

Fire and Burglary System

User's Manual

5120XM

® ADEMCO

TABLE OF CONTENTS

<p>SYSTEM OVERVIEW.....3 General.....3 Zones.....3 Fire & Emergency Protection.....3 Burglary Protection.....4 Alarms.....4 Memory of Alarm.....4 ABOUT THE KEYPADS5 General.....5 Keypad Displays.....5 FUNCTIONS OF THE REMOTE KEYPAD6 TYPICAL ALPHA KEYPAD.....7 FIXED-WORD KEYPAD DISPLAYS.....8 REMOTE KEYPAD USER CODES9 General.....9 Duress Code.....9 Quick Arming.....10 To Assign, Change, or Delete User Codes10 REMOTE KEYPAD EMERGENCY KEYS.....11 Using Emergency Keys11 Emergency Key Programmed Functions12 NORMAL STANDBY OPERATION13 FIRE ALARM PROTECTION14 General.....14 In case of Fire14 Silencing and Resetting a Fire Alarm15 BURGLARY PROTECTION ENTRY/EXIT DELAYS16 General.....16 Exit Delay Alerting Sound16 CHECKING FOR FAULTED BURGLARY ZONES17 Using the READY Key17</p>	<p>BYPASSING BURGLARY PROTECTION ZONES 18 Using the BYPASS Key 18 Quick Bypass 19 ARMING PERIMETER BURGLARY PROTECTION ONLY (STAY)20 ARMING PERIMETER BURG. PROTECTION ONLY (INSTANT)21 ARMING ALL BURGLARY PROTECTION (AWAY).....22 ARMING ALL BURGLARY PROTECTION (MAXIMUM).....23 DISARMING BURGLARY PROTECTION, AND SILENCING BURGLARY ALARMS.....24 BURGLARY PROTECTION EXIT ALARMS25 Burglary Protection Exit Alarm Warning Displays and Sounds25 EMERGENCY AND 24 HOUR NON-FIRE ALARMS.....26 General26 Silencing and Resetting an Emergency Alarm26 SUPERVISORY CONDITIONS27 General27 Silencing and Resetting a Supervisory Indication.....27 TROUBLE CONDITIONS.....28 General (AC LOSS, SYSTEM LO BAT, COMM FAILURE, CHECK).....28 Silencing and Resetting a Trouble Indication29 CHIME MODE29 ACTIVATING A FIRE DRILL TEST30 ACTIVATING A BURGLARY WALK TEST.....31 QUICK GUIDE TO SYSTEM FUNCTIONS32 SUMMARY OF AUDIBLE/VISUAL NOTIFICATION33 PROTECTION ZONES LIST.....35 FCC STATEMENTS36 LIMITATIONS STATEMENT.....38 SERVICING INFORMATION.....39 WARRANTY Back Cover</p>
--	---

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 instructs you with normal and emergency procedures. Keep this manual in a convenient place so that you can refer to it as necessary.

SYSTEM OVERVIEW

General Congratulations on your ownership of an Ademco Alarm System. You've made a wise decision in choosing it, for it represents the latest in alarm protection technology today, including microcomputer technology to monitor all system status. Ademco is the world's largest manufacturer of security systems and millions of premises are protected by Ademco systems.

Your system is a UL Listed commercial fire/burglary alarm control/communicator. It provides up to three forms of protection: fire alarm, burglary alarm and emergency alarm warning, some or all of which may be included in your system. In addition to the control panel, your system will include at least one remote control keypad which provides full control of system operation, external alarm sounders and various types of sensors such as smoke detectors for fire protection, door/window contacts for perimeter burglary protection and passive infrared motion detectors for interior burglary protection.

Please disregard references to burglary and/or emergency protection in the text that follows if your system does not provide these types of protection.

Zones Your system has five protection zones. Your installer has assigned each of your system's sensing devices to one of these zones. For example, warehouse smoke detectors may have been assigned to zone 01, a fire sprinkler supervisory switch may have been assigned to zone 02, burglary door/window contacts may have been assigned to zone 3, etc.. The keypad will display these zone numbers when an alarm, supervisory or trouble condition is detected.

Fire & Emergency Protection The fire and emergency protection portions of your system are always on and will sound an alarm if an alarm condition is detected.

SYSTEM OVERVIEW

- Burglary Protection** The burglary protection portion of your system must be turned on or "armed" before it can sense burglary alarm conditions and sound an alarm. Your system can be armed in one of four modes: STAY, AWAY, INSTANT and MAXIMUM. Refer to the *ARMING THE SYSTEM* sections of this manual for instructions on using these modes.
- Your system also provides a CHIME mode for alerting you to the opening and closing of doors and windows while your burglary protection is disarmed.
- Alarms** When an alarm occurs, both the keypad and external sounders will sound, and a message at the keypad will identify the zone(s) causing the alarm. In addition, if your system is connected to a central monitoring station, an alarm message will be sent. You may stop the sound by entering the OFF sequence (user code + OFF key) at your keypad .
- Memory Of Alarm** When an alarm, supervisory or trouble condition occurs, the keypad displays the number(s) of the zone(s) that caused the problem, and displays the type of condition present (ex. FIRE, ALARM, SUPV, CHECK). The display remains until it is cleared by entering the OFF sequence (user code + **OFF** key) a second time.

ABOUT THE OPTIONAL KEYPADS

General The keypads feature a telephone style (digital) keypad and a Liquid Crystal Display (LCD) which shows the nature and location of all occurrences.

The keypads feature a built-in sounder which emits the same alarm sounds as the control's built-in warning buzzer during alarm conditions.

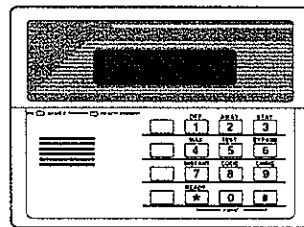
The keypad's display screen displays the same indications as the control's built-in LED indicators, and in addition, displays the zone number of faulted zones as well as the type of fault (i.e. alarm, supervisory or trouble) present. The telephone style keypad keys allow entry of commands for silencing the warning sounds, resetting faulted smoke detectors, activating various system tests, etc.

Keypad Displays There are two basic types of keypad displays, Alpha and Fixed-Word, either of which may have been used in your system.

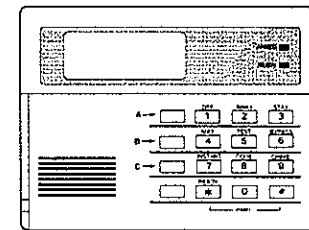
- **Alpha Keypad Displays** feature a 2-line, 32 character alphanumeric Liquid Crystal Display (LCD) which can display the nature and location of all occurrences in friendly English.
- **Fixed-Word Keypad Displays** are functionally similar to the Alpha Keypads, except that their LCD display uses pre-designated (fixed) words to identify the nature and location of occurrences.

Unless stated otherwise, all commands and procedures described herein apply equally to all keypads.

Alpha Keypad



Fixed-Word Keypad

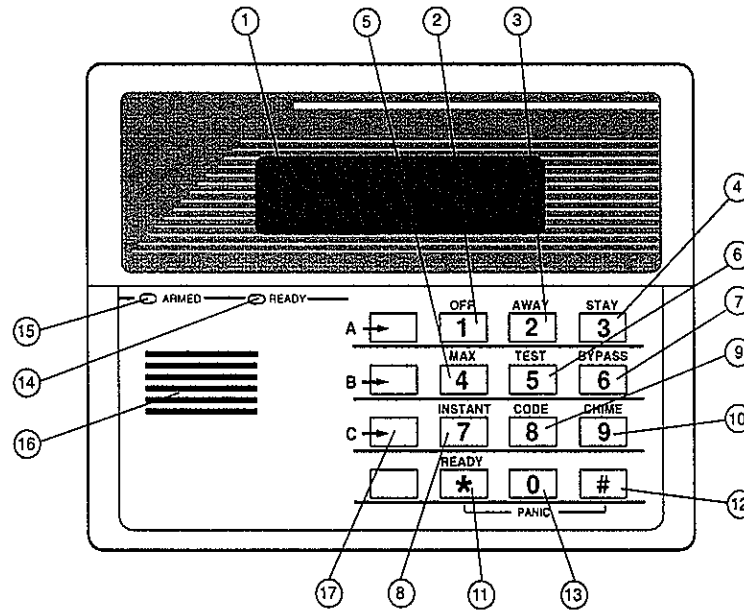


FUNCTIONS OF THE REMOTE KEYPAD

SEE TYPICAL ALPHA KEYPAD ON NEXT PAGE

1. **DISPLAY WINDOW:** Displays zone # and system status messages.
2. **1 OFF Key:** Silences audible alarm, supervisory and trouble sounds, clears visual display after problem's correction, and disarms the burglary protection.
3. **2 AWAY Key:** Arms interior and perimeter burglary protection. Entry and exit delays are provided.
4. **3 STAY Key:** Arms perimeter burglary protection only. Interior burglary protection is not armed, allowing movement within premises without causing alarm. Entry and exit delays are provided.
5. **4 MAXIMUM Key:** Arms in manner similar to AWAY key, except no entry delay is provided. An alarm will occur immediately upon opening any door or window. This mode provides maximum protection.
6. **5 TEST Key:** Tests the burglary and emergency portions of your system.
7. **6 BYPASS Key:** Removes individual protection zones from being monitored by the system.
8. **7 INSTANT Key:** Arms in manner similar to STAY key, but except that no entry delay is provided. An alarm will occur immediately upon opening any door or window.
9. **8 CODE Key:** Used to assign additional 4-digit user codes.
10. **9 CHIME Key:** Turns CHIME mode on and off. When on, with burglary protection disarmed, the opening of a door or window will sound 3 beeps at your keypad(s).
11. *** READY Key:** Displays all open protection zones. Burglary zone faults must be corrected or bypassed prior to arming.
12. **# Key:** "Quick Arm" key that permits burglary protection to be armed without use of a user code. Also activates fire drill.
13. **0-9 Keys:** Used to enter your 4-digit user code.
Most system functions are performed by first entering the 4-digit user code and then entering one of the above command keys (e.g., OFF, AWAY, STAY, etc).
14. **READY INDICATOR:** (GREEN) Lit when burglary portion of your system is ready to be armed (no faults present). While burglary protection is disarmed, this indicator goes off and on as protection zones are faulted and unfaulded.
15. **ARMED INDICATOR:** (RED) Lit when the burglary portion of your system has been armed in STAY, AWAY, MAXIMUM or INSTANT mode.
16. **INTERNAL SOUNDER:** Sound is: *slow on/off pulsing* for fire alarms, *steady dual-tone* for burglary and emergency alarms, and *rapid on/off pulsing* for supervisory and trouble conditions. Also "beeps" during other system functions.(see SUMMARY OF AUDIBLE/VISUAL NOTIFICATION).
17. **A, B, C EMERGENCY Keys:** Your installer may have programmed these keys for manual activation of fire or emergency alarms. **Note:** Other keys may be available for emergency functions (see page 11).

Note: More information about user codes, the various command keys, and the emergency keys is provided in the sections that follow.



SHOWN WITH
KEYPAD COVER
REMOVED

TYPICAL ALPHA KEYPAD

Fixed-Word Keypads are functionally similar, except for screen displays.

IMPORTANT! When entering codes and commands, sequential key depressions must be made within 2 seconds of one another. If 2 seconds elapses without a key depression, the entry is aborted and must be repeated from its beginning.

FIXED-WORD KEYPAD DISPLAYS

- READY** The burglary protection is ready to be armed (no faults are present).
- NOT READY** The burglary protection is not ready to be armed because one or more zones are faulted.
- AWAY** All burglary protection, interior and perimeter, is armed.
Note: "AWAY" appears when armed AWAY and "AWAY INSTANT" appears when armed MAXIMUM.
- STAY** Only perimeter burglary protection, such as windows and doors is armed. *Note:* "STAY" appears when armed STAY and "STAY INSTANT" appears when armed INSTANT.
- INSTANT** Burglary protection is armed with no entry delay provided. Also see AWAY and STAY above.
- FIRE** Appears when a fire alarm is detected. Accompanied by a display of the zone # in alarm.
- ALARM** Appears when any type of alarm is detected. "FIRE" also appears when a fire alarm is detected. Accompanied by a display of the zone # in alarm.
- SUPV** Appears when a fire sprinkler system supervisory condition is detected. Accompanied by a display of the zone # having the supervisory condition.
- CHECK** Appears when a fire zone wiring fault is detected at any time, or when a DAY(Trouble) / NIGHT(Alarm) burglary zone fault is detected while burglary protection is disarmed. Also appears when certain system problems such as phone line problems are detected. Accompanied by a display of the zone # in trouble.
- AC** Appears when AC power is present.
- NO AC** Appears when AC power is low, or not present. System is operating from backup battery power.
- BAT** Appears when backup battery is low or disconnected.
- TEST** Appears when the system is operating in one of its test modes (such as the fire drill test mode).
- BYPASS** Appears when one or more zones have been bypassed and are no longer operational.
- CHIME** Appears when the CHIME feature is ON.



FIXED-WORD DISPLAY

REMOTE KEYPAD USER CODES

General Your installer will have programmed a 4-digit user code (known as User Number 2 code) that can be entered at your keypad to silence/reset alarms, arm/disarm your burglary protection, bypass protection zones and activate the fire drill test and the burglary walk test. This code may also be used to assign up to four other user codes (known as User Number 3–6 codes) and to assign a Duress code

The User Number 3–6 codes are intended for users who need limited and/or temporary control over system operation. These codes can perform the same functions as the User Number 2 code *except* for assigning user codes and activating the fire drill test.

Duress Code **The Duress code** (it corresponds to User Number 8) is intended for use when one is forced to arm or disarm the burglary protection portion of the system under threat. When used, this code will arm or disarm the system apparently normally, but will also send a silent alarm message to the central station so that appropriate action can be taken.

Generally, most keypad functions are performed by first entering the 4-digit user code and then entering one or more command keys, as described in the sections that follow. The user code functions are summarized in the table below.

USER #	ARM/DISARM BURGLARY	SILENCE ALARM/SUPV/TROUBLE	ADD/CHANGE USERS	BYPASS ZONES	ENTER TEST MODES	
					Burg. Walk Test	Fire Drill Test
2	Yes	Yes	Yes (Users 2–8)	Yes (Burglary & Emergency)	Yes	Yes
3–6	Yes	Yes	No		Yes	No
8 (Duress)	Yes (Trips silent emergency)	Yes	No	No	No	No

REMOTE KEYPAD USER CODES

Quick Arming

Ask your installer if "Quick Arming" is active for your system, and if so, check here:

If your system supports "Quick Arming", the "#" key can be pressed in place of the user code when arming the burglary protection. The user code is *always* required, however, when disarming.

To Assign, Change, or Delete User Codes

4-DIGIT USER CODES
It is recommended that obvious codes such as 1111 or 1234 not be assigned.

User Number 2 can change, but not delete, his/her own code and can assign, change, or delete codes for User Numbers 3–8

User Numbers 3–8 cannot assign, change, or delete user codes.

1. Enter the User Number 2 code and press the **CODE** key.
2. Enter a single-digit User Number (2–8) for the user whose code is to be assigned, changed, or deleted. **Note:** The Duress code corresponds to User Number 8.
3. **If assigning or changing a user's code**, enter the new 4-digit code for that user. The keypad will beep once, indicating that the new code has been accepted.

If deleting a user's code, perform steps 1 and 2 and then stop. After a few moments the keypad will beep once, indicating that the existing code has been deleted.

REMOTE KEYPAD EMERGENCY KEYS

**Using
Emergency Keys**
(for manually activating
silent and/or
audible alarms)

Your installer may have programmed the keypad's A, B, or C emergency keys to allow manual activation of fire and/or emergency alarms. The functions that might be programmed are: Fire, Silent Emergency, Audible Emergency, and Personal Emergency.

A fire alarm sends a fire alarm message to the central station* and uniquely sounds at keypad(s) and external bells and sirens. A FIRE message plus a zone number (see table on next page) is also displayed.

A silent emergency sends a silent alarm signal to the central station*, *but there is no audible alarm or visual display.*

An audible emergency sends a signal to the central station* and sounds a loud, steady alarm at your keypad(s) and at any external sounders that may be connected. An ALARM message plus a zone number (see table on next page) is also displayed.

A personal emergency alarm sends an emergency message to the central station* and sounds at keypad(s), but not at external bells or sirens. An ALARM message plus a zone number (see table on next page) is also displayed.

* If connected to a central station.

Also see
Duress Code
feature on
page 9

TO MANUALLY ACTIVATE AN EMERGENCY FUNCTION AT ANY TIME OF DAY OR NIGHT

(SEE TABLE AND DIAGRAM ON NEXT PAGE)

Press the programmed **A**, **B**, or **C** emergency key for at least two seconds,
or alternatively,

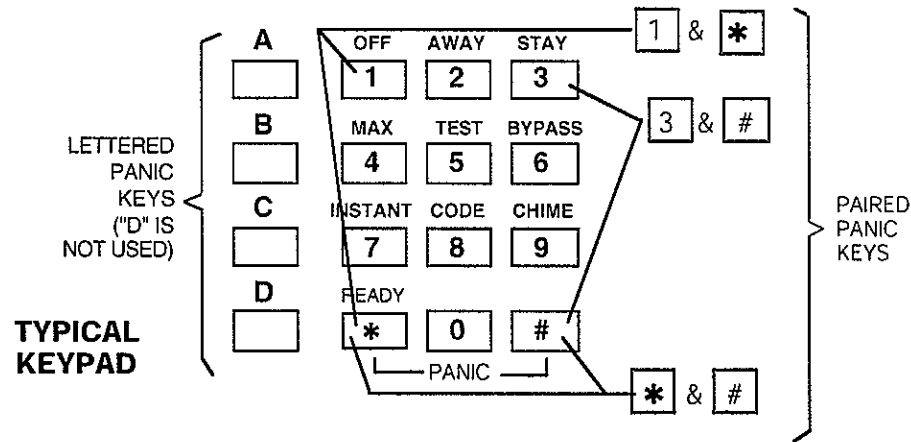
Press *both* keys of the corresponding **1** & ***** (A), ***** & **#** (B), or **3** & **#** (C) emergency key
pair
at the same time.

REMOTE KEYPAD EMERGENCY KEYS

SEE YOUR INSTALLER
AND NOTE HERE
THE KEY(S) & FUNCTION(S)
PROGRAMMED
FOR YOUR SYSTEM

CHECK IF ACTIVE	EMERGENCY KEY(S)	PROGRAMMED FUNCTION	ZONE NUMBER
<input type="checkbox"/>	[A]	___FIRE, ___SILENT, ___AUDIBLE, ___PERSONAL	95
<input type="checkbox"/>	[B]	___FIRE, ___SILENT, ___AUDIBLE, ___PERSONAL	07
<input type="checkbox"/>	[C]	___FIRE, ___SILENT, ___AUDIBLE, ___PERSONAL	96
OR			
<input type="checkbox"/>	[1] & [*]	___FIRE, ___SILENT, ___AUDIBLE, ___PERSONAL	95
<input type="checkbox"/>	[*] & [#]	___FIRE, ___SILENT, ___AUDIBLE, ___PERSONAL	07
<input type="checkbox"/>	[3] & [#]	___FIRE, ___SILENT, ___AUDIBLE, ___PERSONAL	96

• KEY [D] ON YOUR KEYPAD IS NOT ACTIVE HERE.



NORMAL STANDBY OPERATION

Your system provides the following indications while the burglary protection is disarmed and there are no alarm, supervisory, or trouble conditions present:

- The keypad warning buzzer and external alarm sounders are off.
- The Alpha keypad's LCD displays "DISARMED – READY TO ARM" if your system provides burglary protection, or "SYSTEM NORMAL" if your system does not provide burglary protection.

****DISARMED****
READY TO ARM

**** SYSTEM ****
**** NORMAL ****

The Fixed-Word keypad's LCD displays "AC".

AC

FIRE ALARM PROTECTION

General Your fire alarm system is on 24 hours a day, for continuous protection. In the event of an emergency, the strategically located smoke and heat detectors will automatically send signals to your system, triggering sounds from your keypad and exterior sounders. A FIRE message will appear at your keypad and remain on until you silence the alarm and reset the system.

In Case Of Fire

WHEN FIRE ALARM SOUNDS ARE HEARD, EVACUATE ALL OCCUPANTS FROM THE PREMISES IMMEDIATELY AND NOTIFY YOUR LOCAL FIRE DEPARTMENT.

Your system provides the following indications when your system's smoke and/or heat detectors have detected a fire alarm condition.

- The keypad buzzer produces a slow on/off pulsing sound.
- The external fire alarm sounders produce either:
 - a steady sound or a pulsing sound, depending on what your installer selected (check the appropriate box).
- The keypad LCD displays the word "FIRE" (Alpha) or "FIRE ALARM" (Fixed-Word) along with the number of the zone in alarm.

*FIRE05
FIRE00M*

ALPHA

*05 AWAY
ALARM BYPASS
FIRE STAY* AC

FIXED-WORD

- A fire alarm message is sent to the central station.

If your system has a keypad with a FIRE alarm emergency key, then these indications may be manually triggered by pressing this key for at least 2 seconds, (or the corresponding emergency key pair), should you become aware of a fire emergency before your detectors sense the problem.

FIRE ALARM PROTECTION

Silencing and Resetting a Fire Alarm

To silence the keypad buzzer and external alarm sounders:


Enter your User Code followed by the OFF key.

The keypad's LCD will display "FIRE ALARM SILENCED" (Alpha) or "SF" (Fixed-Word) to indicate that a fire alarm condition may still be present. The Alpha keypad will display the number of the zone in alarm as a Memory of Alarm indication. The Fixed-Word keypad alternates the zone number in alarm with the "SF" display.



FIRE 05 FIRE
ALARM SILENCED

ALPHA



SF AC
ALARM
FIRE

FIXED-WORD

To reset your system's smoke detectors and the keypad Memory of Alarm display (after heat or smoke is no longer present):

First determine and correct the cause of the fire alarm condition (e.g., fan smoke from the smoke detector chamber, reset the pull station, etc.) and then:

Re-enter your User Code plus the OFF key.

Note: To silence and reset a burglary alarm, see page 24.

See the **SUMMARY OF AUDIBLE/VISUAL NOTIFICATION** section for information which will help you to distinguish between FIRE and BURGLARY alarm sounds.

BURGLARY PROTECTION ENTRY/EXIT DELAYS

General The burglary protection portion of your system has preset time delays, known as exit delay and entry delay. When you arm your burglary protection, **exit delay** gives you time to leave through the entry/exit door without setting off an alarm. **Entry delay** gives you time to disarm the burglary protection when you reenter through the entry/exit door. The burglary protection must be disarmed, however, before the entry delay period ends, or an alarm will occur. The keypad will beep slowly during the entry delay period, reminding you to disarm the burglary protection.

You can also arm the protection with no entry delay at all by using either INSTANT or MAXIMUM arming modes. These modes can provide greater security while you are sleeping or while you are away for extended periods of time.

Exit Delay Alerting Sound

Ask your installer if this is active for your system, and if so, check here:

If active for your system, and if so-programmed by your installer, when arming your burglary protection AWAY (see page 22) or MAXIMUM (see page 23), slow beeps will sound from the keypad during exit delay, turning to fast beeps during the final five seconds of the delay time.

See your installer for your delay times and record them here:

Exit Delay: seconds

Entry Delay: seconds

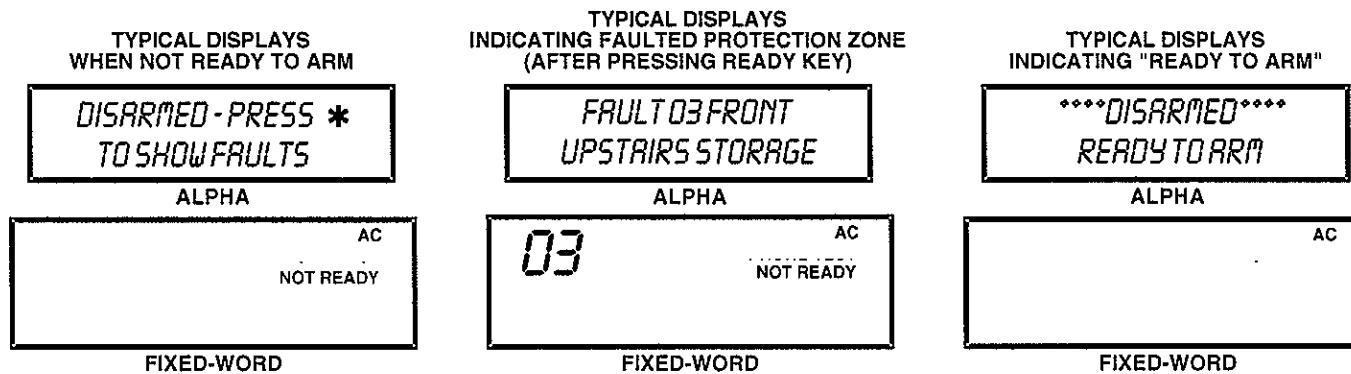
CHECKING FOR FAULTED BURGLARY ZONES

Using the *READY Key Before arming the burglary protection portion of your system, all protected doors, windows and other protection zones must be closed or bypassed (see *BYPASSING BURGLARY PROTECTION ZONES* section), otherwise the keypad will display a "Not Ready" message, and your keypad's READY indicator light will not be lit. The **READY (*)** key can be used to display all faulted burglary zones, making it easier for you to secure any open zone.

To display faulted burglary zones, simply press and release the **READY (*)** key (do not enter your user code first). Secure or bypass the zones displayed before arming the system.

A "Ready" message will be displayed when all protection zones have been either closed or bypassed and the keypad's READY indicator light will be lit.

TO DISPLAY FAULTED ZONES, PRESS THE **READY** KEY.



BYPASSING BURGLARY PROTECTION ZONES

Using the 6 BYPASS Key

All burglary zone
bypasses are removed
when an OFF sequence
(user code plus OFF) is
performed.

This key is used when you want to arm the burglary protection portion of your system with one or more zones intentionally unprotected. The burglary protection must be disarmed first.

1. Enter your user code and press the **BYPASS** key.
2. Enter zone number(s) for the zone(s) to be bypassed (e.g., 02, 03, etc.). *Single digit zone numbers must be preceded by a zero.*
3. When finished, the keypad will momentarily display a "Bypass" message for each bypassed zone number. Wait for these zones to be displayed, to confirm their bypass.
4. Arm the system's burglary protection as usual.

Bypassed zones are unprotected and will not cause an alarm if violated while your burglary protection is armed.

TO BYPASS ZONES:

- ENTER USER CODE.
- PRESS **BYPASS** KEY.
- ENTER ZONE Nos.
- WAIT FOR BYPASSED ZONES TO BE DISPLAYED.
- ARM BURGLARY PROTECTION AS USUAL.

TYPICAL MOMENTARY DISPLAYS OF BYPASSED ZONE

*BYPASS 03 FRONT
UPSTAIRS STORAGE*

ALPHA

03 AC

BYPASS -----

FIXED-WORD

BYPASSING BURGLARY PROTECTION ZONES

Quick Bypass

Ask your installer if "Quick Bypass" is active for your system, and if so, check here:

If your system supports "Quick Bypass", it allows you to easily bypass all open (faulted) burglary zones without having to enter zone numbers individually. This feature is useful if, for example, you routinely leave certain windows open when arming at night.

To use this feature, enter your user code, press the **BYPASS** key, then stop. In a few moments, all faulted burglary protection zones will be displayed along with a "Bypass" message. Wait for all bypassed zones to be displayed, then arm the burglary protection as usual.

BURGLARY PROTECTION
CAN NOW BE ARMED
WITH ZONE(S) BYPASSED.

TYPICAL DISPLAYS
"READY TO ARM WITH ZONES BYPASSED"

DISARMED BYPASS
READY TO ARM

ALPHA

BYPASS

AC

FIXED-WORD

ARMING PERIMETER BURGLARY PROTECTION ONLY WITH ENTRY DELAY ON

Using the 3 STAY Key

BEFORE ARMING, close all doors and windows (see *CHECKING FOR FAULTED BURGLARY ZONES* on page 17).

Use this key when you are staying inside, but expect someone to use an entry/exit door later.

1. Enter your user code and press the **STAY** key.
2. The keypad beeps three times and displays the armed message. The red ARMED indicator lights.
3. The system arms. A burglary alarm sounds immediately if a protected perimeter window or non-entry/exit door is then opened, but you may otherwise move freely throughout the premises.

Later arrivals can enter through an entry/exit door without causing an alarm, but they must disarm the burglary protection during the entry delay period to avoid sounding an alarm.

USER CODE + **STAY** KEY
ARMS THE PERIMETER,
BUT ALLOWS USE OF
THE ENTRY/EXIT DOOR.

TYPICAL DISPLAYS
"ARMED STAY"

ARMED ***STAY***

ALPHA

STAY

AC

FIXED-WORD

ARMING PERIMETER BURGLARY PROTECTION ONLY

WITH ENTRY DELAY OFF

Using the 7 INSTANT Key

BEFORE ARMING, close all doors and windows (see *CHECKING FOR FAULTED BURGLARY ZONES* on page 17).

Use this key when you are staying inside and do not expect anyone to use an entry/exit door.

1. Enter your user code and press the **INSTANT** key.
2. The keypad beeps three times and displays the armed message. The red ARMED indicator lights.
3. The burglary protection arms. A burglary alarm sounds immediately if any protected perimeter door or window is opened, but you may otherwise move freely throughout the premises.

An alarm sounds immediately if anyone opens an entry/exit door.

USER CODE + **INSTANT** KEY
ARMS THE PERIMETER
(INCLUDING THE ENTRY/EXIT DOOR),
WITH NO ENTRY DELAY.

TYPICAL DISPLAYS
"ARMED INSTANT"

ARMED *INSTANT*

ALPHA

STAY
INSTANT

FIXED-WORD

ARMING ALL BURGLARY PROTECTION WITH ENTRY DELAY ON

Using the **2** AWAY Key

BEFORE ARMING, close all doors and windows (see *CHECKING FOR FAULTED BURGLARY ZONES* on page 17).

Use this key when no one will be staying inside.

1. Enter your user code and press the **AWAY** key.
2. The keypad beeps twice and displays the armed message. The red ARMED indicator lights.
3. You may leave through an entry/exit door during the exit delay period without causing an alarm.
After exit delay, the burglary protection arms and sounds an alarm immediately if a protected window or non-entry/exit door is then opened, or if any movement is detected inside your premises.

You may reenter through an entry/exit door, but must disarm the burglary protection during the entry delay period to avoid an alarm.

USER CODE + **AWAY** KEY
ARMS ALL BURGLARY PROTECTION
(INTERIOR AND PERIMETER),
BUT ALLOWS USE OF THE
ENTRY/EXIT DOOR.

TYPICAL DISPLAYS
"ARMED AWAY"

*ARMED ***AWAY***
YOU MAY EXIT NOW*

"YOU MAY EXIT NOW" disappears
when exit delay expires.

ALPHA

AWAY AC

FIXED-WORD

ARMING ALL BURGLARY PROTECTION WITH ENTRY DELAY OFF

Using the 4 MAXIMUM Key

BEFORE ARMING, close all doors and windows (see *CHECKING FOR FAULTED BURGLARY ZONES* on page 17).

Use this key 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.

1. Enter your USER code and press the **MAXIMUM** key.
2. The KEYPAD beeps twice and displays the armed message. The red ARMED indicator lights.
3. You may leave through an entry/exit door during the exit delay period without causing an alarm.

After exit delay, the burglary protection arms and sounds an alarm immediately if any protected door or window is opened, or if any movement is detected inside your premises.

An alarm sounds immediately, when someone reenters.

USER CODE + **MAXIMUM** KEY
ARMS ALL BURGLARY PROTECTION
(INTERIOR AND PERIMETER),
(INCLUDING THE ENTRY/EXIT DOOR
WITH NO ENTRY DELAY).

TYPICAL DISPLAYS
"ARMED MAXIMUM"

*ARMED *MAXIMUM**
YOU MAY EXIT NOW

"YOU MAY EXIT NOW" disappears
when exit delay expires.

ALPHA

AWAY AC

INSTANT

FIXED-WORD

DISARMING BURGLARY PROTECTION AND SILENCING BURGLARY ALARMS

Using the 1 OFF Key

IMPORTANT:
If you return and the main burglary sounder is on, DO NOT ENTER, but CONTACT THE POLICE from a nearby safe location.
If you return after an alarm has occurred and the main sounder has shut itself off, the keypad will beep rapidly upon your entering, indicating that an alarm has occurred during your absence.
LEAVE IMMEDIATELY, and CONTACT THE POLICE from a nearby safe location.

The **OFF** key is used to disarm the burglary protection and to silence burglary alarm sounds.

To Disarm Burglary Protection

Enter your **user code** and press the **OFF** key. The "Ready" message will be displayed (providing no burglary zone is faulted), and the keypad will beep once to confirm that burglary protection is disarmed.

To Silence and Reset a Burglary Alarm

SEE IMPORTANT NOTE AT LEFT!

Enter your **user code** and press the **OFF** key to silence the alarm (or warning tones of a Memory of Alarm). Note the zone in alarm on the keypad display, and make that zone intact (close door, window, etc.). Now re-enter your **user code** plus the **OFF** key again to clear the keypad's Memory of Alarm display. If the display will not clear and does not provide a "Ready" message, notify the alarm agency.

To Silence and Reset a Fire Alarm see page 15.

See the **SUMMARY OF AUDIBLE/VISUAL NOTIFICATION** section for information which will help you to distinguish between **FIRE** and **BURGLARY** alarm sounds.

BURGLARY PROTECTION EXIT ALARMS

Burglary Protection Exit Alarm Warning Displays and Sounds

Ask your installer if "Exit Alarm Warning" is active for your system, and if so, check here:

The burglary protection portion of your system may have been programmed for this feature.

When arming your burglary protection, if an exit or interior zone contains a fault during closing *at the time the exit delay ends*, the alarm sounder and keypad sound continuously to alert you that an unwanted alarm can be prevented if you take action:

- *If you disarm the burglary protection during the entry delay period that will immediately follow, the sound stops. The keypad displays "CANCELLED ALARM" or "CA" as well as a zone indication. No message is transmitted to the central station.*
- *If the burglary protection is NOT disarmed during the immediately following entry delay period, the sounds continue until the system is disarmed (or alarm sounder timeout occurs). The keypad displays "EXIT ALARM" or "EA" as well as a zone indication. An "exit alarm" message will be sent to the central station.*

Note: The latter "EXIT ALARM" conditions also result if an alarm from an exit or interior zone occurs within two minutes after the end of an exit delay.

In any of the above cases, a second OFF sequence (user code + **OFF** key) will clear the keypad display.

EMERGENCY AND 24 HOUR NON-FIRE ALARMS

General Your system may have sensors which detect non-fire related alarm conditions, such as the triggering of an HVAC (Heating, Ventilating, or Air Conditioning) temperature sensor, the pressing of a holdup alarm button, etc. Your system may provide some or all of the indications listed below, depending on what your installer selected to occur when one of those conditions is detected.

If your system's keypad has any active emergency alarm key(s) (see *REMOTE KEYPAD EMERGENCY KEYS* on page 11) these indications may be manually triggered by pressing the appropriate emergency key (or corresponding emergency key pair).

- The keypad buzzer produces a steady sound (no sound for silent alarms).
- The external alarm sounders produce a steady sound (no sound for silent alarms).
- The keypad LCD (Fixed-Word) displays the word "ALARM" and the zone number in alarm. Alpha keypads also display a description of the zone in alarm (no keypad displays for silent alarms).



ALARM 02
TEMPERATURE

ALPHA



02
ALARM AC

FIXED-WORD

- An emergency alarm message is sent to the central station.

Silencing and Resetting an Emergency Alarm

To silence the keypad buzzer
and external alarm sounders:

Enter your User Code,
followed by the OFF key.

The keypad's LCD will display the number of the zone in alarm as a Memory of Alarm indication.

To reset the keypad alarm display:
First correct the cause of the alarm
condition, and then:

Re-enter your User Code,
followed by the OFF key.

SUPERVISORY CONDITIONS

General If your building has a fire sprinkler system, your installer may have installed a sensor which monitors the sprinkler system (e.g., to determine whether the main water gate valve is open or that there is adequate water pressure, etc.). Your system provides the following indications when a supervisory condition is detected.

CALL YOUR INSTALLER IMMEDIATELY FOR SERVICE WHEN A SUPERVISORY INDICATION APPEARS! For servicing information, see page 39.

- The keypad buzzer produces a rapid on/off pulsing sound.
- The keypad LCD displays the word "SUPV" and the number of the zone with the supervisory condition. Alpha keypads also display a description of the zone.



ALPHA



FIXED-WORD

- A supervisory message is sent to the central station.

Silencing and Resetting a Supervisory Indication

To silence the keypad buzzer:

Enter your User Code, followed by the OFF key

The keypad's LCD will display the number of the zone having the supervisory condition as a Memory indication.

To reset the keypad supervisory display:

First have the cause of the indication corrected, and then:

Re-enter your User Code, followed by the OFF key.

TROUBLE CONDITIONS

General Your system monitors each of your protection zones and various aspects of system operation for problems such as wire breaks, loss of AC power, faulted telephone lines, etc., which compromise proper operation. Your system provides the following indications when one of these problems is detected.

CALL YOUR INSTALLER IMMEDIATELY FOR SERVICE, WHEN ANY OF THESE INDICATIONS APPEAR FOR A CONDITION THAT CANNOT BE CORRECTED BY YOU! For servicing information, see page 39.

- The keypad buzzer produces a rapid on/off pulsing sound.
- The keypad LCD displays "AC LOSS" (Alpha) or "NO AC" (Fixed-Word) when AC power is low or not present.
- The keypad LCD displays "SYSTEM LO BAT" (Alpha) or "BAT" (Fixed-Word) when your system's back-up battery is low or disconnected.
- The keypad LCD displays "COMM FAILURE" (Alpha) or "FC" (Fixed-Word) when attempts to send a message to the central station have failed.
- The keypad LCD (Fixed-Word) displays "CHECK" and a protection zone number (1–5) or system zone number (6–12) when there is a zone or system related problem. Alpha keypads also display a description of the zone.



CHECK 03 FRONT
UPSTAIRS STORAGE

ALPHA



03 AC
CHECK

FIXED-WORD

- A trouble message is sent to the central station.

Note: If your keypad LCD displays "0C" for more than 5 minutes, then it is not receiving signals from the control panel. CALL YOUR INSTALLER IMMEDIATELY FOR SERVICE.

TROUBLE CONDITIONS

Silencing and Resetting a Trouble Indication

To silence the keypad buzzer:

**Enter your User Code,
followed by the OFF key.**

The keypad's LCD will display the number of the zone in trouble as a Memory indication.

To reset the keypad trouble display:

First have the cause of the trouble condition corrected, and then:

**Re-enter your User Code,
followed by the OFF key.**

CHIME MODE

Using the **9 CHIME Key**

This feature can be used only while the burglary protection portion of your system is disarmed.

By using the CHIME mode, your system can be set to alert you to the opening of a door or window while the burglary protection portion of the system is disarmed. When activated, three tones will sound at the keypad whenever a door or window is opened. Pressing the **READY** key will display the open protection points.

To turn Chime Mode on, enter your user code and press the **CHIME** key. The CHIME message will appear.

To turn Chime Mode off, enter your user code and press the **CHIME** key again. The CHIME message will disappear.

ACTIVATING A FIRE DRILL TEST

Using the
+ 6 + 9 Keys

This feature can be activated only while the burglary protection portion of your system is disarmed and no alarm, supervisory, or trouble condition is present.

Note: Only User Number 2's code can activate this test.

This test activates the external fire alarm sounders for the purpose of conducting a fire alarm drill. Your system will remain operational for fire alarm signaling while this test is active (although no message will be sent to the central station unless an actual alarm occurs).

- To activate the Fire Drill Test:

Enter User Number 2's code, followed by the # + 6 + 9 keys.

The keypad LCD will display "FIRE DRILL ACTIVE (Alpha) or "TEST dF" (Fixed-Word) and the external fire alarm sounders will produce either a steady or a pulsing sound while this test is active, depending on what your installer selected (see page 14).

FIRE DRILL
ACTIVE

ALPHA

dF AC
TEST

FIXED-WORD

- To terminate the Fire Drill Test:

Enter any User Code, followed by the OFF key.

Your system will also automatically terminate this test if an alarm, supervisory or trouble condition is detected while it is activated.

ACTIVATING A BURGLARY WALK TEST

Using the 5 TEST Key

This feature can be activated only while the burglary protection portion of your system is disarmed.

Your fire alarm protection, however, will remain active during this test.

IF YOU FAULT A FIRE ZONE, YOU WILL CAUSE A FIRE ALARM!

Note: UL requires that this test be conducted weekly.

This test is used to check that sensors on all burglary and non-fire emergency zones are operating properly.

- With the burglary protection disarmed, close all protected doors, windows, etc.
- **To activate the Burglary Walk Test:**

Enter any User Code, followed by the TEST key.

The external alarm sounders will sound for 1 second and then turn off. The keypad LCD will display "BURGLARY WALK TEST IN PROGRESS" (Alpha) or "TEST Cb" (Fixed-Word). The keypad buzzer will beep once every 10 seconds while this test is active.

BURGLARY WALK
TEST IN PROGRESS

ALPHA

CB AC
TEST

FIXED-WORD

- Open and close each protected door and window and walk in front of interior motion detectors (if used). The keypad will beep 3 times each time a zone is faulted and will display the number of the faulted zone while the fault remains.

After all protection points have been checked and restored, there should be no zone numbers displayed. CALL YOUR INSTALLER IMMEDIATELY FOR SERVICE IF YOU EXPERIENCE A PROBLEM! For servicing information, see page 39.

- **To terminate the Burglary Walk Test:**

Enter any User Code, followed by the OFF key.

QUICK GUIDE TO SYSTEM FUNCTIONS

FUNCTION	PROCEDURE	COMMENTS
Check Faulted Burglary Zones	Press READY key.	To view faulted zones when burglary protection not ready to arm.
Arm Burglary Protection	Enter user code. Press desired arming key: (AWAY, STAY, MAXIMUM, or INSTANT)	Arms burglary protection in selected mode.
Quick Arm (if programmed)	Press # key and desired arming key: (AWAY, STAY, MAXIMUM or INSTANT)	Arms protection in selected mode without use of code.
Disarm Burglary Protection	Enter user Code + OFF key.	
Silence Alarm, Supervisory or Trouble sounds	Enter user Code + OFF key.	Also disarms system. Memory of fault condition remains until cleared. Keypad displays # of faulted zone.
Clear Alarm Memory	Re-enter user Code + OFF key.	Keypad will beep rapidly upon entry if alarm has occurred. Alarm display will remain upon disarming until cleared.
Reset Smoke Detectors & Displays	Re-enter user Code + OFF key.	Will reset only if fault corrected.
Manually Trip Emergency Alarms	Press key [A], [B], or [C] for at least 2 sec., or press keys [1]&[*], or [*]&[#], or [3]&[#], both at same time.	Key(s) must be enabled by installer.
Trigger Duress Alarm	Enter User Number 8's code when arming or disarming.	Arms or disarms "normally" and sends a silent alarm message to central station.
Bypass Burglary and Emergency Zone(s)	To bypass, enter user code + BYPASS key + zone number(s) (use 2-digit entries). To remove bypass, enter user code + OFF key.	Bypassed zones are unprotected and will not cause an alarm if violated.
Quick Bypass (if programmed)	Enter user code + BYPASS key.	Automatically bypasses all faulted burglary zones .
Fire Drill Test	To activate: Enter User Number 2's code + # + 6 + 9. To turn off: Enter any user code + OFF key.	Activates external fire alarm sounders.
Chime Mode	To turn on: Enter user code + CHIME key. To turn off: Re-enter user code + CHIME key.	Keypad beeps when protected doors or windows are opened.
Burglary Walk Test	To activate: Enter user code + TEST key. To turn off: Enter user code + OFF key.	Tests burglary alarm sounder and sensors.
Assign, change, delete user code.	To assign or change: Enter User Number 2's code + CODE key + user number (2-8) + new code.	To delete: Enter User 2's code + CODE key + user number (3-8) and stop. Note: User Number 2 can change but not delete his/her own code.

SUMMARY OF AUDIBLE/VISUAL NOTIFICATION ALPHA & FIXED-WORD DISPLAY KEYPADS

SOUND	CAUSE	DISPLAY (Fixed-Word displays are shown in parentheses)
SLOW PULSING Keypad and, as selected by installer: <input type="checkbox"/> SLOW PULSING or <input type="checkbox"/> STEADY External,	a. FIRE ALARM b. FIRE DRILL	a. FIRE plus number and descriptor of zone in alarm (FIRE ALARM plus zone number). b. FIRE DRILL ACTIVE (TEST dF)
STEADY Keypad & External	a. BURGLARY or AUDIBLE EMERGENCY ALARM b. BURGLARY PROTECTION EXIT ALARM (Exit or interior burglary protection zone faulted at time exit delay ends.) (If programmed)	a. ALARM plus number and descriptor of zone in alarm (ALARM plus zone number). b. <i>•If burglary protection disarmed during subsequent entry delay period:</i> CANCELLED ALARM (CA). Sounds stop. No message sent to central station. <i>•If burglary protection <u>not</u> disarmed during subsequent entry delay period:</i> EXIT ALARM (EA). Sounds continue. Alarm message sent to central station.
RAPID PULSING Keypad	a. SUPERVISORY b. TROUBLE, Fire or Day/Night burglary zone problem c. TROUBLE, System problem d. MEMORY OF ALARM	a. SUPV plus number and descriptor of zone with SUPV condition (SUPV plus zone number). b. CHECK plus number and descriptor of zone (CHECK plus zone number). c. AC LOSS (NO AC), or SYSTEM LOW BAT (BAT), or COMM FAILURE (FC) when associated condition detected. d. FIRE or ALARM plus # and descriptor of zone in alarm (FIRE and/orALARM plus zone #).
ONE SHORT BEEP (not repeated), Keypad	a. BURGLARY PROTECTION DISARMING b. BURGLARY PROTECTION ARMING ATTEMPT WITH AN OPEN ZONE c. BYPASS VERIFICATION	a. DISARMED/READY TO ARM (AC). Green READY indicator is lit. b. FAULT plus number and descriptor of the faulted burglary protection zone (NOT READY plus zone number). Green READY indicator is <u>not</u> lit. c. BYPASS plus numbers and descriptors of bypassed burglary protection zones (BYPASS plus zone #'s). One beep for each zone displayed. Subsequently, the following is displayed: DISARMED BYPASS READY TO ARM (BYPASS READY).
STEADY SOUND, External, for 1 second, then ONE SHORT BEEP every 10 seconds from keypad.	SYSTEM IS IN BURGLARY WALK TEST MODE	BURGLARY WALK TEST IN PROGRESS (TEST Cb). Also, see "THREE SHORT BEEPS" below.
TWO SHORT BEEPS, Keypad	BURGLARY ARM ING, AWAY OR MAXIMUM MODE	ARMED AWAY (AWAY) or ARMED MAXIMUM (AWAY INSTANT). Red ARMED indicator is lit.

continued

SUMMARY OF AUDIBLE/VISUAL NOTIFICATION ALPHA & FIXED-WORD DISPLAY KEYPADS

continued

SOUND	CAUSE	DISPLAY (Fixed-Word displays are shown in parentheses)
THREE SHORT BEEPS, Keypad	a. BURGLARY PROTECTION ARMING, STAY OR INSTANT MODE b. BURGLARY PROTECTION ZONE FAULTED WHILE SYSTEM IS IN CHIME MODE c. BURGLARY PROTECTION ZONE FAULTED WHILE SYSTEM IS IN BURGLARY WALK TEST MODE	a. ARMED STAY (STAY) or ARMED INSTANT (STAY INSTANT). Red ARMED indicator is lit. b. CHIME displayed. Pressing READY key will display zone FAULT plus # & descriptor (zone #) of zone while faulted. c. FAULT plus # and descriptor of the faulted burglary protection zone (NOT READY plus zone #).
SLOW BEEPING, Keypad	a. ENTRY DELAY WARNING b. EXIT DELAY ALERT (if programmed)	a. DISARM SYSTEM OR ALARM WILL OCCUR (no fixed-word display during entry). Exceeding the delay time without disarming causes alarm. b. ARMED AWAY (AWAY) or ARMED MAXIMUM (AWAY INSTANT). Slow beeps change to fast during last 5 sec of exit delay.

PROTECTION ZONES LIST

One or more sensing devices will have been assigned by the installer of your alarm system to protection zones 01–05 in your system. For example, fire sensing devices may have been assigned to zone 05, air conditioning temperature sensors to zone 02, burglary protection sensing devices to zone 03, and so on.

Zone numbers 07, 95 and 96 represent Keypad "Emergency" alarm functions assigned by the installer (see Page 12). Zone number 08 is reserved for Duress signal reporting to the central station. Zone numbers 06 and 10–13 report system conditions.

This chart may be used to record the specific assignments for your system's zones 01–05, 07, 95 and 96. Your installer will assist you in recording this information.

PROTECTION ZONE DESCRIPTIONS

Zone	Description
01*	
02*	
03*	
04*	
05*	
06	– Bell Supervision –
07*	Keypad Emergency Key B (or * & #)
08	– Keypad Duress –
10	–Earth Ground Supervision–
11	– Main Dialer Supervision –
12	– Back-up Dialer Supervision –
13	– Auxiliary Relay Disable –
95*	Keypad Emergency Key A (or 1 & *)
96*	Keypad Emergency Key C (or 3 & #)

* To be filled in

FEDERAL COMMUNICATIONS COMMISSION (FCC) Part 15 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 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 radio or television receiver away from the receiver/control.
- Move the antenna leads away from any wire runs to the receiver/control.
- Plug the receiver/control into a different outlet so that it and the radio or television 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.

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 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.

FEDERAL COMMUNICATIONS COMMISSION (FCC) Part 68 STATEMENT

This equipment complies with Part 68 of the FCC rules. On the front cover of this equipment is a label that contains, among other information, the FCC registration number and ringer equivalence number (REN) for this equipment. If requested, this information must be provided to the telephone company.

This equipment uses the following jacks: An RJ31X is used to connect this equipment to the telephone network.

The REN is used to determine the quantity of devices which may be connected to the telephone line. Excessive RENs on the telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of the RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to the line, as determined by the total RENs, contact the telephone company to determine the maximum REN for the calling area.

If this equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. If advance notice is not practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe necessary.

The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make the necessary modifications in order to maintain uninterrupted service.

If trouble is experienced with this equipment, please contact the manufacturer for repair and warranty information. If the trouble is causing harm to the telephone network, the telephone company may request you remove the equipment from the network until the problem is resolved.

There are no user serviceable components in this product, and all necessary repairs must be made by the manufacturer. Other repair methods may invalidate the FCC registration on this product.

This equipment cannot be used on telephone company-provided coin service. Connection to Party Line Service is subject to state tariffs.

This equipment is hearing-aid compatible.

When programming or making test calls to an emergency number, briefly explain to the dispatcher the reason for the call. Perform such activities in the off-peak hours; such as early morning or late evening.

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.
- 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 105°F (32° to 40°C), the detection performance can decrease.

(continued)

**WARNING! THE LIMITATIONS OF THIS ALARM SYSTEM
(continued)**

- 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 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.

Wireless transmitters (used with some systems) are designed to provide long battery life under normal operating conditions. Longevity of batteries may be as much as 4 to 7 years, depending on the environment, usage, and the specific wireless device being used. External factors such as humidity, high or low temperatures, as well as large swings in temperature, may all reduce the actual battery life in a given installation. This wireless system, however, can identify a true low battery situation, thus allowing time to arrange a change of battery to maintain protection for that given point within the system.

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.

SERVICING INFORMATION

Your local authorized service representative is the person best qualified to service your alarm system. Arranging a regular program with that person is advisable. Your local service representative is:

NAME: _____ PHONE: _____

ADDRESS: _____

ADEMCO ONE YEAR LIMITED WARRANTY

Alarm Device Manufacturing Company, a Division of Pittway Corporation, and its divisions, subsidiaries and affiliates ("Seller"), 165 Eileen Way, Syosset, New York 11791, warrants its 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 product 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 12 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 otherwise; 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, fire or other events 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.



A Division of Pittway Corporation

165 Eileen Way, Syosset, New York 11791

Copyright © 1996 PITTWAY CORPORATION

N8031 6/96

ADEMCO

5110XM

User's Manual

**Fire Alarm
Control/Communicator**

TABLE OF CONTENTS

SYSTEM OVERVIEW	3
General	3
Zones	3
Fire & Emergency Protection	4
Alarms	4
Memory of Alarm	4
ABOUT THE BUILT-IN INDICATORS	5
ABOUT THE OPTIONAL KEYPADS	7
General	7
Keypad Displays	7
FUNCTIONS OF THE REMOTE KEYPAD	8
FIXED-WORD KEYPAD DISPLAYS	9
REMOTE KEYPAD USER CODES	10
General	10
To Assign, Change, or Delete User Codes	10
REMOTE KEYPAD EMERGENCY KEYS	11
Using Emergency Keys	11
Emergency Key Programmed Functions	12
NORMAL STANDBY OPERATION	13
FIRE ALARM PROTECTION	14
General	14
In case of Fire	14
Silencing and Resetting a Fire Alarm	15
EMERGENCY ALARMS	16
General	16
Silencing and Resetting an Emergency Alarm	16
BYPASSING PROTECTION ZONES	17
SUPERVISORY CONDITIONS	18
General	18
Silencing and Resetting a Supervisory Indication	18
TROUBLE CONDITIONS	19
ACTIVATING A FIRE DRILL TEST	21
QUICK GUIDE TO SYSTEM FUNCTIONS	22
SUMMARY OF AUDIBLE/VISUAL NOTIFICATION	23
PROTECTION ZONES LIST	24
FCC STATEMENTS	25
LIMITATIONS STATEMENT	27
SERVICING INFORMATION	28
WARRANTY	Back Cover

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 instructs you with normal and emergency procedures. Keep this manual in a convenient place so that you can refer to it as necessary.

SYSTEM OVERVIEW

General

Congratulations on your ownership of an Ademco Alarm System. You've made a wise decision in choosing it, for it represents the latest in alarm protection technology today, including microcomputer technology to monitor all system status. Ademco is the world's largest manufacturer of alarm systems and millions of premises are protected by Ademco systems.

Your system is a UL Listed commercial fire alarm control/communicator. It monitors, on an around-the clock basis, the various fire alarm warning, emergency alarm warning and fire sprinkler system supervisory sensors that have been installed in your system. When the control detects an alarm, supervisory, or trouble condition, it automatically triggers an on-premises warning indication and transmits a message to a central station over the telephone line so that appropriate action can be taken. The control features a built-in warning buzzer and LED indicators which provide the on-premises warning indication. In addition, your system may include an optional remote keypad and/or optional external alarm warning sounders which will provide additional on-premises warning indications. Please disregard references to these devices in the text that follows, if they were not installed in your system.

Zones

Your system has five protection zones. Your installer has assigned each of your system's sensing devices to one of these zones. For example, warehouse smoke detectors may have been assigned to zone 01, a fire sprinkler water valve supervisory switch may have been assigned to zone 02, etc.. If a remote keypad was installed in your system, it will display these zone numbers when an alarm, supervisory or trouble condition is detected, so that the nature and location of the fault can be pinpointed..

SYSTEM OVERVIEW

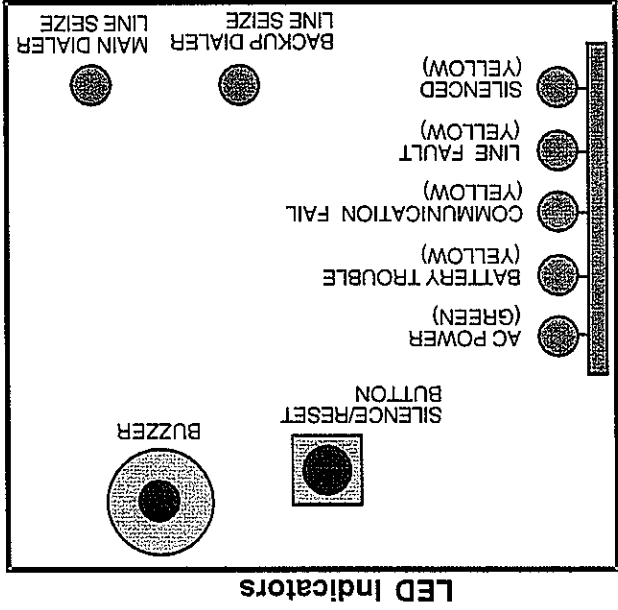
Fire & Emergency Protection The fire and emergency protection portions of your system are always on and will sound an alarm if an alarm condition is detected.

Alarms When an alarm occurs, the control's buzzer, the keypad and external sounders will sound, and a message at the keypad will identify the zone(s) causing the alarm. In addition, an alarm message will be sent to the connected central monitoring station. You may stop the sound by pressing the SILENCE/RESET button at the control, or by entering the OFF sequence (user code + OFF key) at your keypad .

Memory Of Alarm When an alarm, supervisory or trouble condition occurs, the keypad displays the number(s) of the zone(s) that caused the problem, and displays the type of condition present (ex. Fire, Alarm, Supv., Check). The display remains until it is cleared by entering the OFF sequence (user code + OFF key) a second time or by pressing the SILENCE/RESET button a second time if no keypad is present.

ABOUT THE BUILT-IN INDICATORS

The LED indicators, SILENCE/RESET button and WARNING buzzer (shown below) are located on the control's main board inside the control's enclosure. The AC POWER, BATTERY TROUBLE, COMMUNICATION FAIL, LINE FAULT and SILENCED LED indicators are visible through a viewing window on the door of the enclosure. The enclosure door must be opened with the supplied key to gain access to the SILENCE/RESET button.



LED Indicators

- AC POWER.....Lights when AC power is present. Turns off when AC power is low or not present and system is operating from battery power.
- BATTERY TROUBLE.....Lights when battery power is low or disconnected. Turns off when battery is OK.
- COMMUNICATION FAILURE.....Lights when attempts to transmit a message to the central station have failed. Remains until when there are no problems with central station message transmission.
- LINE FAULT.....Lights when either the main or backup phone lines are faulted. Remains until when both phone lines are okay.
- SILENCED.....Lights when the built-in warning buzzer, the remote keypad buzzer and external alarm sounders have been silenced. Otherwise remains until.

Warning Buzzer	Produces slow on/off pulsing sound for fire alarms, steady sound for emergency alarms, and rapid on/off pulsing sound for supervisory and trouble conditions.
Silence/Reset Button	Press to silence the built-in warning buzzer, the remote keypad warning buzzer and the external alarm sounder. A second press resets faulted smoke detectors and resets LED indicators if associated fault conditions have been corrected.
Main Dialer Line Seize	Lights when control is transmitting a message to the central station on the main phone line.
Backup Dialer Line Seize	Lights when control is transmitting a message to the central station on the backup phone line.

ABOUT THE OPTIONAL KEYPADS

General The keypads feature a telephone style (digital) keypad and a Liquid Crystal Display (LCD) which shows the nature and location of all occurrences.

The keypads feature a built-in sounder which emits the same alarm sounds as the controls built-in warning buzzer during alarm conditions.

The keypad's display screen displays the same indications as the control's built-in LED indicators, and in addition, displays the zone number of faulted zones as well as the type of fault (i.e. alarm, supervisory or trouble). The telephone style keypad keys allow entry of commands for silencing the warning sounds, resetting faulted smoke detectors, activating various system tests, etc.

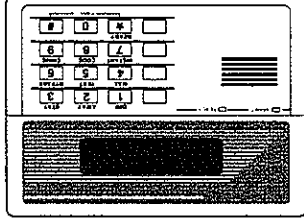
There are two basic types of keypad displays, Alpha and Fixed-Word, either of which may have been used in your system.

• **Alpha Keypad Displays** feature a 2-line, 32 character alphanumeric Liquid Crystal Display (LCD) which can display the nature and location of all occurrences in friendly English.

• **Fixed-Word Keypad Displays** are functionally similar to the Alpha Keypads, except that their LCD display uses pre-designated (fixed) words to identify the nature and location of occurrences.

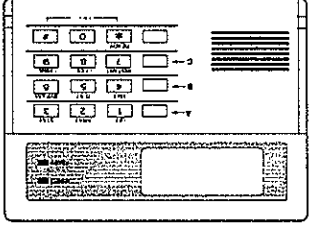
Unless stated otherwise, all commands and procedures described herein apply equally to all keypads.

Alpha Keypad



- 7 -

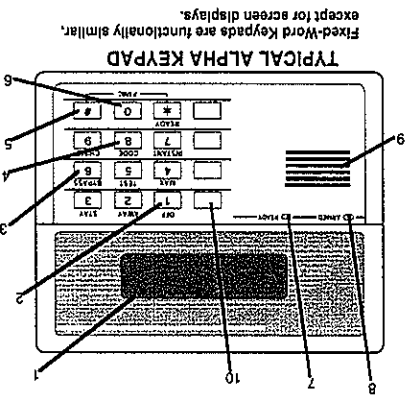
Fixed-Word Keypad



FUNCTIONS OF THE REMOTE KEYPAD

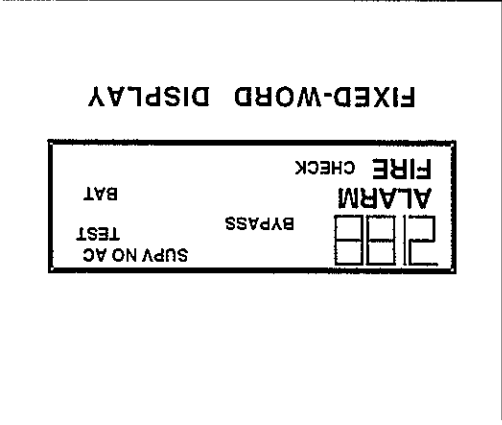
1. **DISPLAY WINDOW:** Displays zone number and system status messages.
2. **OFF Key:** Silences audible alarm, supervisory and trouble sounds, and clears visual display after problem's correction.
3. **BYPASS Key:** Removes individual protection zones from being monitored by the system.
4. **CODE Key:** Used to assign additional 4-digit user codes.
5. **# Key:** Used to activate fire drill.
6. **0-9 Keys:** Used to enter your 4-digit user code, (enter user 2's code + # + 69)
7. **READY INDICATOR:** Not used with this system.
8. **ARMED INDICATOR:** Not used with this system.
9. **INTERNAL SOUNDER:** Sound is: *slow on/off pulsing* for fire alarms, *steady dual-tone* for emergency alarms, and *rapid on/off pulsing* for supervisory and trouble conditions.
10. **A, B, C, EMERGENCY Keys:** Your installer may have programmed these keys for manual activation of fire or emergency alarms. *Note:* Other keys may be available for emergency functions (see REMOTE KEYPAD EMERGENCY KEYS section).

IMPORTANT! When entering codes and commands, sequential key depressions must be made within 2 seconds of one another. If 2 seconds elapses without a key depression, the entry is aborted and must be repeated from its beginning.



TYPICAL ALPHA KEYPAD
Fixed-Word Keypads are functionally similar, except for screen displays.

FIXED-WORD KEYPAD DISPLAYS



- FIRE**
Appears when a fire alarm is detected. Accompanied by a display of the zone # in alarm.
- ALARM**
Appears when any type of alarm is detected. "FIRE" also appears when a fire alarm is detected. Accompanied by a display of the zone # in alarm.
- SUPV**
Appears when a fire sprinkler system supervisory condition is detected. Accompanied by a display of the zone # having the supervisory condition.
- CHECK**
Appears when a fire zone wiring fault is detected at any time. Also appears when certain system problems such as phone line problems are detected. Accompanied by a display of the zone # in trouble.
- AC**
Appears when AC power is present.
- NO AC**
Appears when AC power is low, or not present. System is operating from backup battery power.
- BAT**
Appears when backup battery is low or disconnected.
- TEST**
Appears when the system is operating in one of its test modes (such as the fire drill test mode).
- BYPASS**
Appears when one or more zones have been bypassed and are no longer operational.

REMOTE KEYPAD USER CODES

General

If your system has a remote keypad installed, your installer will have programmed a 4-digit user code (known as User Number 2 code) that can be entered at your keypad to silence/reset alarms, bypass protection zones and activate the fire drill test. This code may also be used to assign up to four other user codes (known as User Number 3-6 codes).

The **User Number 3-6 codes** are intended for users who need limited and/or temporary control over system operation. These codes can perform the same functions as the User Number 2 code *except* for assigning user codes and activating the fire drill test.

To Assign, Change, or Delete User Codes

1. Enter the User Number 2 code and press the **CODE** key.
User Numbers 3-6 cannot assign, change, or delete user codes.
2. Enter a single-digit User Number (2-6) for the user whose code is to be assigned, changed, or deleted.
3. **If assigning or changing a user's code**, enter the new 4-digit code for that user. The keypad will beep once, indicating that the new code has been accepted.
If deleting a user's code, perform steps 1 and 2 and then stop. After a few moments the keypad will beep once, indicating that the existing code has been deleted.

REMOTE KEYPAD EMERGENCY KEYS

**Using
Emergency Keys**
(for manually activating
silent and/or
audible alarms)

Your installer may have programmed the keypad's A, B, or C keys to allow manual activation of fire and/or emergency alarms. The functions that might be programmed are: Fire, Silent Emergency, Audible Emergency, and Personal Emergency. A fire alarm sends a fire alarm message to the central station and uniquely sounds at the control and at keypad(s) and external bells and sirens. A FIRE message plus a zone number (see table on next page) is also displayed on the keypad.

A silent emergency sends a silent alarm signal to the central station, *but there is no audible alarm or visual display.*

An audible emergency sends a signal to the central station and sounds a loud, steady alarm at the control and at your keypad(s) and at any external sounders that may be connected. An ALARM message plus a zone number (see table on next page) is also displayed on the keypad.

A personal emergency alarm sends an emergency message to the central station and sounds at the control and at keypad(s), but not at external bells or sirens. An ALARM message plus a zone number (see table on next page) is also displayed on the keypad.

TO MANUALLY ACTIVATE A FUNCTION AT ANY TIME OF DAY OR NIGHT
(SEE TABLE AND DIAGRAM ON NEXT PAGE)

Press the programmed **A**, **B**, or **C** emergency key for at least two seconds,
or alternately,

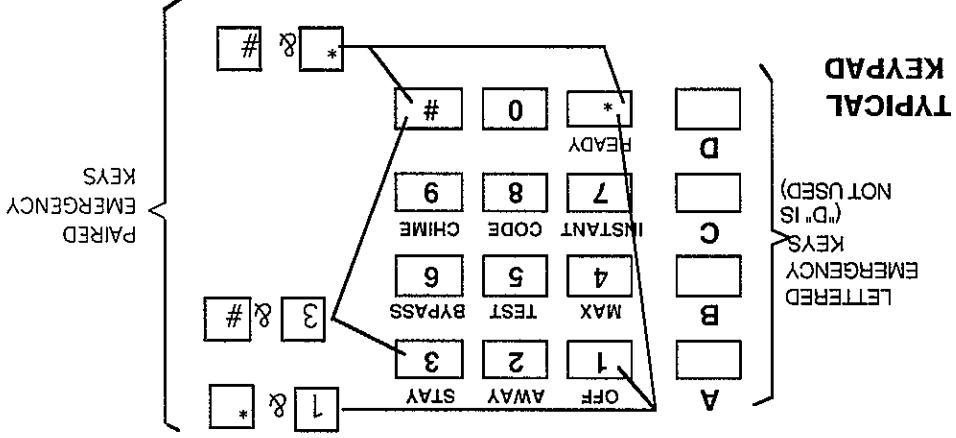
Press *both* keys of the corresponding **1&*** (A), ***&#** (B), or **3&#** (C) emergency key pair at the same time.

REMOTE KEYPAD EMERGENCY KEYS

ZONE NUMBER	PROGRAMMED FUNCTION	EMERG. KEY(S)	CHECK IF ACTIVE
95	FIRE, SILENT, AUDIBLE, PERSONAL	[A]	<input type="checkbox"/>
07	FIRE, SILENT, AUDIBLE, PERSONAL	[B]	<input type="checkbox"/>
96	FIRE, SILENT, AUDIBLE, PERSONAL	[C]	<input type="checkbox"/>
OR			
95	FIRE, SILENT, AUDIBLE, PERSONAL	[1] & [*]	<input type="checkbox"/>
07	FIRE, SILENT, AUDIBLE, PERSONAL	[*] & [#]	<input type="checkbox"/>
96	FIRE, SILENT, AUDIBLE, PERSONAL	[3] & [#]	<input type="checkbox"/>

SEE YOUR INSTALLER AND NOTE HERE THE KEY(S) & FUNCTION(S) PROGRAMMED FOR YOUR SYSTEM

* KEY [D] ON YOUR KEYPAD IS NOT ACTIVE HERE.



NORMAL STANDBY OPERATION

Your system provides the following indications when in normal operation and there are no alarm, supervisory, or trouble conditions present:

- The control's AC POWER LED is lit.
- The control's built-in buzzer and keypad warning buzzer and external alarm sounders are off.
- The Alpha keypad's LCD displays "SYSTEM NORMAL".



- The Fixed-Word keypad's LCD displays "AC".



FIRE ALARM PROTECTION

General

Your system may have sensors which detect fire alarm conditions such as smoke detectors, heat detectors, sprinkler waterflow sensors, etc. You system monitors these sensors 24 hours a day for continuous protection and provides a number of indications when a fire alarm condition is detected.

In Case Of Fire

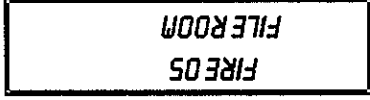
WHEN A FIRE ALARM CONDITION IS DETECTED, EVACUATE ALL OCCUPANTS FROM THE PREMISES IMMEDIATELY AND NOTIFY YOUR LOCAL FIRE DEPARTMENT.

Your system provides the following indications when a fire alarm condition is detected:

- The control's buzzer and keypad produces a slow on/off pulsing sound.
- The external fire alarm sounders produce either:

a steady sound or a pulsing sound,

- depending on what your installer selected (check the appropriate box).
- The keypad LCD displays the word "FIRE" (Alpha) or "FIRE ALARM" (Fixed-Word) along with the number of the zone in alarm.



- A fire alarm message is sent to the central station.

If your system has a keypad with a FIRE alarm emergency key, then these indications may be manually triggered by pressing this key for at least 2 seconds, (or the corresponding emergency key pair), should you become aware of a fire emergency before your detectors sense the problem.

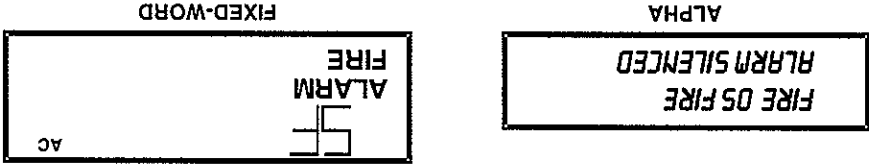
FIRE ALARM PROTECTION

Silencing
and Resetting
a Fire Alarm

To silence the control's buzzer, the keypad buzzer and external alarm sounds:

Press the control's SILENCE/RESET button or enter your User Code followed by the OFF key at the keypad.

The control's "SILENCED" LED lights and the keypad's LCD will display "FIRE ALARM SILENCED" (Alpha) or "SF" (Fixed-Word) to indicate that a fire alarm condition may still be present. The Alpha keypad will display the number of the zone in alarm as a Memory of Alarm indication. The fixed-word keypad alternates the zone number in alarm with the "SF" display.



To reset your system's smoke detectors and the keypad Memory of Alarm display (after heat or smoke is no longer present):

First determine and correct the cause of the fire alarm condition (e.g., fan smoke from the smoke detector chamber, reset the pull station, etc.) and then:

Press the control's SILENCE/RESET button again or re-enter your User Code plus the OFF key at the keypad.

EMERGENCY AND 24 HOUR NON-FIRE ALARMS

General

Your system may have sensors which detect non-fire related alarm conditions, such as the unauthorised opening of a stock room door, the triggering of an HVAC (Heating, Ventilating, or Air Conditioning) temperature sensor, the pressing of a holdup alarm button, etc. Your system may provide some or all of the indications listed below, depending on what your installer selected to occur when one of those conditions is detected.

If your system's keypad has any active emergency alarm key(s) (see *REMOTE KEYPAD EMERGENCY KEYS* section) these indications may be manually triggered by pressing the appropriate emergency key.

- The control's buzzer and keypad both produce a steady sound*.
- The external alarm sounders produce a steady sound*.

- The keypad LCD (Fixed-Word) displays the word "ALARM" and the zone number in alarm. Alpha keypads also display a description of the zone in alarm*.



FIXED-WORD



ALPHA

*Except for silent alarms

- An emergency alarm message is sent to the central station.
- To reset the keypad alarm display and turn off the SILENCED LED at the control: First correct the cause of the alarm condition, and then:

Press the control's SILENCE/RESET button or enter your User Code + the OFF key.

Press the SILENCE/RESET button again or re-enter your User Code, followed by the OFF key.

Silencing and Resetting an Emergency Alarm

The keypad's LCD will display the number of the zone in alarm as a Memory of Alarm indication.

BYPASSING PROTECTION ZONES

Using the 6 BYPASS Key

This feature can only be used if a remote keypad has been installed with the system. User code numbers 2-6 can only be used to bypass emergency and 24 hour non-fire protected zones.

This key is used when you want to bypass one or more zones, thus leaving them intentionally unprotected. For example, a protected stock room door can be bypassed when it is necessary to open the door without causing an alarm. To

1. Enter your user code and press the **BYPASS** key.
2. Enter zone number(s) for the zone(s) to be bypassed (e.g., 02, 03, etc.). *Single digit zone numbers must be preceded by a zero.*
3. When finished, the keypad will momentarily display a "Bypass" message for each bypassed zone number. Wait for these zones to be displayed, to confirm their bypass.
4. A bypass message is sent to the central station.

All emergency zone bypasses are removed when an OFF sequence (user code plus OFF) is performed.

TYPICAL MOMENTARY DISPLAYS OF BYPASSED ZONE



SUPERVISORY CONDITIONS

General

If your building has a fire sprinkler system, your installer may have installed a sensor which monitors the sprinkler system (e.g., to determine whether the main water gate valve is open or that there is adequate water pressure, etc.). Your system provides the following indications when a supervisory condition is detected.

CALL YOUR INSTALLER IMMEDIATELY FOR SERVICE WHEN A SUPERVISORY INDICATION APPEARS!

- The control's buzzer and the keypad buzzer both produce a rapid on/off pulsing sound.
- The keypad LCD (Fixed-Word) displays the word "SUPV" and the number of the zone with the supervisory condition. Alpha keypads also display a description of the zone.



ALPHA



FIXED-WORD

- A supervisory message is sent to the central station.

To silence the control and keypad

buzzers:

Press the control's SILENCE/RESET button or enter your User Code, + the OFF key

Press the SILENCE/RESET button again or re-enter your User Code, followed by the OFF key.

To reset the keypad supervisory display: First have the cause of the indication corrected, and then:

The keypad's LCD will display the number of the zone having the supervisory condition as a Memory indication.

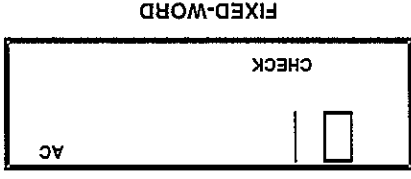
Silencing and Resetting a Supervisory Indication

TROUBLE CONDITIONS

General

Your system monitors each of your protection zones and various aspects of telephone lines, etc., which compromise proper alarm signaling operation. Your system provides the following indications when one of these problems is detected. CALL YOUR INSTALLER IMMEDIATELY FOR SERVICE, WHEN ANY OF THESE INDICATIONS APPEAR FOR A CONDITION THAT CANNOT BE CORRECTED BY YOU!

- The control's buzzer and keypad produce a rapid pulsing sound.
- The control's AC POWER LED turns off and the keypad LCD displays "AC LOSS" (Alpha) or "NO AC" (Fixed-Word) when AC power is low or not present.
- The control's BATTERY TROUBLE LED lights and the keypad LCD displays "SYSTEM LO BAT" (Alpha) or "BAT" (Fixed-Word) when your system's back-up battery is low or disconnected.
- The control's COMM FAIL LED lights and the keypad LCD displays "COMM FAILURE" (Alpha) or "FC" (Fixed-Word) when attempts to send a message to the central station have failed.
- The keypad LCD (Fixed-Word) displays "CHECK" accompanied by a protection zone number (1-5) or system zone number (6-12) when there is a zone or system related problem. Alpha keypads also display a description of the zone. The control's LINE FAULT LED lights if the problem is with the telephone lines.



ALPHA

FIXED-WORD

TROUBLE CONDITIONS

- A trouble message is sent to the central station.
Note: If your keypad LCD displays "0C" for more than 5 minutes, then it is not receiving signals from the control. CALL YOUR INSTALLER IMMEDIATELY FOR SERVICE.

Silencing and Resetting a Trouble Indication

To silence the control and keypad buzzers:

Press the control's SILENCE/RESET button or enter your User Code, + the OFF key.

The keypad's LCD will display the number of the zone in trouble as a Memory Indication.

To reset the keypad trouble display: First have the cause of the trouble condition corrected, and then:

Press the SILENCE/RESET button again or re-enter your User Code, followed by the OFF key.

ACTIVATING A FIRE DRILL TEST

Using the **# + 6 + 9** Keys
 This test requires that a keypad and external fire alarm sander be installed with the system.

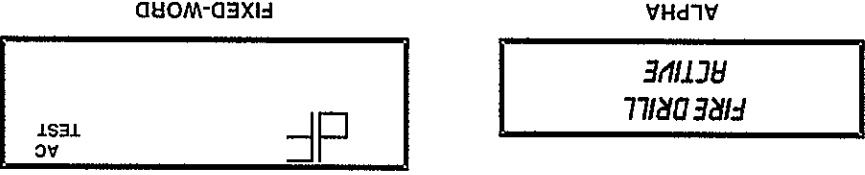
Note: Only User Number 2's code can activate this test.

This test activates the external fire alarm sounders for the purpose of conducting a fire alarm drill. Your system will remain operational for fire alarm signaling while this test is active (although no message will be sent to the central station unless an actual alarm occurs).

This feature can be activated only while no alarm, supervisory, or trouble condition is present.

Enter User Number 2's code, then press the # + 6 + 9 keys.

The keypad LCD will display "FIRE DRILL ACTIVE (Alpha) or "TEST dF" (Fixed-Word) and the external fire alarm sounders will produce either a steady or a pulsing sound while this test is active, depending on what your installer selected.



• To terminate the Fire Drill Test:

Enter any User Code, followed by the OFF key.

Your system will also automatically terminate this test if an alarm, supervisory or trouble condition is detected while it is activated.

QUICK GUIDE TO SYSTEM FUNCTIONS

FUNCTION	PROCEDURE	COMMENTS
Silence Alarm, Supervisory or Trouble sounds	Press the SILENCE/RESET button or Enter user Code + OFF key.	SILENCED LED lights. Memory of fault remains until cleared. Keypad displays # of faulted zone.
Reset Smoke Detectors & Displays	Press the SILENCE/RESET button a second time or Re-enter user Code + OFF key.	Will reset only if fault corrected.
Manually Trip Emergency Alarms	Press key [A], [B], or [C] for at least 2 sec., or press keys [1]&[Q], or [Q]&[#], or [3]&[#], both at same time.	Key(s) must be enabled by installer.
Bypass Emergency Zone(s)	To bypass, enter user code + BYPASS key + zone number(s) (use 2-digit entries). To remove bypass, enter user code + OFF key.	Bypassed zones will not cause an alarm if violated.
Fire Drill Test	To activate: Enter User Number 2's code + # + 6 + 9. To turn off: Enter any user code + OFF key.	Activates external fire alarm sounders.
Assign, change, or delete user code.	To assign or change: Enter User Number 2's code + CODE key + user number (2-6) + new code. To delete: Enter User Number 2's code + CODE key + user number (3-6) and stop. <i>Note:</i> User Number 2 can change but not delete his/her own code.	

SUMMARY OF AUDIBLE/VISUAL NOTIFICATION ALPHA & FIXED-WORD DISPLAY KEYPADS

SOUND	CAUSE	DISPLAY (Fixed-Word displays are shown in parentheses)
SLOW PULSING Keypad and, as selected by installer: <input type="checkbox"/> SLOW PULSING or <input type="checkbox"/> STEADY External,	a. FIRE ALARM b. FIRE DRILL	a. FIRE plus number and descriptor of zone in alarm (FIRE ALARM plus zone #). b. FIRE DRILL ACTIVE (TEST DF)
STEADY Keypad & External	a. AUDIBLE EMERGENCY ALARM	a. ALARM plus number and descriptor of zone in alarm (ALARM plus zone #).
RAPID PULSING Keypad	a. SUPERVISORY b. TROUBLE, Fire zone problem c. TROUBLE, System problem	a. SUPV plus number and descriptor of zone with SUPV condition (SUPV plus zone #). b. CHECK plus number and descriptor of zone (CHECK plus zone #). c. AC LOSS (NO AC), or SYSTEM LOW BAT (BAT), or COMM FAILURE (FC) when associated condition detected.

PROTECTION ZONES LIST

One or more sensing devices will have been assigned by the installer of your alarm system to protection zones 01-05 in your system. For example, fire sensing devices may have been assigned to zone 05, air conditioning temperature sensors to zone 02, and so on.

Zone numbers 07, 95 and 96 represent Keypad "emergency" alarm functions assigned by the installer. Zone numbers 06 and 10-13 report system conditions.

This chart may be used to record the specific assignments for your system's zones 01-05, 07, 95 and 96. Your installer will assist you in recording this information.

PROTECTION ZONE DESCRIPTIONS

Zone	Description
01*	
02*	
03*	
04*	
05*	
06	- Bell Supervision -
07*	Keypad Emergency Key B (or: * & #)
10	- Earth Ground Supervision -
11	- Main Dialer Supervision -
12	- Back-up Dialer Supervision -
13	- Auxiliary Relay Disable -
95*	Keypad Emergency Key A (or: 1 & *)
96*	Keypad Emergency Key C (or: 3 & #)

* To be filled in

FEDERAL COMMUNICATIONS COMMISSION (FCC) Part 15 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 Part 15 of FCC Rules, which are designed to provide reasonable protection against 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 radio or television receiver away from the receiver/control.
 - Move the antenna leads away from any wire runs to the receiver/control.
 - Plug the receiver/control into a different outlet so that it and the radio or television 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.

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 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.

FEDERAL COMMUNICATIONS COMMISSION (FCC) Part 68 STATEMENT

This equipment complies with Part 68 of the FCC rules. On the front cover of this equipment is a label that contains, among other information, the FCC registration number and ringer equivalence number (REN) for this equipment. If requested, this information must be provided to the telephone company.

This equipment uses the following jacks: An RJ31X is used to connect this equipment to the telephone network. The REN is used to determine the quantity of devices which may be connected to the telephone line. Excessive RENs on the telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of the RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to the line, as determined by the total RENs, contact the telephone company to determine the maximum REN for the calling area.

If this equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. If advance notice is not practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe necessary. The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make the necessary modifications in order to maintain uninterrupted service.

If trouble is experienced with this equipment, please contact the manufacturer for repair and warranty information. If the trouble is causing harm to the telephone network, the telephone company may request you remove the equipment from the network until the problem is resolved. There are no user serviceable components in this product, and all necessary repairs must be made by the manufacturer. Other repair methods may invalidate the FCC registration on this product. This equipment cannot be used on telephone company-provided coin service. Connection to Party Line Service is subject to state tariffs. This equipment is hearing-aid compatible.

When programming or making test calls to an emergency number, briefly explain to the dispatcher the reason for the call. Perform such activities in the off-peak hours; such as early morning or late evening.

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.
- 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 105°F (32° to 40°C), the detection performance can decrease.

(continued)

Your local authorized service representative is the person best qualified to service your alarm system. Arranging a regular program with that person is advisable. Your local service representative is:

NAME: _____
PHONE: _____
ADDRESS: _____

SERVICING INFORMATION

(continued) WARNING! THE LIMITATIONS OF THIS ALARM SYSTEM

- 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 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.

Wireless transmitters (used with some systems) are designed to provide long battery life under normal operating conditions. Longevity of batteries may be as much as 4 to 7 years, depending on the environment, usage, and the specific wireless device being used. External factors such as humidity, high or low temperatures, as well as large swings in temperature, may all reduce the actual battery life in a given installation. This wireless system, however, can identify a true low battery situation, thus allowing time to arrange a change of battery to maintain protection for that given point within the system.

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.

ADMCO ONE YEAR LIMITED WARRANTY

Alarm Device Manufacturing Company, a Division of Pittway Corporation, and its divisions, subsidiaries and affiliates ("Seller"), 165 Eileen Way, Syosset, New York 11791, warrants its 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 product 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 12 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 otherwise; 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, fire or other events 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.

N8028 4/96

-30-

A Division of Pittway Corporation
165 Eileen Way, Syosset, New York 11791
Copyright © 1995 PITTWAY CORPORATION

