

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.

5140XM

COMMERCIAL FIRE & BURGLARY ALARM SYSTEM

USER'S MANUAL

ADEMCO

N6020 8/92

TABLE OF CONTENTS

INTRODUCTION	3
SYSTEM OVERVIEW	4
FIRE & BURGLARY PROTECTION	4
BURGLARY SYSTEM ENTRY/EXIT DELAYS	4
USER SECURITY CODES	5
CONSOLE SOUNDS	5
SELF-HELP FEATURE	5
FIRE ALARM SYSTEM OPERATION	6
CONSOLE FIRE FUNCTIONS	6
NORMAL STANDBY OPERATION	7
IN CASE OF FIRE	7
SILENCING/RESETTING FIRE ALARMS	7
SUPERVISORY CONDITIONS	8
BYPASSING FIRE ZONES	8
ACTIVATING FIRE DRILL TEST	9
BURGLARY ALARM SYSTEM OPERATION	10
CONSOLE BURGLARY FUNCTION	10
CHECKING FOR OPEN BURGLARY ZONES	12
Displaying All Zone Descriptors	12
BYPASSING BURGLARY PROTECTION ZONES	13
Quick Bypass Feature	13
Displaying Bypassed Zones	13
ARMING PERIMETER ONLY (STAY/INSTANT)	14
ARMING ALL PROTECTION (AWAY/MAXIMUM)	15
DISARMING THE SYSTEM AND SILENCING ALARMS	16
DURESS CODE	16
CHIME MODE	17
TESTING THE BURGLARY SYSTEM	17
FIRE & BURGLARY COMMON FEATURES	18
VIEWING CENTRAL STATION MESSAGES	18
PANIC KEYS	18
ADDING, CHANGING & DELETING TEMPORARY USER CODES	19
TROUBLE CONDITIONS	20
BYPASSING SYSTEM ZONES & SYSTEM OUTPUTS	21
QUICK GUIDE TO SYSTEM FUNCTIONS	22
5140XM EVENT LOGGING PROCEDURES	23
SUMMARY OF AUDIBLE NOTIFICATIONS	24
GLOSSARY	25
PROTECTION POINT DESCRIPTIONS	25

About This Manual

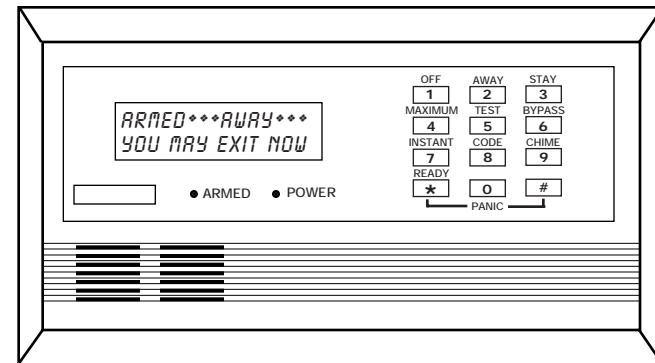
This manual is a step-by-step guide that will acquaint you with the system's features and benefits. It defines the components and their functions, describes their operation, and acquaints you with normal and emergency procedures. Refer to the GLOSSARY at the back of this manual for definitions of terms used throughout.

INTRODUCTION

Congratulations on your ownership of a 5140XM Alarm System. You've made a wise decision in choosing it, for it represents the latest in fire and security protection technology today.

Depending on your installation, your system may offer you up to three forms of protection: fire warning, burglary and emergency. To realize the system's full potential, it is important that you feel comfortable in operating it. Your system consists of at least one console which provides full control of system operation and various fire warning sensors such as smoke and heat detectors which provide early fire warning protection. Your system may also include various security sensors such as door/window contacts and passive infrared detectors which provide perimeter and interior burglary protection.

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



THE ALPHA DISPLAY CONSOLE features a multifunction, backlit 12-key digital keypad, and uses a 2-line, 32-character fully programmable alphanumeric Liquid Crystal Display (LCD) which displays the nature and location of all occurrences in friendly English. Console display backlighting is programmable to always stay on or to light only when a key is pressed, then turn off a few minutes later. A self-help feature is also incorporated, which, when activated, will display abbreviated instructions for the key that has been pressed. The console also has a built-in sounder.

SYSTEM OVERVIEW

FIRE & BURGLARY PROTECTION

One or more sensing devices will have been assigned by the installer of your alarm system to each of the various fire and burglary protection zones in your system (although not every zone may have been used). For example, stockroom smoke detectors may have been assigned to zone 01, hallway fire pull stations to zone 02, the sensing device on your Entry/Exit door to zone 03, sensing devices on store front windows to zone 04 and so on. These numbers will appear on the console display window along with an alpha descriptor for that zone (if programmed), when the respective zone is faulted.

The fire portion of your alarm system is always on. When a fire alarm condition is detected, the console will produce an interrupted sound and the external fire warning sounders will produce either a continuous or interrupted sound depending on which was selected by your installer. A message will appear in the console display window that identifies the zone(s) causing the fire alarm. In addition, if your system is connected to a central monitoring station, a fire alarm report will be sent to that monitoring station. Refer to the fire alarm system sections of this manual for a description of procedures for silencing fire alarms, bypassing fire zones and activating a fire drill test.

The burglary portion of your alarm system (if used) must be armed before it will sense burglary alarm conditions. When an alarm occurs, both the console and the external burglary alarm sounder will produce a continuous sound. A message will appear in the console display window that identifies the zone(s) causing the burglary alarm and a burglary alarm report will be sent to the central monitoring station (if your system is so connected). Disarming the system will stop alarm sounding. Your system provides four modes of burglary protection: STAY, AWAY, INSTANT and MAXIMUM and even lets you BYPASS selected zones of protection while leaving the rest of the burglary system armed. The system also provides a CHIME mode, for alerting users to the opening and closing of doors and windows while the system is disarmed. Refer to the burglary alarm section of this manual for a description of procedures for using these features.

SUMMARY OF ARMING MODES

Mode	Features For Each Arming Mode			
	Exit Delay	Entry Delay	Perimeter Armed	Interior Armed
AWAY	Yes	Yes	Yes	Yes
STAY	Yes	Yes	Yes	No
INSTANT	Yes	No	Yes	No
MAXIMUM	Yes	No	Yes	Yes

BURGLARY SYSTEM ENTRY/EXIT DELAYS

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

Record your delay times here:

Entry Delay 1: _____
 Entry Delay 2: _____
 Exit Delay 1: _____
 Exit Delay 2: _____

Delays may be no more than 60 seconds for Exit delay or 45 seconds for Entry delay for a UL Listed Commercial burglary application.

SYSTEM OVERVIEW

USER SECURITY CODES

The 5140XM allows up to 99 4-digit user security codes to be programmed. These codes are entered at the console's keypad and are used to operate the system.

When programmed, each code is assigned an authority level which determines the system functions that code can perform. For example, some codes can be given authority to arm/disarm the burglary system and to bypass fire and burglary zones. Other codes may be restricted to arm/disarming the burglary system only.

There are six authority levels: master, manager, operator A, operator B, operator C & duress. Generally speaking, the master code is intended to be known and used only by the building owner. The manager code is intended to be known and used only by the building superintendent, the building security officer or the like. These codes allow full control over system operation. The operator's codes are intended to be used by individuals who need limited and/or temporary control over system operation. The duress code allows a silent panic report to be transmitted to the central station when the user is forced to arm or disarm under threat. Refer to the "ADDING, CHANGING AND DELETING USER CODES" section for detailed descriptions of the functions that these codes can perform.

All codes can be used interchangeably when performing system operations within the limits of each code's authority level. For example, the burglary system may be armed with an operator's code and then disarmed with a master or manager's codes. Note that an operator C code can only disarm the burglary system if it was used to arm the system.

Your installer will have programmed at least one master code and possibly several other types of codes at installation time. Make sure you have a record of the codes that were programmed. The master and manager's codes may be used to add, change or delete additional codes for temporary users on an "as needed" basis. Refer to the "ADDING, CHANGING AND DELETING USER CODES" section for more information.

BASIC PROCEDURE

To perform most system functions, simply enter your code, then press the key for the desired function. To disarm the burglary system or clear the console display, enter your code, then press the OFF [1] key. This is referred to in this manual as the "OFF" sequence.

NOTE: if "Quick Arming" was programmed by the installer, the [#] key can be pressed in place of the security code when arming the burglary system. The security code must still be used to disarm the system.

CONSOLE SOUNDS

The console has a built-in sounder which will produce an interrupted sound for fire alarms and a continuous sound for burglary alarms. This sounder will also "beep" during certain system functions, such as when depressing keys to operate the system (to acknowledge the key press), during entry/exit delay times and during chime mode. Some of these sounds can be optionally suppressed. Ask your installer if this has been done.

SELF-HELP FEATURE

Abbreviated user's instructions are built into the system that can be easily viewed on the alpha console's message display screen. This feature will prove particularly useful if this manual is not conveniently accessible when you need to perform a seldom used system procedure with which you are not familiar.

To view the abbreviated instructions, simply press and hold down the function key of interest until the description starts to appear (about 5 seconds) and then release it. Refer to the FUNCTIONS OF THE CONSOLE section for detailed descriptions of each key function.

FIRE ALARM SYSTEM OPERATION

CONSOLE FIRE FUNCTIONS

1. **ALPHA DISPLAY WINDOW:** A 2-line, 32-character Liquid Crystal Display (LCD). Displays protection point identification and system status messages, and user instructions.
2. **OFF KEY:** Silences alarms and audible trouble indicators, and clears visual displays after the problem has been corrected.
3. **BYPASS KEY:** Removes individual protection zones from being monitored by the system. Displays previously bypassed protection zones.
4. **# KEY:** Is used to activate the Fire Drill Function.
5. **KEYS 0-9:** Used to enter your individual security code(s).
6. **CODE KEY:** Allows the entry of additional security codes that can be given to other users of the system.
7. **READY KEY:** Displays all faulted protection zones. This key is also used to display all zone descriptions that have been programmed for your system, by holding this key down for at least 5 seconds.
8. **POWER INDICATOR:** (GREEN) Lit when primary power is on. If off, system is operating on its backup battery power. CALL YOUR INSTALLER IMMEDIATELY.
9. **INTERNAL SOUNDER:** Source of audible internal warning and confirmation sounds, as well as alarms (see "Summary of Audible Notifications").

FIRE ALARM SYSTEM OPERATION

NORMAL STANDBY OPERATION

Your fire alarm system is on 24 hours a day for continuous protection. It will provide the following visual and audible indications while in the normal standby mode (i.e.: no alarm, supervisory or trouble conditions are present):

1. The console sounder and all external fire sounders will be silenced

IN CASE OF A FIRE

In the event that a fire emergency occurs, the strategically located smoke and heat detectors will automatically send signals to your control panel which will trigger the indications described below. Should you become aware of the fire emergency before your detectors sense the problem, go to your nearest console and manually initiate an alarm by pressing the panic key pair assigned as FIRE EMERGENCY (if programmed by your installer) and hold down for at least 2 seconds. When fire alarm sounds are heard, evacuate all occupants from the premises immediately.

SILENCING/RESETTING FIRE ALARMS

1. To silence the console and external sounder fire alarm sounds, enter your security code and press the OFF [1] key. The display window will continue to display the number of the zone(s) in alarm and will also display "FIRE ALARM SILENCED" to indicate that a fire alarm condition may still be present.

2. The console green POWER indicator should be lit indicating that AC power is present
3. The console display window will display a message such as "XYZ ALARM COMPANY" (or "DISARMED - READY TO ARM" if your system provides burglary protection) which is programmed by your installer at installation time.

1. The console sounder will produce an interrupted sound and the external fire sounders will produce either an interrupted or a continuous sound depending on what was selected by your installer at installation time.
2. The console display window will display the word "FIRE" and the number and alpha descriptor of the zone which is in alarm. The display window will sequence through other zone numbers if more than one zone is in alarm.
3. An alarm signal will be sent to a central monitoring station (if your system was installed with this capability).

2. To reset your smoke detectors and clear the console alarm display indications, first locate and correct the cause of the fire alarm condition (i.e.: reset pull stations, fan smoke out of smoke detector chamber, etc.) and then re-enter your user code + OFF [1].

NOTE: Detectors will not reset and the alarm display will not clear while the fire alarm condition remains.

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

FIRE ALARM SYSTEM OPERATION

SUPERVISORY CONDITIONS

If your building has a fire sprinkler system installed, your installer may have installed a sensor which monitors the sprinkler system (i.e.: to determine whether the main water gate valve is open or that there is adequate water pressure, etc.). When the control panel detects a fault on this sensor, it will provide an audible and visual "supervisory" indication as described below. When this indication appears, **CALL YOUR INSTALLER FOR SERVICE IMMEDIATELY**. The audible indication can be silenced as described below. Other conditions for which your system might require service are described in the "TROUBLE CONDITIONS" section near the end of this manual.

1. The console sounder will produce a rapid beeping sound. The external fire sounders will not be on. The console display window will display "SUPV" along with the number and alpha descriptor for the zone which has the supervisory condition. A message will be sent to the central monitoring station (if your system was installed with this capability)
2. Press any key to silence the console sounder
3. To clear the console display, first have your installer correct the cause of the supervisory condition. Then enter your security code and press the OFF [1] key. **NOTE:** the display will not clear while the condition remains.

BYPASSING FIRE ZONES

NOTE: Ask your installer if your system was set up to allow fire zones to be bypassed.

This feature is used to disable the monitoring of one or more fire zones when, for example, the smoke detectors on a zone are to be serviced. If enabled, this feature can only be used by a master user. Your system also allows other "system" zones and "system" outputs which are related to your fire protection to be bypassed. See **BYPASSING SYSTEM ZONES AND SYSTEM OUTPUTS** in the "COMMON FEATURES" section for more information.

1. Enter the master code. Then press **BYPASS [6]** and enter the number(s) of zone to be bypassed. All single digit zone numbers must be preceded by a zero (e.g.: enter 01 when bypassing zone 1)
2. All bypassed zones will be sequentially displayed when you are finished entering the number zones to be bypassed. The console will then display a bypass message as a reminder that one or more zones is bypassed.
3. Zones which have been bypassed can be displayed by entering any code and then pressing the **BYPASS [6]** key. Bypassed zones will then be displayed sequentially.
4. All fire zone bypasses are removed when an **OFF** sequence (security code + **OFF**) is performed.

FIRE ALARM SYSTEM OPERATION

ACTIVATING A FIRE DRILL TEST

Use this test to activate the external fire bells for the purposes of conducting a fire drill. This test can only be performed by your installer or by the master user and should be conducted at a frequency determined by the local authority having jurisdiction. The fire and burglary portions of your system will continue to be operational for alarm signalling while this test is active (if burglary protection is installed, this test must be run with the system disarmed). Use the following steps to perform this test.

1. Enter the master code. Then press the [#] key followed by the digits "69".
2. The console will display "FIRE DRILL ACTIVE" and the external fire bells will produce either a steady or interrupted sound (depending on what your installer selected at installation time) while this test is active.
3. Turn off this test by entering any user's code and pressing the **OFF [1]** key. Your system will automatically terminate this test if a fire alarm condition is detected.

BURGLARY ALARM SYSTEM OPERATION

CONSOLE BURGLARY FUNCTIONS

1. **ALPHA DISPLAY WINDOW:** A 2-line, 32-character Liquid Crystal Display (LCD). Displays protection point identification and system status messages, and user instructions.
2. **OFF KEY:** Disarms the burglary portion of the system, silences alarms and audible trouble indicators, and clears visual displays after the problem has been corrected.
3. **AWAY KEY:** Completely arms both perimeter and interior burglary protection for backup protection by sensing an intruder's movements through protected interior areas as well as guarding doors, windows, etc. Late arrivals can enter through an entry delay zone without causing an alarm if the system is disarmed before the entry delay time expires.
4. **STAY KEY:** Arms the perimeter burglary protection, guarding doors, windows and other perimeter protection points, and sounds an alarm if one is opened. Interior protection is not armed. Late arrivals can enter through an entry delay zone without causing an alarm if the system is disarmed before the entry delay time expires.
5. **TEST KEY:** Tests the burglary system and burglary alarm sounder if disarmed.
6. **BYPASS KEY:** Removes individual protection zones from being monitored by the system. Displays previously bypassed protection zones.
7. **CHIME KEY:** Turns on/off the CHIME mode so that any entry through a delay or perimeter zone while the system is disarmed causes a tone to sound at the Console(s).
8. **# KEY:** Permits ARMING of the system without use of a security code ("Quick Arm", if programmed to do so at installation time).
9. **KEYS 0-9:** Used to enter your individual security code(s).
10. **CODE KEY:** Allows the entry of additional security codes that can be given to other users of the system.
11. **READY KEY:** When depressed prior to arming the system, the console will display all faulted zones. This key will also display all zone descriptors that have been programmed for your system, by holding the key down for at least 5 seconds.
12. **INSTANT KEY:** Arms in manner similar to STAY mode, but turns off the entry delay period, offering greater security while inside and not expecting any late arrivals. An alarm will occur immediately upon opening any perimeter protection point, including entry delay zones.
13. **MAXIMUM KEY:** Arms in manner similar to AWAY mode, but eliminates the entry delay period, thus providing maximum protection. An alarm will occur immediately upon opening any protection point, including entry delay zones.
14. **POWER INDICATOR:** (GREEN) Lit when primary power is on. If off, system is operating on its backup battery power. CALL YOUR INSTALLER IMMEDIATELY.
15. **ARMED INDICATOR:** (RED) Lit when the system has been armed (STAY, AWAY, INSTANT or MAXIMUM).
16. **INTERNAL SOUNDER:** Source of audible internal warning and confirmation sounds, as well as alarms (see "Summary of Audible Notifications").

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

BURGLARY ALARM SYSTEM OPERATION (IF INSTALLED)

CHECKING FOR OPEN BURGLARY ZONES

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

PROCEDURE

1. If the Not Ready message is displayed prior to arming, check for open zones by depressing and releasing the **READY** [*] key (do not enter code first).
2. All open protection points will be displayed. These points must be either closed or bypassed before the system can be armed. The Ready message will be displayed[†] when all protection zones have been either closed or bypassed.

DISPLAYING ALL ZONE DESCRIPTORS

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

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

BURGLARY ALARM SYSTEM OPERATION (IF INSTALLED)

BYPASSING BURGLARY PROTECTION ZONES

(USED FOR ARMING SYSTEM WITH ONE OR MORE ZONES SELECTIVELY UNPROTECTED) This feature can be used by a master, manager or operator A user.

PROCEDURE

1. System must be disarmed first. Enter security code.
2. Press **BYPASS** [6] and enter Zone Number(s) of zones to be bypassed (e.g., 01, 02, 03, etc.). **Important!** All single-digit zone numbers must be preceded by a zero (example, enter 01 for zone 1).
3. When finished entering all zone numbers to be bypassed, wait for bypassed zones to be sequentially displayed before arming.
QUICK BYPASS FEATURE:
To automatically bypass **all** open (faulted) burglary zones, enter the security code, then press **BYPASS**, then press the [#] key.
4. The Bypass message will be displayed indicating the presence of one or more bypassed zones.
5. Arm the system as usual. Bypassed zones are unprotected and will not cause an alarm when violated while system is armed.

DISPLAYING BYPASSED ZONES

(For determining what zones have been previously bypassed)

1. Enter security code and press **BYPASS** [6].
2. Wait for all bypassed zones to be sequentially displayed.
3. Bypassed zones can be displayed regardless of whether the system is armed or disarmed.

LIMITATIONS

- Non-fire emergency zones (except keypad zones) can also be bypassed
- Arming the system before bypassed zones are displayed nullifies all bypasses.

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

BURGLARY ALARM SYSTEM OPERATION (IF INSTALLED)

ARMING PERIMETER ONLY

STAY: STAYING INSIDE, EXPECTING LATE ARRIVALS

INSTANT: STAYING INSIDE, NO LATE ARRIVALS EXPECTED

PROCEDURE

1. Enter the security code when the Ready message is displayed.
2. Press the **STAY** [3] or **INSTANT** [7] key, depending on arming mode desired.
3. The armed state message will be displayed, accompanied by three beeps from the Console. Exit delay begins [if programmed, a slow beeping will sound throughout the exit delay period]. Perimeter protection is in effect immediately, except entry delay zone if STAY key is pressed.

STAY KEY RESULT

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

INSTANT KEY RESULT

Arms sensors guarding doors and windows, with entry delay off. Alarms will occur instantly when any exterior protection point is violated, including the entry delay zone door. Interior protection points are disarmed to permit freedom of movement throughout the interior.

BURGLARY ALARM SYSTEM OPERATION (IF INSTALLED)

ARMING ALL PROTECTION

AWAY: NO ONE INSIDE

MAXIMUM: NO ONE STAYING INSIDE, MAXIMUM SECURITY

PROCEDURE

1. Enter the security code when the Ready message is displayed.
2. Press the **AWAY** [2] or **MAXIMUM** [4] key, depending on arming mode desired.
3. The armed state message will be displayed, accompanied by two beeps from the Console. Exit delay begins [if programmed, a slow beeping will sound throughout the exit delay period]. Complete system protection is in effect immediately, except entry delay zone if AWAY key is pressed.

AWAY KEY RESULT

Arms all perimeter and interior sensors, with entry delay on. You may exit during the exit delay period and reenter through the entry delay zone door (and disarm the system within the entry delay period) without causing an alarm. See your installer for actual delay times set for your system. Alarms will occur instantly when any protection point, interior or exterior, is violated, except the entry delay zone door if AWAY key pressed, which will activate an alarm if the system is not disarmed within the entry delay period.

MAXIMUM KEY RESULT

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

BURGLARY ALARM SYSTEM OPERATION (IF INSTALLED)

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

PROCEDURE

1. Enter security code and press **OFF** [1]. The Ready message will be displayed and the console will beep once to confirm that the system is disarmed, unless an alarm has occurred.
2. If an alarm has occurred, note the zone descriptor displayed and repeat step 1 to restore the Ready message display. If the message will not display, go to the displayed protection zone and remedy the fault (close windows, etc.). If the fault cannot be remedied, notify the alarm agency.

RESULT

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

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

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

DURESS CODE (WHEN FORCED TO DISARM/ARM UNDER THREAT)

Enter the pre-assigned duress code. The system will disarm (or arm), but can silently notify the central station of your situation, if that service has been provided.

IMPORTANT

- This code is useful only when connected to a central station.

BURGLARY ALARM SYSTEM OPERATION (IF INSTALLED)

CHIME MODE (THIS FEATURE IS FUNCTIONAL ONLY WHEN THE BURGLARY SYSTEM IS DISARMED)

Your system can be set to alert you to the opening of a door or window while it is disarmed by using CHIME mode. When activated, three tones will sound at the Console whenever a door or window is opened, and the Not Ready message will be displayed. Pressing the **READY** [*] key will display the open protection points.

Note that Chime mode can be activated only when the system is Disarmed.

To turn Chime Mode on, enter the security code and press the **CHIME** [9] key. The CHIME MODE ON message will appear for about two seconds then disappear. To display this message again (to determine whether chime mode is on or off), simply press and hold down the CHIME key for 5 seconds.

To turn Chime Mode off, enter the security code and press the **CHIME** [9] key again. The CHIME MODE OFF message will appear for about two seconds then disappear.

TESTING THE BURGLARY SYSTEM (TO BE CONDUCTED WEEKLY)

This feature can be used by your installer or by the master or manager user. Use this test to check that sensors on all burglary and non-fire emergency zones are operating properly. Note: If you fault a fire zone, you will cause a fire alarm!

1. Disarm the system.
2. Enter a master or manager code and press the **TEST** [5] key.
3. The external burglary sounders will sound for 3 seconds to indicate that the test has started. The console will display "BURGLARY WALK TEST IN PROGRESS" and will beep every 15 seconds while the test remains active.
4. Open and close each protected door and window in turn. Each action should produce three beeps from the Console, and the identification of each protection point should appear on the display.
5. Walk in front of any interior motion detectors (if used). Listen for three beeps as the detector senses movement. The identification of the detector should appear when it is activated.
6. When all protection points have been checked, there should be no zone identification numbers displayed. If a problem is experienced with any protection point (no confirming beeps, no display), CALL FOR SERVICE IMMEDIATELY.
7. Turn off Burglary Walk Test mode by entering any security code and pressing the **OFF** [1] key.

FIRE & BURGLARY COMMON FEATURES

VIEWING CENTRAL STATION MESSAGES

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

**MESSAGE. PRESS 0
FOR 5 SECS.**

Press and hold down the [0] key for 5 seconds to display the message transmitted to you. The message could take up to four screens to display all the information available.

PANIC KEYS

(FOR MANUALLY ACTIVATING SILENT AND/OR AUDIBLE ALARMS)

There are three possible combinations of paired keys that are installer programmable emergency functions. See your installer for the functions that have been programmed for these emergency key pairs. Typical functions that might be programmed are Silent Police, Audible Police, Personal Emergency, and Fire.

To use a Panic function, simply press both keys of the assigned pair at the same time and hold down for at least two seconds.

PANIC KEY FUNCTIONS:

(Fill-in box for panic function)

KEY [*] + [#] (zone 99)

KEY [*] + [1] (zone 95)

KEY [#] + [3] (zone 96)

RESULT

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

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

A fire alarm key press will send a fire alarm message to the central station and will uniquely sound external bells and sirens (**FIRE** plus a description would also be displayed).

FIRE & BURGLARY COMMON FEATURES

ADDING, CHANGING AND DELETING USER CODES

The system allows up to 99 4-digit user codes to be programmed. When programmed, each code is assigned an authority level which determines the system functions that code can perform. There are six authority levels as listed in the table below. Aside from your installer who programs codes at installation time, the system allows master and manager level users to program codes on an "as needed" basis, for use by those who need limited and/or temporary control over system operation.

Level/Title	Arm/Disarm Burglary System	Silence Alarms, Supv & Trouble	Add/Change Security Codes	Bypass Zones	Activate Test Modes
1-Master	yes	yes	yes, levels 2-6 only	yes, burg zones (and fire zones if enabled)	yes, burg. walk test, fire drill
2-Manager	yes	yes	yes, levels 3-6 only	yes, burg zones only	yes, burg. walk test
3-Operator A	yes	yes	no	yes, burglary zones only	no
4-Operator B	yes	yes	no	no	no
5-Operator C	yes, can disarm only if used to arm	yes	no	no	no
6-Duress	yes, sends silent panic report	yes	no	no	no

General Rules on Authority Levels and changes

- A master or manager user may only add, delete or change users to/from a lower authority level (i.e. a master can assign a lower level user code, but cannot assign another master code).
- Each user is assigned a 2-digit user number (single digit user numbers must be preceded by a "0". Ex. 03, 04, etc.), a 4-digit user code and an authority level.
- The only way to assign a user's authority level is by using the "Add A User" procedure described later.
- Before assigning a code, be sure it does not conflict with the DURESS code.
- You may view your authority level by entering your user code + [*] + [*].

IMPORTANT!: During user edit mode, all consoles except the one being used will display "User Edit Mode – Please Stand By", and key depressions (except Panic) at those consoles will be ignored. Panic key depressions will cause an alarm and terminate user entry. **To exit User Edit Mode**, press either [*] or [#], or don't press any key for 10 secs.

To Add a User:

- Enter Master or Manager code.
- Depress **CODE** [8] key.
- Enter a new 2-digit User Number.
- Enter 4-digit code for that User Number.
- The Console will prompt for the authority level for this user Enter a number (1-6 from table).
- The console will display the user number and corresponding authority level.

To Delete a User:

- Enter Master or Manager code.
- Depress **CODE** [8] key.
- Enter User Number to be eliminated.
- Enter Master or Manager code first entered.

- The system will recognize that the User number is already in use and will prompt whether or not it should be deleted. Press 0 (NO) or 1 (YES). If yes, the system will delete the authority level and all other information about that user.

To Change a User's Code:

- Enter Master or Manager code.
- Depress **CODE** [8] key.
- Enter the user number to have its code changed.
- Enter the new 4-digit code for that user.
- The system will recognize that the user is already in use and will prompt whether or not this is a new user. Press 0 (NO). The system will confirm that the change is allowed based on authorization level, and if so, puts the new code into effect.

FIRE & BURGLARY COMMON FEATURES

TROUBLE CONDITIONS

Your system monitors each of your fire and burglary protection zones and various system conditions for problems such as zone wire breaks, loss of AC power, faulted telephone lines, etc. which can compromise proper alarm signalling operation. When your system detects a problem, it will provide an audible and visual "trouble" indication as described below. When one of these indications appears, **CALL YOUR INSTALLER FOR SERVICE IMMEDIATELY**. The audible indication can be silenced as described below.

1. The console sounder will produce a rapid beeping. The external fire (and burglary) sounders will not be on. The console display window will display one of the following messages:
 - "AC LOSS" when AC power has been interrupted. The green console POWER indicator will also be off.
 - "SYSTEM LO BAT" when your systems back-up battery is low.
 - "COMM FAILURE" when attempts to send a message to the central monitoring station have failed.
 - "CHECK" accompanied by a protection zone number (1-64) or a system zone number (70-99) and an associated alpha descriptor when there is a protection or "system" zone problem. See the section "BYPASSING SYSTEM ZONES AND OUTPUTS" for a list of zone numbers reserved for displaying system problems.
2. Press any key to silence the console sounder.
3. To clear the console trouble display, first, have your installer locate and correct the cause of the problem. Then enter any user code and press the OFF [1] key.

NOTE: The display will not clear while the trouble condition remains.

FIRE & BURGLARY COMMON FEATURES

BYPASSING SYSTEM ZONES AND SYSTEM OUTPUTS

NOTE: Ask your installer if your system was set up to allow system zones and system outputs to be bypassed.

Your system may allow you to bypass certain "system zones" which monitor various aspects of system status and certain system outputs which annunciate system status. These zones and outputs are listed below. This feature is used to disable the monitoring of one or more system zones or to disable the operation of one or more system outputs when, for example, the system is to be serviced or tested. If enabled, this feature can only be used by a master user.

- zone #70: monitors the supervision status of the bell 1 output (if enabled at installation time). Bypassing this zone disables the operation and supervision of the bell 1 output.
- zone #71: monitors the supervision status of the bell 2 output (if enabled at installation time). Bypassing this zone disables the operation and supervision of the bell 2 output.
- zone #72: monitors the panel's field wiring to determine if a short to earth ground exists. Bypassing this zone disables earth ground fault monitoring.
- zone #73: monitors devices that your installer has connected to input 1 on the main PCB J2 connector (such as a back-up ALARMNET radio transmitter). Bypassing this zone causes the system to ignore the status of devices connected to input 1.
- zone #74: monitors the supervision status of the main dialer output (if enabled at installation time). Bypassing this zone disables the operation and supervision of the main dialer output.
- zone #75: monitors the supervision status of the back-up dialer output (if installed and enabled at installation time). Bypassing this zone disables the operation and supervision of the back-up dialer output.
- zone #76: this zone is assigned to the auxiliary relay output. Actually, this zone does not monitor anything since the auxiliary relay output is not supervised. However, bypassing this zone allows the operation of the auxiliary relay output to be disabled.
- zone #77: this zone is assigned to the ALARMNET radio trigger outputs. Actually, this zone does not monitor anything since the ALARMNET triggers are not supervised. However, bypassing this zone allows the operation of the triggers to be disabled.

To Bypass a System Zone or System Output:

1. Enter the master code. Then press BYPASS [6] and enter the number(s) of zone to be bypassed.
2. All bypassed zones will be sequentially displayed when you are finished entering the number of zones to be bypassed. The console will then display a bypass message as a reminder that one or more zones is bypassed.
3. Zones which have been bypassed can be displayed by entering any user code and then pressing the BYPASS [6] key. Bypassed zones will then be displayed sequentially.
4. All system zone bypasses are removed when an OFF sequence (code + OFF) is performed.

QUICK GUIDE TO ALARM SYSTEM FUNCTIONS

FUNCTION	PROCEDURE	COMMENTS
Check Faulted Zones	Press [*]	To view faulted zones when burglary system not ready to arm.
Display All Descriptors	Press and hold [*] for 5 seconds	Displays all zone alpha descriptors programmed by installer.
Arm Burglary System (if installed)	Enter any user code. Press arming key desired AWAY, STAY, INSTANT, MAXIMUM)	Arms system in mode selected.
Disarm Burglary System and/or Silence Alarms	Enter any user code. Press OFF [1]	Disarms system (if armed) and silences alarms. Repeat to clear displays.
Bypass zones (fire, burg & system zones)	Enter user code. Press BYPASS [6] Enter zone numbers to be bypassed (use 2-digit entries). To remove bypasses, enter code + OFF [1].	Bypassed zones are unprotected and will not cause an alarm if faulted. Burglary zones can be bypassed by an operator "A" or higher level user only. If enabled, fire and system zones can only be bypassed by a master user.
Quick Bypass	Enter user code, Press BYPASS [6] Press [#] To remove bypasses, enter code + OFF [1].	Bypasses all faulted zones automatically.
Chime Mode (if burglary system installed)	Enter any user code. Press CHIME [9]. Repeat to turn Chime Mode off.	Console will sound if doors or windows are violated while burglary system disarmed.
Burglary Walk Test Mode (if installed)	Enter master or manager code. Press TEST [5]. Enter code + OFF [1] to end test.	Activates external sounders for 3 seconds and allows burglary and non-fire sensors to be tested.
Fire Drill Test	Enter master code. Press [#] + 69. To end test, enter code + OFF.	Activates external fire sounders.
View Messages	Press and hold [0] key for at least 5 seconds.	Message from central station will appear.
View User Capabilities	Enter any user's code. Press [*] + [*].	Displays authority levels assigned to the user code entered.
Add a User	Enter master or manager code. Press CODE [8]. Enter new 2-digit user number. Enter 4-digit code for that user. At prompt, enter authority level.	Master and manager level users can add users to the system, each with its own code and authority level.
Change a User Code	Enter master or manager code. Press CODE [8]. Enter user's 2-digit number. Enter new 4-digit code for that user. Enter 0 (no) at prompt.	Master and manager level users can change their own or other user's codes.
Delete a User's Code	Enter master or manager code. Press CODE [8]. Re-enter master or manager's code. Enter 1 (yes) at prompt.	Master and manager level users can delete users. A user can only be deleted by a user with a higher authority level.
Self-Help	Press and hold any function key for at least 5 seconds.	Will display abbreviated instructions for the key pressed

5140XM EVENT LOGGING PROCEDURES

The system has the ability to record various events in a history log wherein each event is recorded in one of five categories (listed below), with the time and date of its occurrence. The Event Log holds up to 224 events, with the oldest event being replaced by the logging of any new event after the log is full. Using an alpha console, the Event Log can be viewed one category at a time, or can display all events, regardless of category (ALL EVENT LOG). The system also allows selection of displaying the COMPLETE log, or only those events occurring since the last installer service (RECENT). Note that events are displayed in chronological order, from most recent to oldest.

TO DISPLAY THE EVENT LOG:

1. Enter any user CODE + [#] + [6] + [0]
2. Select the display mode.
RECENT: Displays only those events occurring since last installer service.
COMPLETE: Displays complete event log (up to 224 events).
3. Use the [3] & [1] keys (for next and previous categories respectively) to display the categories of events.

ENTER 0 = RECENT 1 = COMPLETE

Press the desired key, 0 or 1.

ALARM EVENT LOG TYPE CCC UUU

*Typical Category
Select Screen*

ALARM EVENT LOG

Displays time and date for zones that have either caused an alarm or have been restored.

CHECK EVENT LOG

Displays time and date for zones that have caused a trouble or fire supervisory condition.

BYPASS EVENT LOG

Displays time and date for zones that have been bypassed.

OPEN EVENT LOG

Displays time, date and user number for each arming and disarming of the system.

SYSTEM EVENT LOG

Displays time and date for system problems, such as AC Loss, low battery, etc..

ALL EVENT LOG

Displays all categories of events in chronological order.

P1 01/01 12:02AM BURGLARY C03	<i>Typical Event Log Display</i>
----------------------------------	--------------------------------------

Shows burglary alarm occurred in zone 3 (C03), at 12:02AM on January 1.

After the last event has been displayed, the END OF EVENT LOG message appears for a few seconds, then the system automatically displays the RECENT/COMPLETE mode select screen again (see step 2).

4. To EXIT the Event Log:
Press [*] at any time.

SUMMARY OF AUDIBLE NOTIFICATION

(ALPHA DISPLAY CONSOLE)

SOUND	CAUSE	DISPLAY
LOUD, INTERRUPTED Console & external*	FIRE ALARM	FIRE is displayed; descriptor of zone in alarm is displayed.
LOUD, CONTINUOUS Console & external	BURGLARY/AUDIBLE EMERGENCY ALARM	ALARM is displayed; descriptor of zone in alarm is also displayed.
ONE SHORT BEEP (not repeated) Console only	a. SYSTEM DISARM b. SYSTEM ARMING ATTEMPT WITH AN OPEN ZONE. c. BYPASS VERIFY	a. DISARMED/READY TO ARM is displayed. b. The number and descriptor of the open protection zone is displayed. c. Numbers and descriptors of the bypassed protection zones are displayed (One beep is heard for each zone displayed). Subsequently, the following is displayed: DISARMED BYPASS Ready to Arm
ONE SHORT BEEP (once every 15 seconds) Console only	SYSTEM IS IN BURGLARY TEST MODE	Faulted Zone identifications will appear.
TWO SHORT BEEPS Console only	ARM AWAY OR MAXIMUM	ARMED AWAY or ARMED MAXIMUM is displayed. Red ARMED indicator is lit.
THREE SHORT BEEPS Console only	a. ARM STAY OR INSTANT b. ZONE OPENED WHILE SYSTEM IS IN CHIME MODE. c. ENTRY WARNING**	a. ARMED STAY ZONE BYPASSED or ARMED INSTANT ZONE BYPASSED is displayed. Red ARMED indicator is lit. b. CHIME displayed, descriptor of open protection zone will be displayed if the [*] key is pressed. c. DISARM SYSTEM OR ALARM WILL OCCUR is displayed.
RAPID BEEPING Console only	a. FIRE SUPERVISORY b. TROUBLE c. AC POWER LOSS ALERT	a. SUPV displayed. Descriptor of faulted zone is displayed. b. CHECK displayed. Descriptor of troubled protection zone is displayed. c. AC LOSS displayed (may alternate with other displays that may be present).
SLOW BEEPING Console only	a. ENTRY DELAY WARNING** b. EXIT DELAY WARNING (if programmed)	a. DISARM SYSTEM OR ALARM WILL OCCUR is displayed. Exceeding the delay time without disarming causes alarm. b. ARMED AWAY or ARMED MAXIMUM is displayed along with You May Exit Now

* Fire alarms may be programmed by your installer to produce continuous external sounds, but always produce interrupted console sounds.

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

GLOSSARY

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

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

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

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

FIRE SUPERVISORY ZONE: A zone which monitors a fire sprinkler system to determine that main water valve is open or that there is adequate water pressure.

BYPASS: To disable a specific area of fire or burglary protection while leaving other areas operational. Also, to disable the operation of a specific system output circuit such as a bell output.

ALPHA DESCRIPTOR: A zone description (up to 3 words) such as "WEST WING SMOKE" which is displayed along with the zone number on the console display window when a zone is faulted.

ZONE: A specific area of protection.

PROTECTION POINT DESCRIPTIONS

ID DESCRIPTION	ID DESCRIPTION	ID DESCRIPTION
1	23	45
2	24	46
3	25	47
4	26	48
5	27	49
6	28	50
7	29	51
8	30	52
9	31	53
10	32	54
11	33	55
12	34	56
13	35	57
14	36	58
15	37	59
16	38	60
17	39	61
18	40	62
19	41	63
20	42	64
21	43	
22	44	

ID numbers 01-64 represent sensor/detector protection zones. ID 70-75, 97 represent system problems (CALL FOR SERVICE IMMEDIATELY)

Service Company: _____

Telephone: _____

"FEDERAL COMMUNICATIONS COMMISSION (FCC) STATEMENT"

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

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

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

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

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

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

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

IN THE EVENT OF TELEPHONE OPERATIONAL PROBLEMS

In the event of telephone operational problems, disconnect the control 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.

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 150°F, the detection performance can decrease.
- Alarm warning devices such as sirens, bells or horns may not alert people or wake up sleepers if they are located on the other side of closed or partly open doors. If warning devices sound on a different level of the residence from the bedrooms, then they are less likely to waken or alert people inside the bedrooms. Even persons who are awake may not hear the warning if the alarm is muffled from a stereo, radio, air conditioner or other appliance, or by passing traffic. Finally, alarm warning devices, however loud, may not warn hearing-impaired people or waken deep sleepers.
- Telephone lines needed to transmit alarm signals from a premises to a central monitoring station may be out of service or temporarily out of service. Telephone lines are also subject to compromise by sophisticated intruders.
- Even if the system responds to the emergency as intended, however, occupants may have insufficient time to protect themselves from the emergency situation. In the case of a monitored alarm system, authorities may not respond appropriately.
- This equipment, like other electrical devices, is subject to component failure. Even though this equipment is designed to last as long as 10 years, the electronic components could fail at any time.

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

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

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

