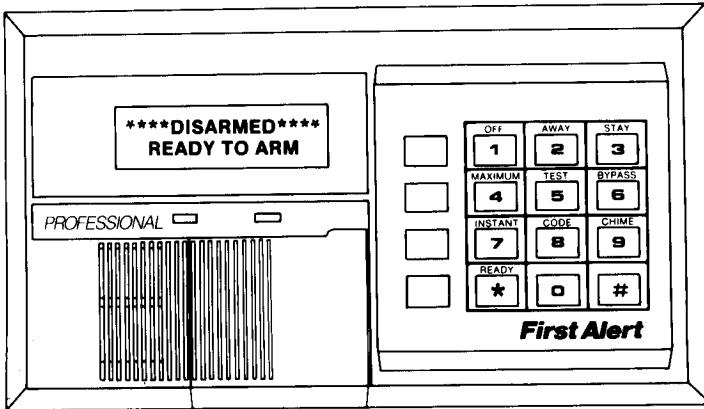


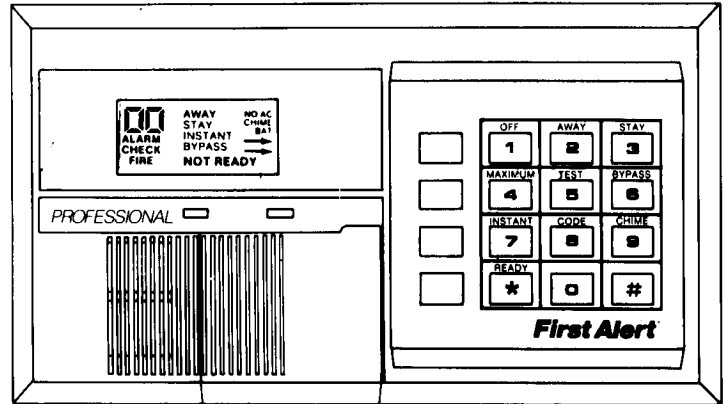
First Alert®

PROFESSIONAL SECURITY SYSTEM

ALPHA DISPLAY CONSOLE



FIXED WORD DISPLAY CONSOLE



USER'S MANUAL

N4811-1V2

FIRST ALERT ONE YEAR LIMITED WARRANTY

Pittway Corporation, and its divisions, subsidiaries and affiliates ("SELLER"), 165 Eileen Way, Syosset, New York 11791, warrants its First Alert security equipment (the "product") to be free from defects in materials and workmanship for one year from date of original purchase, under normal use and service. Seller's obligation is limited to repairing or replacing, at its option, free of charge for parts, labor, or transportation, any part proven to be defective in materials or workmanship under normal use and service. Seller shall have no obligation under this warranty or otherwise if the product is altered or improperly repaired or serviced by anyone other than the Seller. In case of defect, contact the security professional who installed and maintains your security equipment or the Seller for product repair.

This one year Limited Warranty is in lieu of all other express warranties, obligations or liabilities. THERE ARE NO EXPRESS WARRANTIES, WHICH EXTEND BEYOND THE FACE HEREOF. ANY IMPLIED WARRANTIES, OBLIGATIONS OR LIABILITIES MADE BY SELLER IN CONNECTION WITH THIS PRODUCT, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, ARE LIMITED IN DURATION TO A PERIOD OF ONE YEAR FROM THE DATE OF ORIGINAL PURCHASE. ANY ACTION FOR BREACH OF ANY WARRANTY, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY, MUST BE BROUGHT WITHIN 18 MONTHS FROM DATE OF ORIGINAL PURCHASE. IN NO CASE SHALL SELLER BE LIABLE TO ANYONE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, OR UPON ANY OTHER BASIS OF LIABILITY WHATSOEVER, EVEN IF THE LOSS OR DAMAGE IS CAUSED BY THE SELLER'S OWN NEGLIGENCE OR FAULT. Some states do not allow limitation on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

Seller does not represent that the product may not be compromised or circumvented; that the product will prevent any personal injury or property loss by burglary, robbery, fire or other events; or that the product will in all cases provide adequate warning or protection. Buyer understands that a properly installed and maintained alarm may only reduce the risk of a burglary, robbery or fire occurring without providing an alarm, but it is not insurance or a guarantee that such will not occur or that there will be no personal injury or property loss as a result. 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. HOWEVER, IF SELLER IS HELD LIABLE, WHETHER DIRECTLY OR INDIRECTLY, FOR ANY LOSS OR DAMAGE ARISING UNDER THIS LIMITED WARRANTY OR OTHERWISE, REGARDLESS OF CAUSE OR ORIGIN, SELLER'S MAXIMUM LIABILITY SHALL NOT IN ANY CASE EXCEED THE PURCHASE PRICE OF THE PRODUCT, WHICH SHALL BE THE COMPLETE AND EXCLUSIVE REMEDY AGAINST SELLER. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. No increase or alteration, written or verbal, to this warranty is authorized.

N4811-1V2 1/92

Copyright© 1989 PITTWAY CORPORATION



TABLE OF CONTENTS

INTRODUCTION.....	3
GLOSSARY	4
ABOUT THE CONSOLES	5
FUNCTIONS OF THE CONSOLE.....	6/7
FIRE AND BURGLARY PROTECTION OVERVIEW	8
DELAY ZONE ENTRY & EXIT TIMES	8
SECURITY CODES/AMBUSH CODE.....	9
CHECKING FOR OPEN ZONES.....	10
ARMING EXTERIOR PROTECTION.....	11
ARMING ALL PROTECTION	12
DISARMING THE SYSTEM AND SILENCING ALARMS.....	13
BYPASSING PROTECTION ZONES.....	14
DISPLAYING BYPASSED PROTECTION ZONES.....	14
PANIC.....	15
TROUBLE CONDITIONS	16
VIEWING MESSAGES	17
SELF-HELP FEATURE.....	17
TESTING THE SYSTEM.....	18
CHIME ANNUNCIATION.....	18
PROTECTION ZONES.....	19
FIRE PROTECTION	20
NATIONAL FIRE PROTECTION ASSN. RECOMMENDATIONS.....	21
EMERGENCY EVACUATION	22
SUMMARY OF AUDIBLE NOTIFICATIONS.....	23
FCC STATEMENT.....	25
THE LIMITATIONS OF THIS ALARM SYSTEM	26
WARRANTY	28

- 2 -

INTRODUCTION

Congratulations on your ownership of a FIRST ALERT security system. You've made a wise decision in choosing it, for it offers the best security protection available today.

Basically, this system offers you three forms of protection: burglary, fire and emergency. To realize the system's full potential, it is important that you feel comfortable in operating it.

This manual is a step-by-step guide that will acquaint you with the system's features and benefits. It defines the components and their functions, describes their operation, and acquaints you with normal and emergency procedures.

Your system consists of at least one Console (ALPHA DISPLAY or FIXED WORD DISPLAY type)* which provides full control of system operation, various sensors which provide perimeter and interior burglary protection, plus a selected number of strategically placed smoke or combustion detectors designed to provide early warning in the event of fire.

The system uses microcomputer technology to monitor all protection zones, analyzes the status of the system at all times and provides appropriate information for display on the Console(s) used in the system, and also initiates appropriate alarms when required. When programmed to do so, the system can transmit appropriate alarm or status messages over the phone lines to a central alarm monitoring station.

IMPORTANT!: When using the keypad to enter codes and commands, sequential key depressions must be made within 3 seconds of one another. If 3 seconds elapses without a key depression, the entry is aborted and must be repeated from its beginning.

* Up to five Consoles can be used in the system in any combination.

About This Manual

This manual describes the operation of both the FA1000C & FA1200C Professional Security Systems, using either the Alpha Display or Fixed Word Display Consoles. Unless stated otherwise, all commands and procedures apply equally to both systems, but the Fixed Word Display Console messages, as well as any differences in procedures, will be described in a boxed area on the page that looks like this:

FIXED WORD DISPLAY CONSOLE

Special instructions and display information pertaining to the Fixed Word Display Console will appear in boxes like this one.

- 3 -

GLOSSARY

The following glossary of terms used throughout the manual will help avoid any confusion.

ARM/DISARM: "Armed" simply means that the burglary portion of your system is turned ON and is in a state of readiness. "Disarmed" means that the burglary system is turned OFF, and must be rearmed to become operational. However, even in a "disarmed" state, "emergency" and "fire" portions of your system will still be operational.

KEYPAD: This is the area on your Console containing numbered pushbuttons similar to those on telephones or calculators. These keys control the arming or disarming of the system, and perform other functions which will be described.

ZONE: A specific area of protection.

PROTECTION POINT: Any of the specific sensors and detectors used in this security system.

BYPASS: To disarm a specific area of burglary protection while leaving other areas operational.

DELAY ZONE: An area of protection containing doors most frequently used to enter or exit (typically, a front door, back door, or door from the garage into the building). The delay zone allows sufficient time for authorized entry or exit without causing an alarm. Consult your installer for the entry and exit delay times that have been set for your system during installation and record them on page 7.

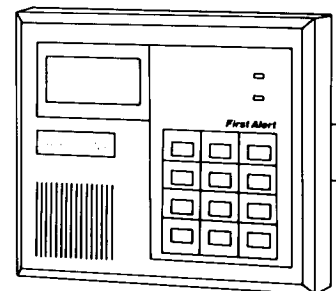
DAY/NIGHT ZONE: An area of protection whose violation causes a trouble indication during the disarmed (DAY) mode and an alarm during the armed (NIGHT) mode.

- 4 -

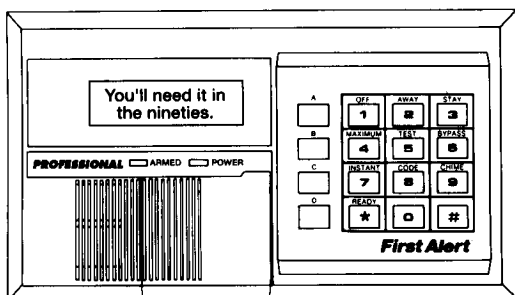
ABOUT THE CONSOLES

THE ALPHA DISPLAY CONSOLE (FA500KP) enables you to control all system functions and also enables you to monitor and diagnose system operation. It is equipped with a multifunction 16-key digital keypad, and uses a 2-line, 32-character fully programmable alphanumeric Liquid Crystal Display (LCD) which can present the nature and location of all occurrences in an English language display (as depicted in the illustration). A self-help feature is also incorporated. When activated, by simply pressing any of the function keys for 5 seconds, the message display screen on the Console will display abbreviated instructions for the key that has been pressed. This feature will prove particularly useful if this manual is not conveniently accessible when you need to perform a little-used system procedure with which you are not familiar. A built-in sounder is also incorporated in the Console, and allows the user to audibly verify the various command entries and identify system conditions.

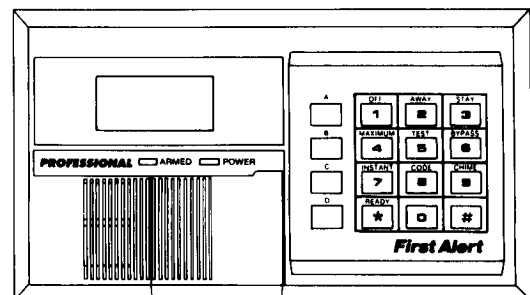
THE FIXED WORD DISPLAY CONSOLES are functionally similar to the Alpha Console, except that they are equipped with a fixed-word English language/zone numeric LCD display which displays the nature and location of all occurrences. Both fixed-word consoles contain a built-in sounder. The FA300KP Console features a backlit keypad, while the FA200KP Console has a compact design and provides a pullout zone identification card.



FA200KP



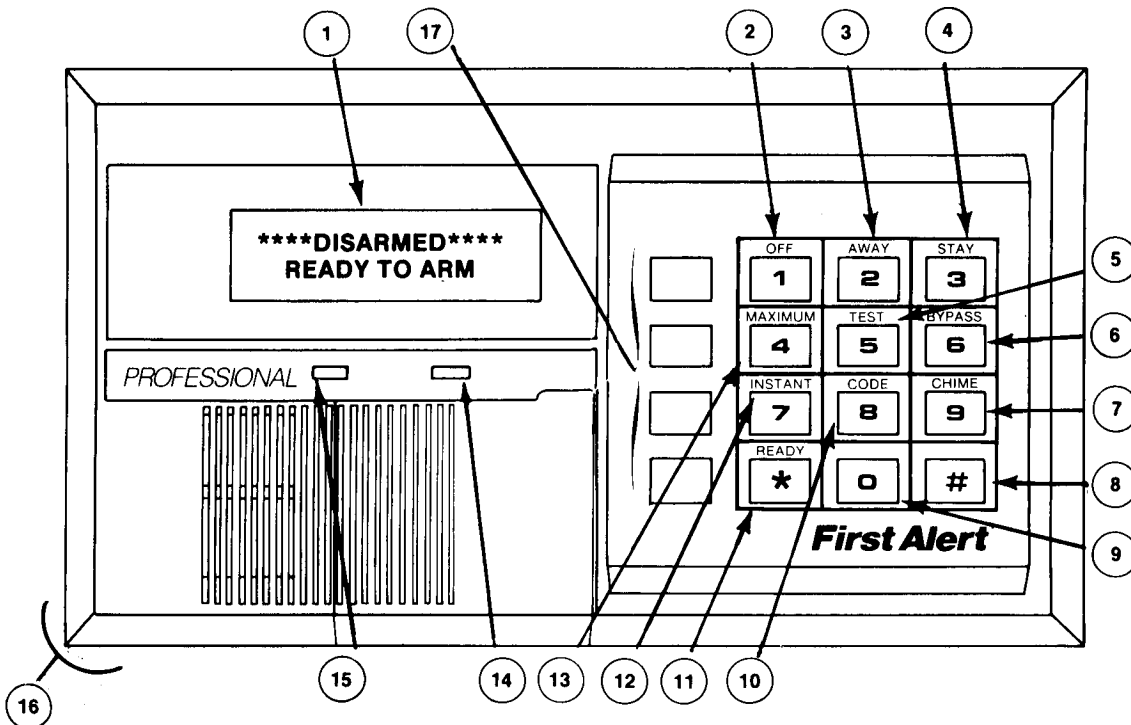
FA 500KP



FA300KP

- 5 -

FUNCTIONS OF THE CONSOLE



-6-

FUNCTIONS OF THE CONSOLE

1. **ALPHA DISPLAY WINDOW:** A 2-line, 32-character Liquid Crystal Display (LCD). Displays protection point identification and system status, messages, and user instructions.

1. **FIXED WORD DISPLAY WINDOW:** Combined two-digit protection point identification display and fixed word system status display. Refer to the TROUBLE CONDITIONS section for special numeric code descriptions. The fixed words that can appear are listed on the right.

2. **OFF KEY:** Disarms the burglary portion of the system, silences alarms and audible trouble indicators, and clears visual alarm trouble after the problem has been corrected.

3. **AWAY KEY:** Completely arms the burglary portion of the system.

4. **STAY KEY:** Arms the burglary portion of the system with the exception of the interior zone protection.

5. **TEST KEY:** Tests the system and the alarm sounder during the disarmed mode.

6. **BYPASS KEY:** Removes individual protection zones from being monitored by the system. Displays previously bypassed protection zones.

7. **CHIME KEY:** Turns on the CHIME mode so that any entry through a delay or perimeter zone during the disarmed period causes a tone to sound at the Console.

8. **# KEY:** Permits ARMING of the system without use of a security code ("Quick Arm", if programmed to do so at installation time). Press # + AWAY, STAY, etc.

9. **KEYS 0-9:** Used to enter your individual security access code(s).

10. **CODE KEY:** Allows the entry of new temporary access codes that can be given to users of the system. User numbers 03 through 22 or 04 through 21 (depending upon installation configuration) are available.

11. **READY KEY:** When depressed prior to arming the system, the console will display all open protection zones.

12. **INSTANT KEY:** Arms the burglary portion of the system with the exception of the interior zone of protection and removes entry delay period.

FIXED WORD DISPLAY CONSOLE

System Status Displays:

AWAY: Appears when all burglary zones are armed.

STAY: Appears when all burglary zones, except the interior zones, are armed.

INSTANT: Appears when entry delay is disabled.

BYPASS: Appears when one or more burglary protection zones have been bypassed.

NOT READY: Appears when burglary portion of the system is not ready for arming (due to open protection zones).

READY: Appears when the burglary portion of the system is ready to be armed.

NO AC: Appears when AC power has been cut off.

AC: When AC power is present.

CHIME: Appears when CHIME feature is activated.

BAT: Low battery condition in a Radio Transmitter (if used).

ALARM: Appears when an intrusion has been detected and the system is armed (also appears during a Fire alarm). Accompanied by the protection zone ID in alarm.

CHECK: Appears when a malfunction is discovered in the system at any time or if a fault is detected in a FIRE zone at any time or in a DAY/NIGHT burglary zone during a disarmed period. Accompanied by a display of zone number in trouble.

FIRE: Appears when a fire alarm is present. Accompanied by a display of the zone in alarm.

13. **MAXIMUM KEY:** Completely arms the burglary portion of the system and removes entry delay period.

14. **POWER INDICATOR:** (GREEN) Lit when power is on.

15. **ARMED INDICATOR:** (RED) Lit when the system has been armed (STAY, AWAY, INSTANT or MAXIMUM).

16. **INTERNAL SOUNDER:** Source of audible internal warning and confirmation sounds, as well as alarms (see "Summary of Audible Notifications").

17. **PANIC KEYS:** See PANIC section for description of A,B,C,D keys.

-7-

FIRE and BURGLARY PROTECTION OVERVIEW

The fire protection portion of your security system (if used) is always on and will sound an alarm if a fire condition is detected. The burglary protection portion of your system must be armed before it will sense burglary alarm conditions. When an alarm occurs, both the console and external sounders will sound, and a message in the Display Window will identify the zone(s) causing the alarm. In addition, if your system is connected to a central monitoring station, an alarm report will be sent. Disarming the system will stop alarm sounding. Note that the system can be programmed to delay external sounding for 16 seconds, which allows a user who has inadvertently caused a false alarm to disarm the system before sounders activate and disturb neighbors. Ask your installer if this option has been programmed for your system.

Your system provides four modes of burglary protection: STAY, AWAY, INSTANT and MAXIMUM, defined as follows:

STAY Mode: Provides exterior protection, guarding doors, windows, and other perimeter protection points, and will sound an alarm if one is opened. Late arrivals can enter through an entry delay zone without causing an alarm if the system is disarmed before the entry delay time expires.

AWAY Mode: Provides both exterior and interior protection, offering backup protection by sensing an intruder's movements through protected interior areas. Late arrivals can enter through an entry delay zone without causing an alarm if the system is disarmed before the entry delay time expires.

INSTANT Mode: Protection is similar to STAY mode, but turns off the entry delay period, offering greater security while inside and not expecting any late arrivals. An alarm will occur immediately upon opening any exterior protection point, including entry delay zones.

MAXIMUM Mode: Protection is similar to AWAY mode, but eliminates the entry delay period, thus providing the greatest protection the system offers. An alarm will occur immediately upon opening any interior or exterior protection point, including entry delay zones.

DELAY ZONE ENTRY AND EXIT TIMES

Your system is programmed by the installer with a preset time delay, during which the system must be disarmed or an alarm will occur. This feature allows you to leave and reenter through the entry delay door without setting off the alarm. The entry delay feature can also be turned off for greater security when sleeping or while away for extended periods of time (INSTANT or MAXIMUM modes). Record your delay times below:

Exit Delay #1: ____sec* Entry Delay #1: ____sec**

Exit Delay #2: ____sec* Entry Delay #2: ____sec**

*May be from 15 to 225 seconds, but no more than 60 seconds for a UL Listed Household burglary application.

**May be from 15 to 225 seconds, but no more than 45 seconds for a UL Listed Household burglary application.

- 8 -

SECURITY CODES (MASTER AND TEMPORARY)

At the time of installation, your installer programs a personal four-digit code, known only to you and yours (this code can be changed by the Master User in FA1200C systems). This code must be entered when arming and disarming the system. As an additional safety feature, up to twenty (68 for FA1200C) temporary codes can be assigned for use by those not having a need to know the master code. Temporary codes are assigned two-digit "User numbers" from 03 to 22 (03 to 70 for FA1200C). Before assigning a temporary code though, be sure it does not conflict with the AMBUSH code (see AMBUSH CODE section). *Note that the master code remains in effect even when a temporary code is assigned.*

HIGH SECURITY FEATURE: The FA1200C system can be programmed to require a 6-digit code for arming and disarming. The 6-digit code consists of the 2-digit user number plus a 4-digit code. Ask your installer if this feature has been programmed.

USER 15 SPECIAL FEATURES: Both systems can be programmed to automatically delete user 15's code after a pre-determined number of uses, which is useful if a particular user will need to access the protected area only a limited number of times. The FA1200C system also allows this pre-programmed number to be changed by the Master User by doing the following: Enter Master Code, press **CODE** key, enter [1] [5], enter user 15's code, then enter a 2-digit usage count (01-15). Entering the count as 00, or no entry for the count, reverts the usage count back to the pre-programmed value.

The system can also be programmed so that the only function user 15 can perform is to bypass pre-determined zones while the system is armed. Ask your installer if either of these features have been programmed for your system.

USER 22 SPECIAL FEATURE (Babysitter Code option): The system can be programmed so that user 22 can disarm the system *only* if the system was previously armed by user 22. Ask your installer if this option is programmed for your system.

NOTE: *Users to whom temporary codes have been assigned should not be shown how to bypass protection points unless they have a need to know. It is also recommended that obvious codes such as 1111 or 1234 not be assigned.*

To Assign or delete Temporary Codes:

1. Enter Master code.
2. Press **CODE** [8] key.
3. Enter User Number to be assigned or deleted.
4. To assign a code, enter temporary code for that User Number. To delete a code, enter Master Code for that User Number.
5. The Console will beep once when procedure has been completed successfully.

To Change The Master Code (FA1200C system)

1. Enter current Master Code.
2. Press **CODE** [8] key.
3. Press [0] then [2].
4. Enter new 4-digit Master Code desired. The console will beep twice and will display "RE-ENTER NEW CODE DIGITS" (Fixed Word display is "ED"). Reenter the new Master Code. The console will beep 3 times if successful. If not, the console will display "VERIFY ERROR CODE UNCHANGED" (Fixed Word display is "FC"). If this happens, try the procedure again.

Note that if "Quick Arming" was programmed by the installer, the # key can be pressed in place of the security code when arming the system. The security code is always required when disarming the system.

CHECKING FOR OPEN ZONES

BEFORE ARMING YOUR ALARM SYSTEM, ALL PROTECTED DOORS, WINDOWS AND OTHER PROTECTION ZONES MUST BE CLOSED.

ALPHA CONSOLE

1. If the message **"DISARMED - Press * to show faults"** is displayed prior to arming, check for open zones by depressing and releasing the **READY [*]** key.
2. All open protection points will be displayed. These points must be either closed or bypassed before the system can be armed.
3. The message **"*****DISARMED***** READY TO ARM"** will be displayed* when all protection zones have been either closed or bypassed.

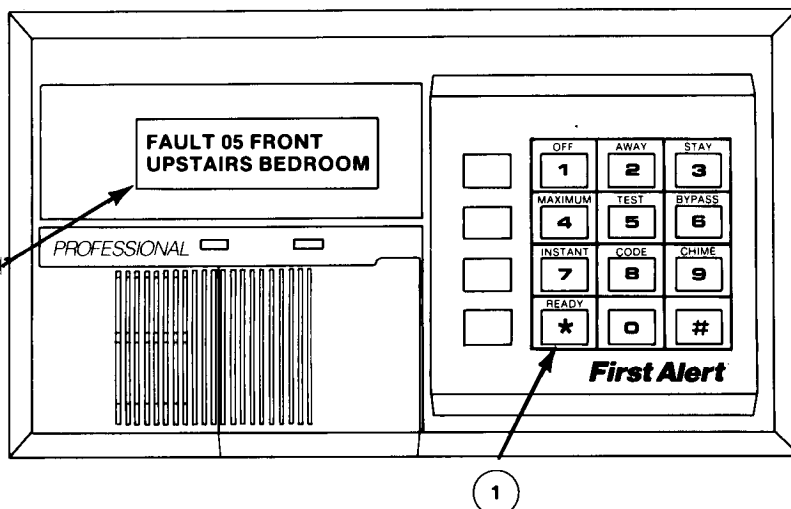
** NOTE: All or part of this message may be replaced by a customized message programmed by the installer. Bear this in mind whenever the instructions for the Alpha Console indicate that the "DISARMED" message will be displayed*

DISPLAYING ALL ZONE DESCRIPTORS

The Alpha Console can also display all the zone descriptors that are programmed in your system by pressing the **READY [*]** key and holding down for at least 5 seconds. This is useful when you need to know the zone number of a particular zone, as when bypassing zones.

FIXED WORD DISPLAY CONSOLE

If open protection points exist, the words **"NOT READY"** will appear on the display. When all protection points are either closed or bypassed, the word **"READY"** will appear.



- 10 -

ARMING EXTERIOR PROTECTION (STAY and INSTANT MODES) DOORS, WINDOWS, WHILE INSIDE

ARMING IN STAY MODE

1. Enter the security code when the message **"*****DISARMED***** READY TO ARM"** is displayed.
2. Press the **STAY [3]** key.
3. The message **"ARMED ***STAY*** ZONE BYPASSED"** will be displayed, accompanied by three beeps from the Console. Exit delay begins [a slow beeping will (optionally) sound throughout the exit delay period]. Perimeter protection is in effect immediately and the entry delay feature is on.

RESULT

Late arrivals can enter through the entry delay zone door and disarm the system within the entry delay period without causing an alarm. See FIRE and BURGLARY PROTECTION OVERVIEW page for actual delay times set for your system. Alarms will occur instantly when any exterior protection point is violated, except the entry delay zone door, which will activate an alarm if the system is not disarmed within the entry delay period. Interior protection points are disarmed to permit freedom of movement throughout the interior.

ARMING IN INSTANT MODE

1. Enter the security code when the message **"*****DISARMED***** READY TO ARM"** is displayed.
2. Press the **INSTANT [7]** key.
3. The message **"ARMED *INSTANT* ZONE BYPASSED"** will be displayed, accompanied by three beeps from the Console. Exit delay begins [a slow beeping will (optionally) sound throughout the exit delay period]. Perimeter protection is in effect immediately and the entry delay feature is off.

RESULT

Alarms will occur instantly when any exterior protection point is violated, including the entry delay zone door. Interior protection points are disarmed to permit freedom of movement throughout the interior.

FIXED WORD DISPLAY CONSOLE

The word **"READY"** must appear before arming. When armed, the **ARMED** indicator will light and **"STAY"** will be displayed.

FIXED WORD DISPLAY CONSOLE

The word **"READY"** must appear before arming. When armed, the **ARMED** indicator will light and **"STAY"** and **"INSTANT"** will be displayed.

- 11 -

ARMING ALL PROTECTION (AWAY and MAXIMUM MODES) DOORS, WINDOWS, AND INTERIOR PROTECTION POINTS

ARMING IN AWAY MODE

1. Enter the security code when the message ******DISARMED**** READY TO ARM** is displayed.
2. Press the **AWAY** [2] key.
3. The message **"ARMED ***AWAY*** You may exit now"** will be displayed, accompanied by two beeps from the Console. Exit delay begins [a slow beeping will (optionally) sound throughout the exit delay period]. Complete system protection is in effect immediately and the entry delay feature is on.

RESULT

You may exit during the exit delay period and reenter through the entry delay zone door (and disarm the system within the entry delay period) without causing an alarm. See **BURGLARY PROTECTION** page for actual delay times set for your system. Alarms will occur instantly when any protection point, interior or exterior, is violated, except the entry delay zone door, which will activate an alarm if the system is not disarmed within the entry delay period.

FIXED WORD DISPLAY CONSOLE

The word **"READY"** must appear before arming. When armed, the **ARMED** indicator will light and **"AWAY"** will be displayed.

ARMING IN MAXIMUM MODE

1. Enter the security code when the message ******DISARMED**** READY TO ARM** is displayed.
2. Press the **MAXIMUM** [4] key.
3. The message **"ARMED *MAXIMUM* You may exit now"** will be displayed, accompanied by two beeps from the Console. Exit delay begins [a slow beeping will (optionally) sound throughout the exit delay period]. Complete system protection is in effect immediately and the entry delay feature is off.

RESULT

You may exit during the exit delay period, BUT alarms will trigger instantly upon reentering, or when any protection point, interior or exterior, is violated. This mode is suggested when the premises will be vacant for extended periods of time such as vacations, etc., or when retiring for the night and no one will be moving through protected interior areas.

Note for Commercial applications (FA1000UL):

Following receipt of the arming confirmation from the alarm monitoring agency, a 1/2 second bell ring will sound. If the bell ring is not heard, reenter the premise and notify the alarm monitoring agency.

FIXED WORD DISPLAY CONSOLE

The word **"READY"** must appear before arming. When armed, the **ARMED** indicator will light and **"AWAY"** and **"INSTANT"** will be displayed.

- 12 -

DISARMING THE SYSTEM AND SILENCING ALARMS (FOR AWAY, STAY, INSTANT, AND MAXIMUM ARMING)

DISARMING THE SYSTEM

1. Enter security code and press **OFF** [1].
2. If an alarm has occurred, note the zone descriptor displayed and repeat procedure to restore the ******DISARMED****READY TO ARM** display. If the message will not display, go to the displayed protection zone and remedy the fault (close windows, etc.). If the fault cannot be remedied, notify the Service Department.

RESULT

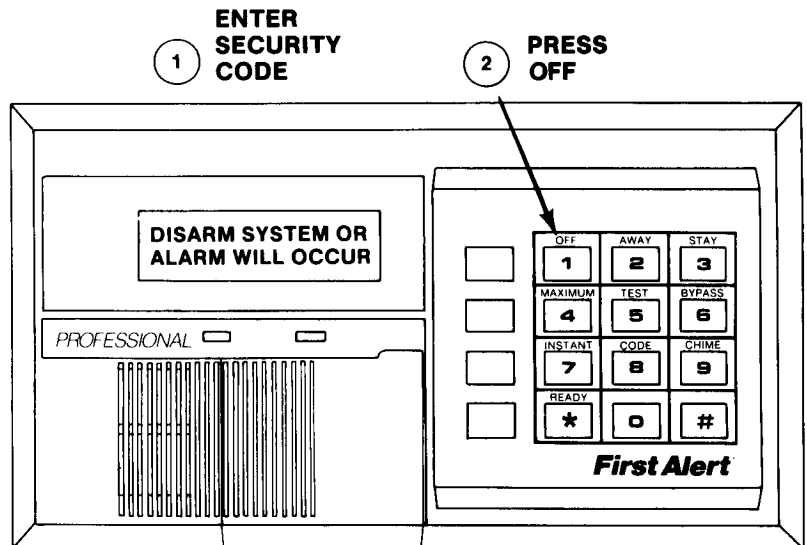
Any alarm sounders will be silenced; **ALARM** and zone descriptor (if displayed) will go off only when the open sensor is closed.

A fire alarm is indicated by a display of both **FIRE** and the zone descriptor on the Console. These will go out only when the fire zone is again intact.

See **"SUMMARY OF AUDIBLE NOTIFICATION"** section for information which will enable you to distinguish between **FIRE** and **BURGLARY** alarm sounds.

FIXED WORD DISPLAY CONSOLE

If an alarm has occurred, the word **ALARM** and the zone identification number will be displayed. Fire alarms are indicated by the words **FIRE** and **ALARM** with the zone identification number displayed. When all zones are closed and intact, the word **READY** will appear.



- 13 -

BYPASSING PROTECTION ZONES

(USED FOR ARMING SYSTEM WITH ONE OR MORE ZONES SELECTIVELY UNPROTECTED)

BYPASSING PROTECTION (DISARMED)

1. System must be disarmed first. Enter security code.
2. Press **BYPASS** [6] and enter Zone Number(s) of zones to be bypassed (e.g., 01, 02, 03, etc.). **Important!** All single-digit zone numbers must be preceded by a zero (example, enter 01 and not 1.)

QUICK BYPASS (applies to FA1200C only): To automatically bypass all open (faulted) zones, enter security code + **BYPASS** + [#].

3. When finished entering all zone numbers to be bypassed, wait for bypassed protection zones to be sequentially displayed (each accompanied by one beep) before arming.
4. The message "**DISARMED BYPASS READY TO ARM**" will be displayed indicating the presence of one or more bypassed zones.
5. Arm system.

RESULT

Bypassed protection zones will not cause an alarm when violated during Armed mode.

LIMITATIONS

- The system must first be placed in the disarmed state to perform the bypass procedure.
- Fire or emergency zones cannot be bypassed.
- Arming the system before bypassed zones are displayed nullifies the bypass procedure.

NOTE: All bypasses are removed when an OFF sequence (security code plus OFF) is performed.

DISPLAYING BYPASSED PROTECTION ZONE

(USED FOR DETERMINING WHAT PROTECTION ZONES HAVE BEEN PREVIOUSLY BYPASSED)

1. Enter security code and press **BYPASS**.
2. Wait for all bypassed protection zones to be sequentially displayed (each accompanied by one beep).
3. Bypassed zones can be displayed regardless of whether the system is armed or disarmed.

FIXED WORD DISPLAY CONSOLE

The words "**BYPASS**" and "**READY**" will appear when protection points have been bypassed and the system is ready to be armed.

BYPASSING PROTECTION (WHILE ARMED)

If programmed by your installer, certain zones can be bypassed while the system is armed, allowing access to portions of the protected area without having to disarm the entire system. To bypass these zones, enter the security code, press bypass, and enter the zone number(s) of the zones to be bypassed. To restore protection to these zones, repeat the procedure. If this feature has been programmed, your installer will identify the zones that can be bypassed while the system is armed.

ZONES THAT CAN BE BYPASSED WHILE SYSTEM IS ARMED:

ZONES: _____

ZONES: _____

- 14 -

PANIC KEYS and AMBUSH CODE

FOR MANUALLY ACTIVATING SILENT AND/OR AUDIBLE ALARMS

PROCEDURE

The leftmost column of Console keys are labeled A-D and represent four installer programmable emergency functions. Your installer should have indicated below any functions that have been programmed for these Emergency Keys. Typical functions that might be programmed are Silent Police, Audible Police, Personal Emergency, and Fire.

To use a Panic key, simply press the appropriate function key and hold down at least two seconds.

RESULT

If programmed for silent emergency by your installer, and the system is connected to a central alarm monitoring station, the police emergency key press will send a silent alarm signal to the central station, but there will be no audible alarms or visual displays. If programmed for audible emergency by your installer, a loud, steady alarm will sound at your console and at any external sounders that may be connected [**ALARM** (or **FIRE**) plus a description would also be displayed].

A personal emergency alarm key press will notify the central station (if connected) and will sound at Consoles, but not at external bells or sirens.

A fire alarm key press will send a fire alarm message to the central station and will uniquely sound external bells and sirens.

KEY A: _____

KEY B: _____

KEY C: _____

KEY D: _____

FIXED WORD DISPLAY CONSOLE

The words **ALARM** or **ALARM** and **FIRE** plus codes 95, 96 or 99 will appear for audible police, personal and fire emergency key presses.

AMBUSH (DURESS) CODE

WHEN FORCED TO DISARM/ARM UNDER THREAT

PROCEDURE

Enter the first three digits of the security code. Increase the final digit by one and then press **OFF** (or **AWAY**, etc. if arming the system). The system will disarm (or arm), but can silently notify the central station of your situation, if that service has been provided.

For example, if the Normal security code is "1 2 3 4", the Ambush security code is "1 2 3 5".

IMPORTANT

- This code is useful only when connected to a central station.
- Ambush code capability is not present for codes ending in 9.
- Users of temporary codes must be instructed to enter their codes carefully to avoid the possibility of accidentally entering the ambush code.

- 15 -

TROUBLE CONDITIONS

The word **CHECK** on the Console's display, accompanied by a rapid "beeping" at the Console, indicates that there is a trouble condition in the system. The audible warning sound may be silenced by pressing any key.

TYPICAL CHECK DISPLAYS

1. A display of **"CHECK CALL SERVICE"** indicates that a problem exists with the system that eliminates some of the protection. **CALL FOR SERVICE IMMEDIATELY.**
2. A display of **"CHECK"** accompanied by one or more zone descriptors indicates that a problem exists with those zone(s). First, determine if the zone(s) displayed are intact and make them so if they are not. If the problem has been corrected, the display of the zone descriptor(s) and **CHECK** should disappear. If not, key an OFF sequence (Code plus OFF) to clear the display. If the display persists, **CALL FOR SERVICE IMMEDIATELY.**

OTHER TROUBLE CONDITIONS

1. A display of **"COMM. FAILURE"** at the Console indicates that a failure has occurred in the telephone communication portion of your system. **CALL FOR SERVICE IMMEDIATELY.** A display of **"MODEM COMM"** indicates the control is on-line with the remote computer and is not operational. If condition persists, **CALL FOR SERVICE IMMEDIATELY.**
2. A display of **"LO BAT"** and a zone descriptor, accompanied by a once per minute beep at the Console indicates that a low battery condition exists in the wireless transmitter* displayed. **CALL FOR SERVICE IMMEDIATELY.** **"LOW MAIN SYSTEM BATTERY"** display indicates a low system battery condition exists. **CALL FOR SERVICE IMMEDIATELY.**

* Not all systems employ wireless transmitters.

** Note that zone numbers 88-91 represent problems with wireless receivers, which are not user serviceable. **CALL FOR SERVICE IMMEDIATELY.**

POWER FAILURE: If the **POWER** indicator is off, operating power for the system has stopped and is inoperative. **CALL FOR SERVICE IMMEDIATELY.** If the **POWER** indicator is on, but the message **"AC LOSS"** is displayed, the Console is operating on battery power only. Check the following:

- If only some lights are out on the premises, check circuit breakers and fuses and reset or replace as necessary.
- Check to see that your system's primary power source plug has not been accidentally pulled out.
- Call your service representative immediately if AC power cannot be restored.

Fixed Word Display Console Trouble Displays

1. A display of the word **"CHECK"** and **"97"** indicates that a problem exists with the system that eliminates some of the protection. **CALL FOR SERVICE IMMEDIATELY.**
2. **"CHECK"** accompanied by one or more zone numbers** indicates that a problem exists with the zone(s) being displayed.
3. **"FC"** indicates a failure has occurred in the telephone communication portion of your system. The on-line with remote computer display is **"CC"**.
4. **"BAT"** accompanied by one or more zone numbers indicates that a low battery condition exists in a wireless transmitter*. **"BAT"** with no zone number indicates a low system battery condition. **CALL FOR SERVICE IMMEDIATELY.**
5. The AC power failure display is **"NO AC"**.

-16-

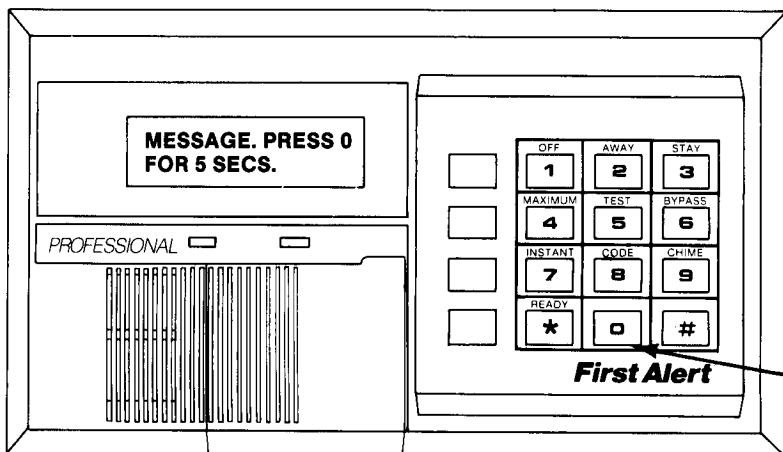
VIEWING MESSAGES

(Alpha display consoles only)

Users of the system may periodically receive messages on their display screens from their monitoring agency. When a message is waiting to be viewed, the following display will appear:

**Message. Press 0
for 5 secs**

When the "0" key is pressed and held for 5 seconds, the message transmitted to you will appear on your display screen. The message could take up to four screens to display all the information available.



SELF-HELP FEATURE

Abbreviated user's instructions are built into the system that can be easily viewed on the console's message display screen.

Eleven separate functions are covered by the built-in instructions. Each description is viewed by pressing the function key of interest until the description starts to appear (5 seconds) and then releasing it. The function keys and their functions are:

OFF: For turning off burglary protection or silencing audible troubles and alarms.

AWAY: For turning on all burglary protection when leaving.

STAY: For turning on perimeter burglary protection when staying.

MAXIMUM: For turning on all burglary protection with no entry delay when staying.

INSTANT: For turning on perimeter burglary protection with no entry delay when staying.

TEST: For testing the system.

BYPASS: For bypassing zones of protection.

CODE: For adding and deleting user security codes.

CHIME: For turning on and off the chime annunciation mode.

READY: For determining specific faulted zones.

#: For use when "Quick Arming" without a security code.

-17-

TESTING THE SYSTEM TO BE CONDUCTED WEEKLY

1. Disarm the system.
2. Enter security code and press the **TEST** [5] key.
3. The external sounder should sound for 3 seconds and then turn off. If the sounder does not sound, it may be due to dialer communication activity. Wait a few minutes and try again. If the sounder still does not sound, **CALL FOR SERVICE IMMEDIATELY**.
4. Immediately after the sounder turns off, the system enters Test mode, which allows each protection point to be checked for proper operation. The Console will sound a single beep at 15 second intervals (if no protection points are violated), to indicate that it is in Test mode.
5. Open and close each protected door and window in turn. Each action should produce three beeps from the Console, and the identification of each protection point should appear on the display.
6. Walk in front of any interior motion detectors (if used). Listen for three beeps as the detector senses movement. The identification of the detector should appear when it is activated.
7. Follow the manufacturer's instructions to test all smoke detectors to ensure that all are operational and functioning properly.
8. When all protection points have been checked, ascertain that no identification is displayed. If a problem is experienced with any protection point (no confirming beeps, no display), call for service immediately.
9. Turn off Test mode by entering the security code and pressing the **OFF** key.

CHIME ANNUNCIATION

THIS FEATURE IS FUNCTIONAL ONLY WHEN THE BURGLARY SYSTEM IS DISARMED.

Your system can be set to alert you to the opening of a door or window while it is disarmed by entering the security code and pressing the **CHIME** key. When activated, the message **"DISARMED CHIME READY TO ARM"** will appear as long as all protection points are closed. Whenever a door or window is opened, three tones will sound at the Console, and **"DISARMED CHIME Press * Key"** will be displayed. Pressing the **READY** [*] key will display the open protection points.

To turn Chime Mode off, simply enter the security code and press the **CHIME** key again. *Note that Chime mode can be activated only when the system is Disarmed.*

FIXED WORD DISPLAY CONSOLE

When chime mode is activated, the word **"CHIME"** appears. Whenever a door or window is opened, the words **"NOT READY"** will appear.

- 18 -

PROTECTION ZONES

One or more sensing devices will have been assigned by the installer of your alarm system to each of the various protection zones in your system (although not every zone may have been used). For example, the sensing device on your Entry/Exit door may have been assigned to zone 01, sensing devices on windows in the master bedroom to zone 02, and so on.

ID numbers 01-87 represent sensor/detector protection points. ID numbers 88-91 represent wireless receiver supervisory problems (call for service immediately). ID number 95, 96 or 99 represent "Panic" alarm codes assigned by the installer. ID number 97 represents a system supervisory problem (call for service immediately).

For your convenience, a chart has been provided which may be used to record the specific protection points that have been assigned to each zone in your system. Your installer will assist you in recording this information.

PANIC CODES

95 _____
96 _____
99 _____

ID	DESCRIPTION	ID	DESCRIPTION	ID	DESCRIPTION
1		30		59	
2		31		60	
3		32		61	
4		33		62	
5		34		63	
6		35		64	
7		36		65	
8		37		66	
9		38		67	
10		39		68	
11		40		69	
12		41		70	
13		42		71	
14		43		72	
15		44		73	
16		45		74	
17		46		75	
18		47		76	
19		48		77	
20		49		78	
21		50		79	
22		51		80	
23		52		81	
24		53		82	
25		54		83	
26		55		84	
27		56		85	
28		57		86	
29		58		87	

- 19 -

FIRE ALARM SYSTEM (IF INSTALLED)

Your fire alarm system is on 24 hours a day, for continual protection. In the event of an emergency, the strategically located smoke and heat detectors will automatically send signals to your Control/Communicator, triggering a loud, interrupted sound from the Console. An interrupted sound will also be produced by optional exterior sounders. A FIRE message will appear at your Console and remain on until you silence the alarm.

Should you become aware of a fire emergency before your detectors sense the problem, go to your nearest Console and manually initiate an alarm by pressing the panic key assigned as the FIRE emergency key (if programmed by the installer) and hold down for at least 2 seconds.

IN CASE OF FIRE ALARM:

1. Evacuate all occupants from the premises.
2. If flames and/or smoke are present, leave the premises and notify your local Fire Department immediately.
3. If no flames or smoke are apparent, investigate the cause of the alarm. The zone descriptor of the zone(s) in an alarm condition will be displayed at the Console.

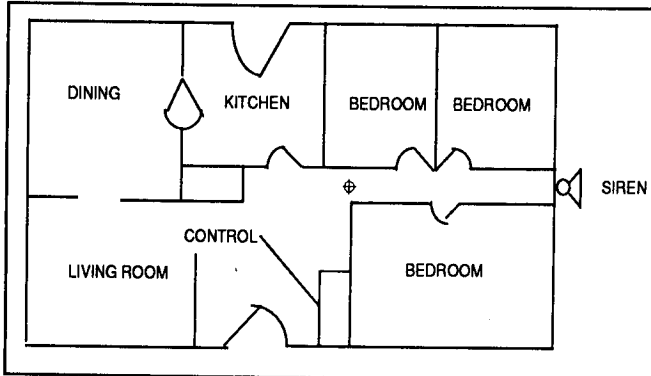
SILENCING A FIRE ALARM:

1. Silence the alarm by entering your code and pressing the **OFF** key. To clear the display, enter your code and press the **OFF** key again.
2. If the Console does not indicate a **READY** condition after the second **OFF** sequence, press the **READY** [*] key to display the zone(s) that are faulted. Be sure to check that smoke detectors are not responding to smoke or heat producing objects in their vicinity. Should this be the case, eliminate the source of heat or smoke.
3. If this does not remedy the problem, there may still be smoke in the detector. Clear it by fanning the detector for about 30 seconds.
4. When the problem has been corrected, clear the display by entering your code and pressing the **OFF** key.

- 20 -

NATIONAL FIRE PROTECTION ASSN. RECOMMENDATIONS ON SMOKE DETECTORS

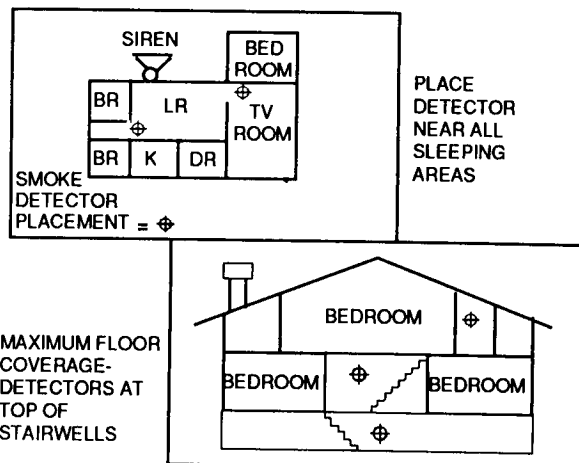
With regard to the number and placement of smoke/heat detectors, we subscribe to the recommendations contained in the National Fire Protection Association's Standard #74, noted below: Early warning fire detection is best achieved by the installation of fire equipment in all rooms and areas of the household as follows: A smoke detector installed outside of each sleeping area in the immediate vicinity of bedrooms and on each additional story of the family living unit including basements and excluding crawl spaces and unfinished attics.



BEST RESIDENTIAL DETECTOR PLACEMENT
BETWEEN BEDROOMS AND REST OF HOUSE

In addition, it is recommended that the householder consider the use of heat or smoke detectors in the living room, dining room, bedroom(s), kitchen, hallway(s), attic, furnace room, utility and storage rooms, basements and attached garages.

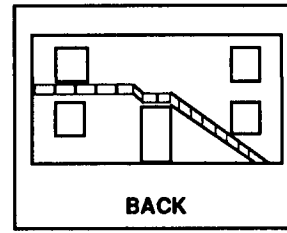
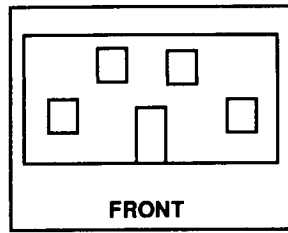
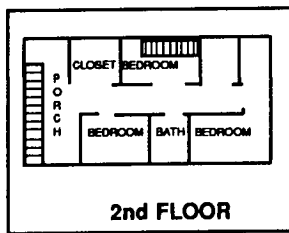
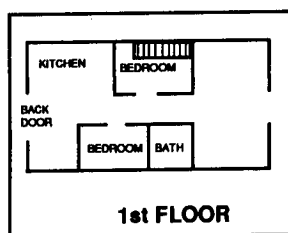
NOTE: " Approval of the panel's burglar alarm functions does not fall within the (California) State Fire Marshal's area of jurisdiction."



EMERGENCY EVACUATION

Every family should take steps to establish and regularly practice a plan of escape in the event of a fire. The following steps are recommended by the National Fire Protection Association and can be used as a guide in developing your own emergency plan.

1. Plan on your detector or your interior and/or exterior sounders waking the family.
2. Determine two means of escape from each room in your home, particularly the bedrooms, since most home fires occur at night when everyone is asleep. One path of escape should lead to the door that permits normal exit from the house. The other may be a window which opens easily to permit escape should your primary path be unpassable. It may be necessary to station an escape ladder at such windows if there is an unusually long drop to the ground below.
3. Sketch a floor plan of your home. Show windows, doors, stairs and rooftops that can be used to escape in the event of fire.



Indicate escape routes for each room. Remember to keep these routes free from obstruction and post copies of the escape route sketch in every room.

4. Make sure that all bedroom doors are shut while the family is asleep. This will prevent deadly smoke from entering while you escape.
5. Try the door. If it is hot, check your alternate escape route. If the door is cool, use your shoulder to open it cautiously. Be prepared to slam the door if smoke or heat rushes in.
6. Crawl in the smoke and hold your breath.
7. Escape quickly; don't panic.
8. Establish a common meeting place outdoors, away from your house where everyone can meet and take steps to contact the authorities and account for those missing. Choose someone to assure that nobody returns to the house-many die going back.

-22-

SUMMARY OF AUDIBLE NOTIFICATION (ALPHA DISPLAY CONSOLE)

AT CONSOLE	EXTERNAL	CAUSE	DISPLAY
LOUD, INTERRUPTED	SAME SOUND*	FIRE ALARM	FIRE is displayed; descriptor of zone in alarm is displayed.
LOUD, CONTINUOUS	SAME SOUND*	BURGLARY/AUDIBLE EMERGENCY ALARM	ALARM is displayed; descriptor of zone in alarm is also displayed.
ONE SHORT BEEP ONE SHORT BEEP (not repeated)	1/2 sec BEEP NONE	a. OPTIONAL ARMING CONFIRMATION b. SYSTEM DISARM c. SYSTEM ARMING ATTEMPT WITH AN OPEN ZONE. d. BYPASS VERIFY	a. POWER, READY and status indicators lit. b. DISARMED/READY TO ARM is displayed. c. The number and descriptor of open protection zone is displayed. d. Numbers and descriptors of the bypassed protection zones are displayed (One beep is heard for each zone displayed). Subsequently, the following is displayed: DISARMED BYPASS Ready to Arm
ONE SHORT BEEP (once every 15 seconds) ONE BEEP every 60 sec.	NONE NONE	e. SYSTEM IS IN TEST MODE f. LOW BATTERY AT A TRANSMITTER	e. Opened Zone identifications will appear. f. LO BAT displayed with transmitter ID number.
TWO SHORT BEEPS	NONE	ARM AWAY OR MAXIMUM	ARMED AWAY or ARMED MAXIMUM is displayed. Red ARMED indicator is lit.
THREE SHORT BEEPS	NONE	a. ARM STAY OR INSTANT b. ZONE OPENED WHILE SYSTEM IS IN CHIME MODE. c. ENTRY WARNING**	a. Red ARMED indicator is lit. b. CHIME displayed, descriptor of open protection zone will be displayed if the * key is pressed. c. DISARM SYSTEM OR ALARM WILL OCCUR is displayed.
RAPID BEEPING	NONE	a. TROUBLE b. AC POWER LOSS ALERT*** c. MEMORY OF ALARM	a. CHECK displayed. Descriptor of troubled protection zone is displayed. b. AC LOSS displayed (may alternate with other displays that may be present). c. FIRE or ALARM is displayed; descriptor of zone in alarm is displayed.
SLOW BEEPING	NONE	a. ENTRY DELAY WARNING** b. EXIT DELAY WARNING	a. DISARM SYSTEM OR ALARM WILL OCCUR is displayed. Exceeding the delay time without disarming causes alarm. b. ARMED AWAY or ARMED MAXIMUM is displayed along with "You May Exit Now"

SUMMARY OF AUDIBLE NOTIFICATION (FIXED WORD DISPLAY CONSOLE)

AT CONSOLE	EXTERNAL	CAUSE	DISPLAY
LOUD, INTERRUPTED ALARM SOUND*	SAME	FIRE ALARM	FIRE and ALARM is displayed; protection zone in alarm is displayed.
LOUD, CONTINUOUS ALARM SOUND*	SAME	BURGLARY/AUDIBLE	ALARM is displayed; protection zone in alarm is also displayed.
ONE SHORT BEEP ONE SHORT BEEP (not repeated)	1/2 sec BEEP NONE	a. OPTIONAL ARMING CONFIRMATION b. SYSTEM DISARM c. SYSTEM ARMING ATTEMPT WITH AN OPEN ZONE d. BYPASS VERIFY	a. POWER, READY and status indicators lit. b. Only READY is displayed. c. NOT READY is displayed, open protection zone number is displayed. d. The bypassed protection zone numbers are displayed. (One beep for each number displayed.) BYPASS displayed.
ONE SHORT BEEP (once every 15 seconds) ONE BEEP every 60 sec.	NONE	e. SYSTEM IS IN TEST MODE f. LOW BATTERY in WIRELESS TX	e. Opened Zone identification numbers will appear. f. BAT displayed with transmitter number shown.
TWO SHORT BEEPS	NONE	ARM AWAY OR MAXIMUM	AWAY and possibly INSTANT are displayed.
THREE SHORT BEEPS	NONE	a. ARM STAY OR INSTANT b. ZONE OPENED WHILE SYSTEM IN CHIME MODE c. ENTRY WARNING**	a. STAY and possibly INSTANT are displayed. b. CHIME displayed, open protection zone number is displayed c. No display
RAPID BEEPING	NONE	a. TROUBLE b. AC POWER LOSS ALERT*** c. MEMORY OF ALARM	a. CHECK displayed. Troubled zone is displayed. b. NO AC displayed. c. FIRE and/or ALARM is displayed; protection zone in alarm is displayed.
SLOW BEEPING	NONE	a. ENTRY DELAY WARNING** b. EXIT DELAY WARNING	a. None during delay; exceeding the delay time without disarming causes alarm. b. Normal armed "Away" or "Instant" display.

*If bell is used as external sounder, fire alarm is pulsed ring; burglary/audible emergency is steady ring.

**Entry warning may consist of three short beeps or slow continuous beeping, as programmed by your installer.

***Loss of system battery power is not indicated or annunciated by the console (warnings are for loss of AC power only).

- 24 -

"FEDERAL COMMUNICATIONS COMMISSION (FCC) STATEMENT"

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

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in 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:

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

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions.

The user or installer may find the following booklet prepared by the Federal Communications Commission helpful:

"Interference Handbook"

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

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

IN THE EVENT OF TELEPHONE OPERATIONAL PROBLEMS

In the event of telephone operational problems, disconnect the control/communicator by removing the plug from the RJ31X wall jack. We recommend that your certified installer demonstrate disconnecting the phones on installation of the system. Do not disconnect the phone connection inside the control/communicator. Doing so will result in the loss of your phone lines. If the regular phone works correctly after the control/communicator has been disconnected from the phone lines, the control/communicator has a problem and

should be returned for repair. If upon disconnection of the control/communicator, there is still a problem on the line, notify the telephone company that they have a problem and request prompt repair service. The user may not under any circumstances (in or out of warranty) attempt any service or repairs to the system. It must be returned to the factory or an authorized service agency for all repairs.

- 25 -

WARNING

THE LIMITATIONS OF THIS ALARM SYSTEM

While this system is an advanced design security system, it does not offer guaranteed protection against burglary or fire or other emergency. Any alarm system, whether commercial or residential, is subject to compromise or failure to warn for a variety of reasons. For example:

- Intruders may gain access through unprotected openings or have the technical sophistication to bypass an alarm sensor or disconnect an alarm warning device.
- Intrusion detectors (e.g. passive infrared detectors), smoke detectors, and many other sensing devices will not work without power. Battery operated devices will not work without batteries, with dead batteries, or if the batteries are not put in properly. Devices powered solely by AC will not work if their AC power supply is cut off for any reason, however briefly.
- Signals sent by wireless transmitters may be blocked or reflected by metal before they reach the alarm receiver. Even if the signal path has been recently checked during a weekly test, blockage can occur if a metal object is moved into the path.
- A user may not be able to reach a panic or emergency button quickly enough.
- While smoke detectors have played a key role in reducing residential fire deaths in the United States, they may not activate or provide early warning for a variety of reasons in as many as 35% of all fires, according to data published by the Federal Emergency Management Agency. Some of the reasons smoke detectors used in conjunction with this System may not work are as follows. Smoke detectors may have been improperly installed and positioned. Smoke detectors may not sense fires that start where smoke cannot reach the detectors, such as in chimneys, in walls, or roofs, or on the other side of closed doors. Smoke detectors also may not sense a fire on another level of a residence or building. A second floor detector, for example, may not sense a first floor or basement fire. Moreover, smoke detectors have sensing limitations. No smoke detector can sense every kind of fire every time. In general, detectors may not always warn about fires caused by carelessness and safety hazards like smoking in bed, violent explosions, escaping gas, improper storage of flammable materials, overloaded electrical circuits, children playing with matches, or arson. Depending upon the nature of the fire and/or the locations of the smoke detectors, the detector, even if it operates as anticipated, may not provide sufficient warning to allow all occupants to escape in time to prevent injury or death.

— 26 —

LIMITATIONS OF THIS ALARM SYSTEM (continued)

- Passive Infrared Motion Detectors can only detect intrusion within the designed ranges as diagrammed in their installation manual. Passive Infrared Detectors do not provide volumetric area protection. They do create multiple beams of protection, and intrusion can only be detected in unobstructed areas covered by those beams. They cannot detect motion or intrusion that takes place behind walls, ceilings, floors, closed doors, glass partitions, glass doors, or windows. Mechanical tampering, masking, painting or spraying of any material on the mirrors, windows or any part of the optical system can reduce their detection ability. Passive Infrared Detectors sense changes in temperature; however, as the ambient temperature of protected area approaches the temperature range of 90° to 150°F, the detection performance can decrease.
- Alarm warning devices such as sirens, bells or horns may not alert people or wake up sleepers if they are located on the other side of closed or partly open doors. If warning devices sound on a different level of the residence from the bedrooms, then they are less likely to waken or alert people inside the bedrooms. Even persons who are awake may not hear the warning if the alarm is muffled from a stereo, radio, air conditioner or other appliance, or by passing traffic. Finally, alarm warning devices, however loud, may not warn hearing-impaired people or waken deep sleepers.
- Telephone lines needed to transmit alarm signals from a premises to a central monitoring station may be out of service or temporarily out of service. Telephone lines are also subject to compromise by sophisticated intruders.
- Even if the system responds to the emergency as intended, however, occupants may have insufficient time to protect themselves from the emergency situation. In the case of a monitored alarm system, authorities may not respond appropriately.
- This equipment, like other electrical devices, is subject to component failure. Even though this equipment is designed to last as long as 10 years, the electronic components could fail at any time.

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

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

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