++++++++++++++++++++++	+		+	-		-	·····		
Talephone 2 $\frac{-1}{1855}$ $\frac{-1}{1}$								B56	
(Nust ha	1	T	1	1	1	1		1	
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programmed) I I									
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ENTRY RECEIVER FORM	MAT			7		  ENT  Bla	RY nk	EXTEI	DATA FORMAT NDED OR SINGLE DIGIT
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ENTRY RECEIVER FORM (Blank) ADEMCO "SLOW" 1 RADIONICS "SLOW"*** 2 SESCOA*** 3 RADIONICS "FAST"***	MAT				•	ENT Bla 1 2	<u>RY</u> nk	EXTEI SINGI TWO I	DATA FORMAT NDED OR SINGLE DIGIT LE DIGIT DIGIT (OR 4/2) CHECK
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ENTRY RECEIVER FORM (Blank) ADEMCO "SLOW" 1 RADIONICS "SLOW"*** 2 SESCOA*** 3 RADIONICS "FAST"*** 4 SILENT KNIGHT "FAST" *** These formats typical	MAT	 .e. a	2300	Hz		ENT Bla 1 2 4 8	<u>RY</u> nk	EXTENSING SING TWO I SUM ( FOR ( THIS	DATA FORMAT NDED OR SINGLE DIGIT LE DIGIT DIGIT (OR 4/2) CHECK 2300Hz HANDSHAKE, ADD "8" TO LOCATION.

### PROGRAMMING GUIDE

The following guide describes the programmable options and provides important information on required programming. Entries are arranged in alphabetical order.

<u>Abort Delav.</u> Delay period that allows cancellation of central-station report This is done by disarming control panel within delay period. (If selected for a 24-Hour Zone, cause of alarm condition must be removed before disarming panel.)

<u>AC-Failure Reporting</u> If ac is removed from control panel, all LEDs will flash simultaneously. To arm, first press Key [9]. If programmed for Report On Alarm, report will be delayed for 1 hour. Restores will report immediately.

<u>Access Number for Outside Line.</u> Some telephone systems require one digit to access an outside line before telephone number can be dialed. Also, first dial tone encountered (prior to access number) may have a frequency different from that of accessed dial tone (440Hz). One or more 4-second Pre-Dial Delay "d"s may be entered before the access number instead of a dial tone with frequency "E".

If subscriber's system uses an access number, ask telephone-equipment supplier if dial tone other than 440Hz is received prior to dialing access number. If communicator must delay before dialing access number instead of attempting to recognize dial tone, find out how many 4-second delays must be programmed.

For each telephone, (a) enter the Dial-Tone Detection "E" or Pre-Dial Delay "D" in the first location. Enter any extra "D"s that may be required starting in the second location. (b) Enter the access number digit in the second location or the next available location thereafter. (c) Starting in the first available location after the access number, enter any Pre-Dial Delay "D"s needed before the second dial tone; the Dial-Tone Detection "E" for the second dial-tone frequency; then the telephone number.

#### Alarm Codes. See Data Format: Single Digit Event Code

<u>Alarm Outputs.</u> The following table summarizes wiring and programming for signalling an alarm in typical installations. See **Time Selection** time-outs.

Output	Wiring	Remarks
Alarm Output	7 (-), 8 ( + )	
Pulsing Output	7 (-), 8 ( + )	Zone 6 Only

<u>Anti-Jam Time.</u> If communicator does not detect a dial tone within 12 seconds, Anti-Jam feature is activated: communicator will go off line for a preprogrammed anti-jam interval in order to free telephone circuit from incoming calls, then make another 12-second attempt at dial-tone detection. If still unsuccessful, communicator will again go off line for 16 seconds, then proceed to dial anyway. Ask telephone-equipment supplier to determine if a longer time is required for Anti-Jam feature to function.

To test Anti-Jam feature, call alarm phone line from a different phone line, then activate an alarm; incoming call should be disconnected by control panel.

<u>Auto-Reset.</u> If a tripped zone is selected for Auto-Reset, it automatically resets itself when alarm condition is removed. Auto-Reset may be delayed to occur after time-out period by programming Auto-Reset After Alarm Time-Out.

Zones 1 through 6 not programmed for Auto-Reset will not be able to signal another alarm until cause of alarm has been removed *and* panel is disarmed.

<u>Auto-ByPass.</u> Zones programmed for Auto-Bypass will be automatically shunted from system if faulty when arming. Momentary beep at keypad warns that system has been armed without full protection. Note: Exit/entry door must be closed before arming, otherwise Exit/Entry Zone (Zone 1) will be auto-bypassed.

<u>Backup Reporting</u> Backup reporting is always present, therefore bbth telephone numbers must be programmed, even if both numbers are the same. (Similarly, Subscriber Identification Numbers must be programmed for both telephone numbers, even if both are the same.)

<u>Batterv.</u> 12Vdc standby power source in control panel to provide backup protection in event of a power loss. Battery must be installed, even if ac power is present.

Closing Report: Closing Bv User: Force-Arm Report Upon arming, the communicator can transmit either a Closing Report or a Force-Arm Report. Note that both Closing Code and Force-Arm Code locations must be programmed for any closing report. Therefore, to transmit a Closing Report only, repeat the Closing Code in the Force-Arm locations. If Closing and Force-Arm Codes are **different**, the communicator will transmit a Closing Report each time the panel is armed, or a Force-Arm Report if the panel is armed with an auto-bypassed zone. If reporting Closing by User, user code will be transmitted automatically in Extended Format.

Data Format, Consult the central station to find out which of the following formats to use.

• Extended Format. Extended-format reporting allows the communicator to transmit an extra digit to the central station. This extra digit is generally used to report the user or the zone on which the event occurred.

**Example.** An installation uses the following programmed transmission information: Subscriber Identification Number is "789"; an Alarm Code is selected for Zone 1; Extended Format Alarm Code is "31" (Burglary, Zone 1). If Zone 1 trips, the communicator will transmit:

7893 - Subscriber "789" Burglary 3331- Burglary, Zone 1

Extended Format may be used with most receivers; most that are capable of recognizing multiple reporting also recognize Extended Format. Central station will specify event codes to be programmed. For Extended Format, leave Data Format location blank and follow Steps 2 through 5 of **Two-Digit Event-Code Format** later in this section.

- Single-Digit Event Code Format. If receiver cannot accept extended reporting, (1) program "1" in the Data Format location(s); (2) enter first digit for any Alarm/Trouble Code, Restore Code and Opening/Closing Codes. Note: To have a Single-Digit Event Code for one telephone number and Extended Format for the other, program both digits for all event codes. Follow Steps 2 through 5 of Two-Digit Event Code Format, which follows. Telephone number with "1" in Data Format location will transmit only first digit; other number will use both digits. (Single-Digit Format will override Two-Digit Format Location.)
- Two-Digit Event Code Format. Some central-station receivers require that a two-digit code be sent in each report.
  *Example.* In a certain installation, the Alarm Subscriber Number is "1234"; a burglary alarm occurs on Zone 1 (Alarm Code "31"). Communicator will send "1234 31". To use Two-Digit Event Code Format,

1. Program "2" in Data Format location(s). See Double Reporting.

**2.** Enter an Alarm Code for each zone or condition to report on alarm or for a Force-Arm as follows:

a. Enter first digit of Alarm Code (may be used to indicate alarm type.)

b. Enter second digit of the Alarm Code (may be used to indicate zone.)

3. Repeat Step 2 to enter Restore Codes for each zone selected.

4. If Opening Report or Opening Report After Alarm is selected, enter a two-digit Opening Code. See **Opening Report; Opening Report After Alarm.** 

5. If Closing Report is selected, enter a two-digit Closing Code. For Force Arm, also enter a two-digit Force-Arm Code. Note: Single-Digit Format will override Two-Digit Format.

• Sum-Check Format. Sum Check is a sophisticated data format used to enhance speed and check accuracy of received transmission. It should be preferred whenever central station is capable of receiving it.

After transmitting Subscriber Identification Number and event code, communicator sends a verifying digit that is sum of both. Receiver compares verifying digit with sum of other two numbers to check transmission accuracy. To select Sum Check, program "4" in Data Format location(s), and "8" for 2300Hz Handshake.

**Day Zone**, A Burglary Zone programmed to cause visual and audible indication at keypad if loop has an open condition only when disarmed. May be used to warn of trouble during the day, when control panel is not armed. If Day Zone experiences a problem (break in window foil, for example), Ready LED on keypad will flash, sounder will pulse steadily, and digital readout will display problem zone(s). Use Reset Key [9] to reset the sounder and display.

<u>**Dial-Tone Detection..**</u> At least one entry is usually required for each telephone number used to ensure that a dial tone is present before communicator dials.

When "E" is programmed before first digit of outside telephone number, communicator dial-tone detection circuit is set to detect standard 440Hz dial tone. "E" is generally entered in location just before telephone number.

It may be necessary to program at least one 4-second Pre-Dial Delay before a Dial-Tone Detection "E". With certain exchanges, Pre-Dial-Delay "d"s may be used without a Dial-Tone Detection "E". (See Access Number for Outside Line; Pre-Dial Delay.)

**Door Chime.** May be used on Zone 1 while disarmed to beep at keypad when zone goes into trouble. Hold down Key [6] until it beeps to enable or disable.

<u>Double **Reporting**</u> For Double Reporting, enter Subscriber Identification Numbers for Telephone 2 and related information. Subscriber Identification Numbers for both Telephones 1 and 2 must be entered, even if they are the same.

<u>Enable Pre-Alarm</u>, Sounds a lo-second warning at keypad if any zone is tripped when armed with Instant Protection. Gives user time to disarm to avoid sounding a false alarm.

<u>Exit/Entry Delav</u>, Permits exit and entry through Exit/Entry Zone (Zone 1) after system is armed without setting off an immediate alarm. Exit delay allows time to leave premises after panel has been armed. Entry delay allows time to enter and disarm. Upon entering, keypad sounder comes on to remind user to disarm.

Exit- and Entry-Delay times may each be programmed for up to 150 seconds.

Exit/entry delay may be cancelled by holding down Key [4] (Instant Protection) prior to arming (automatically restored upon disarming). A *pre-alarm warning* may be programmed to sound at keypad if Exit/Entry Zone is accidentally tripped.

**Exit/Entry Follower,** Zones 2 and 3 are Exit/Entry Follower Zones; these will ignore detection during exit delay, and during entry delay only if Exit/Entry Zone is entered first. Detection devices (e.g. PIRs) along path between keypad and exit/entry door will not signal an alarm during exit/entry delay under normal conditions. However, if device in Exit/Entry Follower Zone detects a violation when exit/entry door has not first been entered, there will be no entry delay and Exit/Entry Follower Zone will go into instant alarm.

If panel is armed with entry delays cancelled (Instant Protection), any violation on Exit/Entry or Exit/Entry Follower Zone will cause an immediate alarm.

# **Force Arm** See Closing Report

<u>Group Bypass</u> Removal of a preset group of zones from the system. Group Bypass is often used to deactivate some or all interior zones simultaneously so that user may move freely throughout premises but still be protected from intrusion through armed perimeter zones.

Zones are group-bypassed by pressing the Bypass Key [B] *twice*. (Bypass LED on keypad will light.) Holding down Key [2] will display zones bypassed. When panel is disarmed, all bypassed zones automatically revert to non-bypassed zones.

<u>Loon Response</u> Loop response is the amount of time that a normally-closed circuit must remain open, or a normally-open circuit must remain closed, to trigger an alarm. The slower the loop response, the more immune the system will be to intermittents (*swingers*). Selectable loop-response times are:

- **750mS** (.75 sec.): Slowest loop-response time, recommended for use with magnetic contacts, window foil, etc. Unless programmed otherwise, loop- response time will be 750mS (milliseconds) for all zones.
- 50mS (.05 sec.): Used for momentary Panic Buttons and area-protection devices, such as photoelectric eyes, PIRs, floor mats, etc.
- 10mS (.010 sec.): An extremely fast loop response used primarily for window bugs, and to eliminate need for pulse extender.

Low Battery. Alarm will signal when battery terminal voltage drops to ll.OV. A low-battery condition may report to a central station if programmed.

## **No Ac See AC-Failure Reporting**

<u>One-Button Arming</u> Permits quick arming by momentarily pressing Key [5]. (Disarming still requires complete code.)

#### **Opening/Closing Bv User** See Closing Report; Opening Report

**Opening Report: Opening User: Opening Report After Alarm,** Opening and closing reports are generally used in commercial installations. On disarming, communicator can send an Opening Code (Opening Report), or it may transmit only when control panel is disarmed after an alarm has occurred (Opening Report After Alarm). Note that Subscriber Identification Numbers and Opening Codes *must* be entered for either opening report. Program

Opening to report each time the control panel is disarmed. If selecting Opening Report, do *not* select Opening Report After Alarm. If reporting Opening by User, user code will be transmitted automatically in Extended Format.

Program Opening Report After Alarm to report only when disarming after an alarm. This feature may be used by the central station to verify that the subscriber has responded to the alarm and disarmed the control panel. If Opening Report After Alarm is selected, do **not** select Opening Report.

<u>Panic Zone</u> (Zone 5). When using Zone 5 for Panic, program 24-Hour Protection and Report On Alarm. Note that if Zone 5 is not programmed for 24-Hour Protection, Panic may still be activated when disarmed, but "5" will be displayed red LED will flash.

Program Enable Keypad Panic on Zone 5. Panic Zone is accessed by pressing Keys [\*] and [#]) *simultaneously* activating communicator to alert central station.

External panic switches may be used on Zone 5 terminals. Do not program Zone 5 for Restore Report, or a restore will be sent as soon as buttons are released.

<u>Pre-Dial Delav.</u> May be used whenever a delay is required before dialing. It is usually required to program Dial-Tone Detection, which causes the communicator to wait for a dial tone before dialing (see Dial-Tone Detection). Certain telephone exchanges send a nonstandard dial tone that the communicator may not be able to detect. With these exchanges, it is possible to program Pre-Dial Delay rather than Dial-Tone Detection. This will cause the communicator to wait for a nonstandard dial tone to wait for a predetermined period of time before dialing rather than look for a nonstandard dial tone.

Contact telephone-equipment supplier to find out how long a delay is required before dialing. Program one "d" for each 4-second delay required.

<u>Priori tv Zone.</u> A zone that will prevent arming if in trouble. If an attempt is made to arm, the sounder will sound continuously and a "P" will be displayed. Priority condition may be silenced by disarming. Any zone may be selected as a Priority Zone. A zone in trouble that is neither a Priority Zone nor an Auto-Bypass Zone will cause an alarm on arming.

<u>Receiver Format</u>. The communicator can be programmed to transmit to any standard central-station receiver. A receiver format must be entered for each telephone number used, but a different format may be assigned to each.

Call the central station for each telephone number used to confirm the type of receiver in use. Select the receiver format entry for each telephone number from the following table.

<u>Reuort on Alarm.</u> When a zone selected to Report on Alarm is tripped, communicator transmits code for that zone to central station. Enter Alarm Codes for each zone to report on alarm, even if identical codes are used for different zones.

		DATA	DUTY CYCLE	INTERDIGIT
ENTRY	<b>RECEIVER FORMAT</b>	FREQ.	(ON/OFF)	TIME
(BLANK)	Ademco, Silent Knight slow	1900Hz	60/40mS	600mS
1	<b>Radionics, DCI, Franklin slow</b>	18OOHz	60/40mS	600mS
2	Sescoa, Vertex, DCI, Franklin	1800Hz	30/20mS	800mS
3	Radionics fast	1800Hz	13/12mS	400mS
4	Silent Knight fast	1900Hz	40/30mS	560mS

**Restore Report: Zone Restore, When** selecting a Restore Report, (a) Subscriber Alarm/Restore Identification Numbers must be programmed for Telephones 1 and 2; and (b) Restore Codes must be entered for each zone reporting a restore. If selecting Zone 5 as a Panic Zone, do not program it for a Restore Report.

The communicator can transmit a report to the central station when a zone or the control panel is restored. To select the time of reporting, refer to the following table.

PROGRAM:	FOR RESTORE REPORT TO BE SENT:
Instant Auto-Reset	When zone is repaired, or
	When control panel is disarmed
Auto-Reset After Alarm Time-Out	When resets (alarm times out and zone repaired), or
	When control panel is disarmed
No Auto-Reset	When control panel is disarmed
	(regardless of zone condition)

**Selective Bypass** Removal of one particular zone from the system. Any or all of Zones 1-6 programmed for Selective Bypass may be removed, but each must be removed separately. This is accomplished by pressing Bypass Key [B] followed by the zone number. When the control panel is subsequently disarmed, all bypassed zones will automatically revert to non-bypassed zones. When one or more zones is bypassed, the yellow Bypass LED on the keypad will light. The zones bypassed may be confirmed by holding down the **DISPLAY BYPASS** Key [2] until it beeps; with the key depressed, the bypassed zones will be displayed on the digital readout.

**Subscriber Identification Numbers,** Must be programmed for each phone number. See Report on Alarm; Restore Report; Opening Report; Closing Report. Note: Starting at the left-most location, enter at least 3 digits for each Subscriber Identification Number, even if the first two are zeros. A fourth digit is available for those receivers capable of recognizing 4-digit subscriber codes.

Swinger Shutdown, To prevent *swingers* (intermittents) from causing repeated false alarms, Zones 1 through 6 with Auto-Reset will only reset twice (3 alarms) until rearmed. See Auto-Reset.

<u>**Teleuhone Numbers, To**</u> report to a central station, Telephones 1 *and* 2 must be programmed. The telephone number will be preceded by at least one Dial-Tone Detection entry ("E") or Pre-Dial Delay entry ("d") to ensure that the communicator detects a dial tone or waits a reasonable time to access a telephone line before dialing. (See Dial-Tone Detection; Pre-Dial Delay.) Furthermore, private telephone systems may require a separate Dial-Tone Detection or Pre-Dial Delay digit, followed by an Access Number to obtain an outside line. (See Access Number for Outside Line.)

<u>**Time-Out.</u>** Time-Out specifies the length of time that an alarm, alert, or delay will remain active. Abort-Delay time and Burglary Time-Out must be programmed, or the feature will not activate. See Time Selection.</u>

<u>**Time Selection, The following times are programmable:**</u>

Time	Units	Max. Programmable Time
Abort Delay (See Note 1)	-seconds	75 seconds
Exit Delay (See Note 1)	seconds	150 seconds
Entry Delay (See Note 1)	seconds	150 seconds
Relay Time-Out (See Note 2)	minutes	75 minutes

Notes:

- **1.** If time location left blank, feature does not activate.
- 2. If time location left blank, feature remains active until system disarmed.

<u>**Trouble.**</u> An abnormal zone condition (a break in loop). Trouble on a Burglary Zone is indicated by a sounder beep on arming (does not apply to selective- or group-bypassed zones). If Auto-Bypass has been removed from a Burglary Zone, that zone will go into alarm on arming.

A Day-Zone trouble is indicated by a flashing Ready LED and a pulsing sounder; the digital readout displays the troubled zone(s). Keypad is reset by Key [9].

**Voltage Open Loop NOL Lug).** To convert one or more zones from normally closed to normally open, install a 330-ohm VOL resistor (supplied) across each zone's input terminals, and connect a normally-open device between the zone's positive (+) terminal and Terminal 17. See example, illustrating Zone 5, below.



**<u>24-Hour Protection</u>**. A zone that provides protection at all times, whether or not system is armed. Neither Ready nor Armed LED will indicate the condition of a zone programmed for 24-Hour Protection.



14

WIRING DIAGRAM

# ALARM LOCK LIMITED WARRANTY

ALARM LOCK Systems, Inc. (ALARM LOCK) warrants its products to be free from manufacturing defects in materials and workmanship for fifteen months following the date of manufacture. ALARM LOCK will, within said period, at its option, repair or replace any product failing to operate, without charge to the original purchaser or user.

In case of defect, contact the security professional who installed and maintains your security system. ALARM LOCK shall have no obligation under this warranty, or otherwise, if the product has been repaired by others, improperly installed, improperly used, abused, altered, damaged, subjected to accident, nuisance, flood, fire or acts of God, or on which any serial numbers have been altered, defaced or removed. ALARM LOCK will not be responsible for any dismantling, reassembly or reinstallation charges.

In order to exercise the warranty, the product must be returned by the user or purchaser, shipping costs prepaid and insured to ALARM LOCK. After repair or replacement, ALARM LOCK assumes the cost of returning products under warranty.

There are no warranties, express or implied, which extend beyond the description on the face thereof. There is no express or implied warranty of merchantability or a warranty of fitness for a particular purpose. Additionally, this warranty is in lieu of all other obligations or liabilities on the part of ALARM LOCK.

Any action for breach of warranty, including but not limited to any implied warranty or merchantability, must be brought within the six months following the end of the warranty period. In no case shall ALARM LOCK be liable to anyone for any consequential or incidental damages for breach of this or any other warranty, express or implied, even if the loss or damage is caused by the seller's own negligence or fault.

This warranty contains the entire warranty. It is the sole warranty and any prior agreements or representations, whether oral or written, are either merged herein or are expressly cancelled. ALARM LOCK neither assumes, nor authorizes any other person purporting to act on its behalf to modify, to change, or to assume for it, any other warranty or liability concerning its products.

In no event shall ALARM LOCK be liable for an amount in excess of ALARM LOCK's original selling price of the product, for the loss or damage, whether direct, indirect, incidental, consequential, or otherwise arising out of any failure of the product. Seller's warranty, as hereinabove set forth, shall not be enlarged, diminished or affected by, and no obligation or liability shall arise or grow out of, Seller's rendering of technical advice or service in connection with Buyer's order of the goods furnished hereunder.

ALARM LOCK RECOMMENDS THAT THE ENTIRE SYSTEM BE COMPLETELY TESTED WEEKLY.

**Warning:** Despite frequent testing, and due to, but not limited to, any or all of the following: criminal tampering, electrical or communications disruption, it is possible for the system to fail to perform as expected. ALARM LOCK does not represent that the product/systern may not be compromised or circumvented; or that the product or system will prevent any personal injury or property loss by burglary, robbery, fire or otherwise; nor that the product or system will in all cases provide adequate warning or protection. A properly installed and maintained alarm or lock may only reduce risk of burglary, robbery, fire or otherwise but it is not insurance or a guarantee that these events will not occur. CONSEQUENTLY, SELLER SHALL HAVE NO LIABILITY FOR ANY PERSONAL INJURY, PROPERTY DAMAGE, OR OTHER LOSS BASED ON A CLAIM THE PRODUCT FAILED TO GIVE WARNING. Therefore, the installer should in turn advise the consumer, and the consumer is hereby advised, to take any and all precautions for his or her safety including but not limited to, fleeing the premises and calling police or fire department, in order to mitigate the possibilities of harm and/or damage.

ALARM LOCK is not an insurer of either the property or safety of the user's family or employees, and limits its liability for any loss or damage including incidental or consequential damages to ALARM LOCK's original selling price of the product regardless of the cause of such loss or damage. If the user wishes to protect itself to a greater extent, ALARM LOCK will, at user's sole cost and expense, obtain an insurance policy to protect the user, supplemental to user's own policy, at a premium to be determined **by** ALARM LOCK's insurer upon written notice from user by Certified Mail, Return Receipt Requested, to ALARM LOCK's home office address, and upon payment of the annual premium cost by user.

This warranty shall be construed according to the laws of the State of New York. Some states do not allow limitations on how long an implied Warranty lasts or do not allow the exclusion or limitation of incidental or consequential damages, or differentiate in their treatment of limitations of liability for ordinary or gross negligence, so the above limitations or exclusions may not apply to you. This Warranty gives you specific legal rights and you may also have other rights which vary from state to state.