

# MOOSE Z950

Security System Control

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**MOOSE** 

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User Guide

**Thank you** for choosing the Z950 Security Control. This control will provide you with years of reliable operation when properly installed and maintained.

It is important to note however, that no security system provides total protection over life or property, nor can it detect intrusion or other conditions in all circumstances. Ask your security representative to fully review the features of your system, indicate areas of potential risk, and detail recommendations for future upgrades to the system.

To maximize the benefits of your Security System, it is important to carefully read the entire contents of this manual and become familiar with all control operations. Your security representative has recorded confidential information about your system in this manual, therefore, you should store it in a secure place. Contact your security representative immediately with any questions.

The following is a list of general precautions you should follow to maximize the benefits of your security system:

- Do not enter the building if you see any signs of visible entry or return to find the alarm sounding. Go to the nearest telephone and contact the proper authorities.
- Inform your neighbors that you have installed a security system and ask them to contact the proper authorities when the alarm sounds.
- Test your security system once per week to ensure proper operation. Your security representative can provide you with a testing procedure and advise you on a regular maintenance program.
- Contact your security representative immediately for any system malfunction. Schedule any needed service immediately using only qualified professionals.
- Note any illumination of the "Trouble" indicator light and contact your security representative immediately for service.
- Pay special attention to electrical or phone services performed on the building. Make sure these services do not affect or interrupt the operation of the security system. Test the operation of the security system immediately following electrical or phone service.
- Request your security representative to regularly check the condition of the battery used in your security system. This battery functions as a standby power source in the event of a power failure and therefore should be replaced when necessary.
- Discuss the operation of motion detectors and smoke alarms with your security representative. Motion detectors are designed to detect specific types of motion within a defined area. Intruders cannot be detected in obstructed areas such as behind walls and closed doors. Smoke detection devices cannot detect all types of fire, nor do they perform under all circumstances. Make sure your security representative fully explains the limitations of these devices, the areas they protect, and the areas they do not protect.
- When the control is programmed remotely, the zone indicators will scroll in sequence.
- The Ready and Armed LED's will alternately blink throughout local programming.

**NOTE**

Underwriters Laboratories (U.L.) requires the following: Audible burglar alarms utilize a bell and fire alarms utilize a horn. For combination burglar and fire alarms systems, the sounder emits a steady tone for fire alarms and a pulsing tone for burglar alarms. The fire alarm signal takes priority over the burglar. Exit delay time may not exceed 60 seconds. Entry delay time may not exceed 45 seconds. Cut-off time for siren/bell cannot be less than 4 minutes.

Exit Time = \_\_\_\_\_ Seconds

Entrance Time = \_\_\_\_\_ Seconds

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**Glossary**

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# Operating Your System **1**

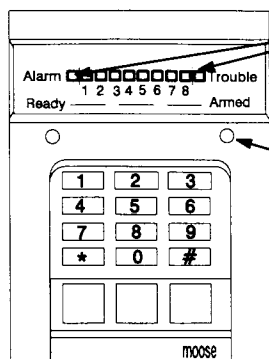
## 1.1 System Orientation

The keypad for your Z950 security system is illustrated in FIGURE 1-1 on Page 1-2.

The keypad is the most important and most used component in your security system. It is important that you carefully review the information presented on Pages 1-1 and 1-2, and become familiar with all features and functions of your keypad.

The primary components of the keypad are as follows:

- **Numeric User keys, Reset (\*) key, and Bypass (#) key**  
 The numeric **User** keys are used to enter your user code when arming or disarming the security system. They are also used in programming the security system.  
 The **Reset (\*)** key is used to silence the keypad sounder or exit audible test mode. It cannot reset the alarm or cancel the reporting of an alarm. See Page 1-12.  
 The **Bypass (#)** key is used to bypass selected zones in your security system. See Page 1-10.
- **Ready Status Indicator**  
 The **Ready Status Indicator** (green), when illuminated, indicates that your security system is ready to be armed. If the indicator is not illuminated, one or more protection zones are not ready (faulted) for arming.  
**Armed Status Indicator**  
 The **Armed Status Indicator** (red), when illuminated, indicates that your security system is armed. If the indicator is not illuminated, your system is disarmed. If the indicator is blinking, the system has delayed arming to enable you time to leave the building. After a pre-programmed exit delay time, the system will fully arm. During the last 10 seconds of exit delay, the beep accelerates to fast beep, warning that arming is about to occur.
- **Panic Keys**  
 The **Panic** keys are keys used in specific situations. The function of each key and its programming are explained on Page 1-8.

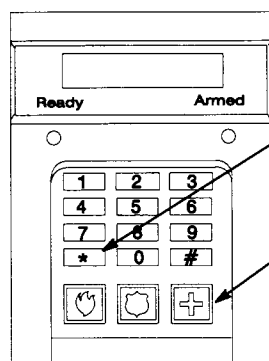


### Trouble and Alarm Indicators

These indicators, if illuminated, designate the zone violated by alarm or zone where trouble occurs.

### Armed Status Indicator

If illuminated, the system is armed. If not illuminated, the system is disarmed. If blinking, time is being provided to exit the building after which the system will be armed.



### Reset Key

The reset key is used to reset the system and restart a particular function.

### Panic Keys (under protective cover)

Panic keys are provided for use in a specific situation. Panic keys may or may not be active on your system. Check with your security representative to verify configuration of these keys on your system.

### Ready Status Indicator

If illuminated, the system is ready to be armed. If not illuminated, one or more zones are faulted.

Indicator(s) of zones (s) at fault will be illuminated.

### Numeric User Keys

These are the numeric keys used to select various functions, zones, etc.

### Bypass Key

The bypass key is used to shunt or bypass a particular zone or function.

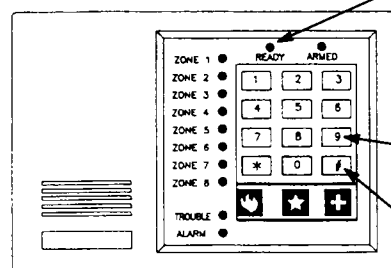


FIGURE 1-1. Z950 Typical Keypad Configurations

## 2 Arming

### Arming The System Prior To Leaving

Before your security system can be armed, all of the intrusion zones must be secure as indicated by the green READY indicator. If the READY indicator is off, one or more zones are faulted. The indicator(s) corresponding to the faulted zone(s) will light. Determine the areas of protection which are assigned to each of the zones, then check the appropriate doors and windows to see that they are closed.

1. Verify that the READY indicator is on.
2. Enter your User Code.
3. The keypad will begin beeping and the red ARMED indicator will blink to indicate that arming will take place after the exit time expires. (The ARMED indicator will light steady after the system arms).
4. Leave the building immediately.

The control is programmed with an exit delay time which allows a specific amount of time to leave through any delay defined intrusion detection zone without causing an alarm. Be sure that you have been informed on routes to enter and exit from without causing an alarm. The beeping tone will become more rapid for the last 10 seconds, warning you that arming is about to occur. If the exit door is not secure during the last 10 seconds of the exit delay, then the exit delay will be restarted for one full exit delay period. This exit delay restart is only performed once.

## Arming The System Without Leaving

Your security system is divided into two areas of protection:

1. **PERIMETER** – The first line of defense. Consists of one or more zones which detect intrusion through doors and windows.
2. **INTERIOR** – The backup or second line of defense. Consists of one or more zones that detect intruders that have already entered the building. Interior detection devices usually consist of motion detection devices, interior door contacts, and under carpet sensors, designed to surprise the intruder.

Prior to arming the control, you may first choose to turn off the interior protection, allowing free movement within the building when armed.

### Turning Off The Interior Zones (Key 4) and Entrance Delay (Key 5)

Key 4 may be used to turn the interior zones off prior to arming.

1. Press the 4 key and hold for three seconds.
2. When interior defined zones are turned off, their corresponding Zone indicators will flash. They may continue to flash until 30 seconds after the system is armed or they may flash for the entire time that the system is armed. The installer can program how the flashing operates.
3. Arm the system by entering your User Code.

NOTE

**Upon disarming, the interior zones automatically re-enable unless your installer has altered this feature through programming.**

Key 5 may be used to turn the entrance delay time off. Press the 5 key and hold for three seconds to turn off the entrance delay. When the delay is turned off, the armed light will not blink after arming. This will allow the system to alarm instantly if the entrance door is opened while armed.

## Automatic Interior Off/Delay Off

Your system may have been programmed to automatically turn the interior zones off if you arm and do not leave the premises before the exit delay time expires. The entrance delay may also be programmed to automatically turn off at this time. When the system is disarmed, the interior and delay will return to their normal on or off state. See your security representative for details.

### Two Digit Arming

Your system may have been programmed with an abbreviated arming feature. When this feature is enabled, only the first two digits of your User Code will be required to arm the system and perform other features. Disarming however, will still require the entire code sequence.

## System Will Not Arm (READY Light Off)

If the READY indicator is off, one or more detection devices such as a door or window has been left open. The system cannot be armed. One or more of the ZONE indicators will also be lit indicating the area of protection that is at fault.

If an attempt is made to arm the system with the READY light off, a three second error tone will be emitted to alert you that the system did not arm.

## 1.3 Disarming

### Disarming Upon Entering The Premises

Your system is programmed with one or more entrance delay zones which allow time to enter the premises without causing an alarm. Each delay door may have one of two different entry times. Be sure to check with your installer.

If your system has the “Interior Follower” feature enabled, all interior designated zones automatically become delay zones whenever you first enter through a delay zone. This allows you to walk in front of motion detectors on the way to the keypad after you enter.

1. After entering the premises through a delay zone, the keypad will sound a continuous tone to remind you to disarm the system.

#### WARNING

**IF THE ALARM INDICATOR IS LIT AND THE KEYPAD IS BEEPING, AN ALARM HAS OCCURRED. LEAVE THE PREMISES IMMEDIATELY AND GO TO THE NEAREST PHONE TO CONTACT THE APPROPRIATE AUTHORITIES. DO NOT ENTER THE PREMISES.**

2. Enter your User Code.
3. The red armed light should turn off indicating that the system is disarmed.

## 1.4 Alarm Conditions

### What To Do If An Alarm Occurs

Whenever an alarm occurs, the ALARM indicator will light, the audible alarm will sound (if applicable), and the control will communicate with the central station (if this option was purchased).

#### WARNING

**IF UPON RETURNING TO THE PREMISES, IT IS DISCOVERED THAT AN ALARM HAS OCCURRED, DO NOT ENTER THE PREMISES. GO TO THE NEAREST TELEPHONE AND CONTACT THE APPROPRIATE AUTHORITIES.**

#### To reset the alarm:

1. Enter your User Code to reset the alarm.
2. The ALARM indicator will remain lit.

If the alarm was activated through one of the “hardwire” zones, the corresponding ZONE indicator(s) will also be lit, identifying the specific area that was violated. If the alarm was activated manually by pressing one of the keys, no zone indicators will be lit. Press the **Reset (\*)** key to extinguish the ALARM indicator after determining the type of alarm that occurred and area of protection involved.

A history of the alarm condition will be stored in the control’s memory and may be recalled at any time. See “Special Features” for more information.

### False Alarms

If for any reason a false alarm occurs, perform the following steps:

1. Enter your User Code. The armed light should turn off.
2. Notify the appropriate authorities of the alarm immediately.
3. Press the **Reset (\*)** key to extinguish the ALARM light.

## 1.5 The Keypad Panic Alarms

Your system may have been purchased with up to three keypad panic alarms. These may be used to activate an alarm in the event of a Fire, Hold-up, or other condition, as programmed by your installer. Each alarm is activated by pressing the appropriate panic key (located below the numeric keys). Each alarm may be programmed to report the condition to a central monitoring station. Check with your security representative to determine the characteristics of your system.

### Alarm Activation

Each of the three panic keys (See FIGURE 1-1) can initiate a specific type of alarm as programmed and labeled by your installer.

To activate an alarm, press the appropriate panic key and hold for three seconds. The alarm will activate.

Your installer may have programmed the panic zones to ignore momentary key presses and to activate only by pressing and holding pressed for three seconds (or pressing at least twice within three seconds). Check with your security representative for the specific characteristics of your system.

### Resetting The Alarm

When an Alarm is activated, the ALARM indicator will be lit (unless your installer has programmed the alarm for silent or no keypad indication).

To reset the alarm, enter your user code. Pressing the **Reset** (\*) key will extinguish the ALARM indicator, if lit.

A history of the last alarm will be stored in the control's memory and may be recalled if desired. (See Alarm Memory on page 1-12.)

## 1.6 Special Features

### Chime Mode Operation

The CHIME mode allows audible monitoring of zones while the system is disarmed. When the CHIME mode is active, the keypad sounder will beep whenever a perimeter burglar defined zone (door, window, etc.) indicator is opened.

For example, the CHIME feature will cause the keypad to beep two times whenever the front door has been opened. Many businesses use this type of signal to announce that a customer has entered. In a residential application, the CHIME is useful for monitoring opening of doors by children.

The CHIME feature does not annunciate interior zones.

#### To Turn CHIME On

1. The system must be disarmed.
2. Press the "6" key and hold for three seconds. The keypad will beep three times to signify that the CHIME has been turned on.
3. The keypad will now beep two times when any burglar zone is opened.

#### To Turn CHIME Off

Press the "6" key and hold for three seconds. The keypad will beep two times to signify that the CHIME has been turned off.

### Force Arming (This feature is disabled in U.L. Listed systems)

Your system may be programmed for quick arming even with one or more zones faulted. In this condition, when an attempt is made to arm the system with faulted zones (READY light off), the keypad will emit a three second error tone, indicating that the system refused to arm. If a second attempt to arm is made within eight seconds after the tone quits, all faulted zones will automatically be bypassed and the system will Force Arm. Depending upon how your system was programmed at the time of installation, force armed zones will either be permanently bypassed until disarming or may return to operation when or if they become operable.

## Bypassing Zones

The **Bypass (#)** key is used to bypass selected zones in your system. A bypassed zone will NOT be capable of activating an alarm as it is temporarily removed from your system. Bypassing (also referred to as shunting) is most commonly used to allow free movement of an area (zone or group of zones) while arming the rest of the system or to temporarily remove a zone or zones that require service, allowing partial use of the system until repaired. When a zone is bypassed, its corresponding Zone indicator will flash to indicate that it has been removed from operation. It may continue to flash until 30 seconds after the system is armed or it may flash for entire time that the system is armed. The installer can program how the flashing operates.

### WARNING

**WHEN ZONES ARE BYPASSED, SECURITY IS COMPROMISED. DO NOT INSTRUCT TEMPORARY USERS ON USE OF THE BYPASS FEATURE.**

#### To Bypass A Zone

1. The system must be disarmed.
2. Press the **Bypass (#)** key, then enter the number of the zone to be bypassed.
3. The corresponding ZONE indicators will blink to indicate the zones that have been bypassed. The blinking will cease after the system is armed and the exit delay has expired. If *Permanent Force-Arming* has been enabled, then the ZONE indicators for the bypassed zones will continue to blink during the ARMED period.
4. Repeat steps 2 and 3 to bypass other zones.

#### To Cancel A Zone Bypass

1. The system must be disarmed.
2. Press the **Bypass (#)** key followed by the number of the zone to be restored to service.
3. The ZONE indicator of the previously bypassed zone will stop blinking.

#### To Cancel All Zone Bypasses

1. Press the **Bypass (#)** key followed by key "9".
2. All ZONE indicators will stop flashing. The zones are returned to operation.

#### To Bypass All Faulted Zones Simultaneously (Not available in U.L. Listed Systems)

1. The system must be disarmed.
2. Press the **Bypass (#)** key, then press the "0" key.
3. All faulted zones will simultaneously be bypassed. The corresponding ZONE indicators will blink to indicate zones that have been bypassed. The blinking will cease 30 seconds after the system is armed.

## Key Switch Operation

Your system may utilize a conventional key switch for arming and disarming the system. Arming and disarming with a key switch is performed as follows:

### Arming

1. Verify that the READY light is on.
2. Insert your key into the key switch and turn. Hold for one second and release.
3. The red ARMED light will blink during the exit delay cycle and then light steady when the system arms.

### Disarming

1. Insert your key into the key switch and turn. Hold for one second and release.
2. The red ARMED light will go out, indicating that the system is disarmed.



**Access** (U.L. Note: The control is not listed to Standard U.L. 294 Access Control Units.)

If your system was purchased with the ACCESS feature, the keypad can be used to switch other devices on and off or as a timed switch. This feature is most commonly used to activate an electric door release or switch lights on and off. Consult your security representative for more information.

### The Reset Key

The **Reset** (\*) key may be used to:

- Silence the keypad sounder and the audible output during Auxiliary "A" (Fire) and Auxiliary "C" alarms.
- Silence and keypad sounder during Burglar alarms.
- Exit the audible test mode.
- **Pressing the Reset (\*) key does not reset alarms or cancel reporting to the central station.**

### Remote Programming

Your system is capable of being serviced remotely from the alarm company's service office providing that the system is set up for Remote Programming. The system provides a means of verifying that this feature is enabled. Contact your security representative for more information.

### Alarm Memory

#### To View The Last Alarm That Occurred:

1. The system must be disarmed.
2. Press the "3" key and hold for three seconds. The keypad will beep three times.
3. The corresponding zone indicator(s) indicate the zone(s) that caused the last alarm.

### Audible Zone Testing With Bell Test and Dialer Test

The TEST mode commands the keypad to beep continuously and light the corresponding zone indicator, each time a zone is violated. The zone indicator of each tested zone will remain lighted while each succeeding zone is tested. Testing can be performed only while the system is disarmed. Testing the system should be performed in both ELECTRICAL POWER AC ON and STANDBY BATTERY modes. Your neighbors' understanding and cooperation is very important. When you are away from your residence (or commercial business), neighbors play an important role. Advise them that you have a security system and ask them to notify the proper authorities if your system is sounding. The burglar alarm typically has a pulsing bell and a fire alarm has a steady horn sound.

#### NOTE

**A lit zone indicator means that at least one sensor of that particular zone has been tested. It does not necessarily mean that all sensors of that zone were tested. It is recommended that you test your system on a weekly basis.**

1. The system must be disarmed.
2. Determine the area of protection which corresponds to each zone.
3. To simplify testing, all zones should first be secured (READY light ON). If it is not possible to secure all zones prior to beginning the walk test mode, please note that the keypad will beep continuously as a result of the non-secure zones. This will eliminate the advantages of the audible walk test mode, although the zone indicator lights may still be relied upon for testing.
4. Press key 8 and hold for three seconds. The keypad will beep three times to signify entry into the TEST mode.
5. To test the Bell for one second, press the "1" key and the Reset (\*) key. This feature allows you to test the system audible without having a signal transmitted to the central station.
6. To test the dialer, press the "2" key and the Reset (\*) key. A dialer test signal will be performed with the central station (monitored systems only). The READY light will blink until the test is completed or until the TEST mode is exited. If the dialer test fails, the keypad will indicate a trouble condition.
7. Violate a detection zone (open a door, window, etc.). The keypad will beep continuously and the indicator of the corresponding zone will light.

8. Secure the zone (close the door, window, etc.). The keypad beeping will cease.
9. The interior detection devices will also cause the keypad to beep if entering those protected areas when testing unless the INTERIOR is first turned OFF. You may also want to walk test motion detection devices to check whether the pattern is covering the areas of concern.
10. Begin at step five to test the remaining sensors.
11. Press the **Reset** (\*) key when finished testing.

**NOTE**

**Your system should be regularly tested at least once per week to insure proper operation. For UL Listed Burglar systems, the Bell Test should be included as part of the weekly test. Contact your security representative for complete instructions on regular system maintenance and testing procedures. If the wall mounted transformer which powers the system is removed for any reason, test the system to see if the standby battery is adequately powering the system. Reconnect the transformer, secure to the wall plate with the restraining tab machine screw, and test the system again to assure it is receiving AC power.**

## 1.7 Fire Detection

Your system may or may not include fire detection, depending upon the options purchased and the local codes and regulations for your area. Fire alarm systems are active 24 hours a day and cannot be turned off. All fire systems require regular testing and maintenance. Common household dust build-up in smoke detectors can cause them to false alarm or fail in a time of need. Consult your security representative for a scheduled maintenance program.

### What To Do If The Fire Alarm Sounds

1. The red ALARM indicator will light, and the alarm sounder will sound steadily. The ZONE indicator(s) corresponding to the violated Fire Zone(s) will also be lighted. If the alarm was activated manually through the keypad panic zone, no ZONE indicators will be lit.
2. Press the **Reset** (\*) key to silence the keypad and the audible alarm.
3. Notify the alarm monitoring service or the proper authorities immediately if the alarm was unintentional.
4. The red ALARM light will remain on. To clear the alarm, enter a valid User Code.

**WARNING**

**IF THE TROUBLE INDICATOR LIGHTS, A FIRE SUPERVISORY/TROUBLE CONDITION MAY EXIST. CONSULT YOUR SECURITY REPRESENTATIVE.**

## Fire Supervisory/Trouble (Resetting Smoke Detectors)

Many smoke detectors “latch on” and illuminate a built-in indicator when triggered. This feature allows you to determine which detector caused the alarm. If a smoke detector remains latched after resetting a fire alarm activation, the yellow TROUBLE indicator will be lit.

1. Check all smoke detectors for the presence of a latched condition to determine which detector triggered the alarm. If all detectors appear normal, a wire may be broken or shorted. Call for service.
2. Press Key 7 and hold for three seconds. The system will attempt to reset the smoke detectors. If the smoke detector(s) did not reset, the keypad will continue to indicate the TROUBLE condition. Call your security representative for service.

### NOTE

**If a fire alarm is active, smoke detectors cannot be manually reset until the fire alarm is reset.**

## Testing The Fire System

All devices in a Fire Alarm system should be tested monthly except as described in NFPA 72 chapter 7-3-2. If the Bell Test on page 1-13 does not test the fire alarm bell, then follow these steps:

1. Notify the Central Station or the appropriate authorities that you are about to perform a fire system test.
2. Press and hold for three seconds the Keypad Panic Key (see FIGURE 1-1) that is designated as the Fire Panic Key. The Fire Alarm should go off.
3. Enter your passcode and press Reset (\*) to silence the alarm.

# Evacuation Plan

# 2

## 2.1 Developing An Evacuation Plan

Preparation and education are of prime importance in the prevention of fire. An evacuation plan should be established **BEFORE** a severe situation arises. Your security system may or may not contain fire detection and notification equipment. Make sure your security representative fully explains the configuration of your system. Make sure you fully understand these limitations of your system.

Use the following steps in establishing an evacuation plan:

1. Evaluate all possible escape routes from your home and draw a floor plan.
2. Select two exit escape routes from each room.
3. Provide escape ladders for rooms above the first floor. Check the ladders to be sure that they will reach the ground.
4. Draw a rough sketch of your escape plan so that everyone is familiar with it.
5. Practice your escape plan to assure that everybody knows what they have to do in a severe situation.
6. Establish a meeting place outside where your family is to report.
7. Advise the local fire authority if you have installed a fire alarm system.

Discuss the following with all residents:

1. Familiarity with alarm signals.
2. Status of bedroom doors.
3. Testing of door during a fire and use of alternate escape routes if HOT to touch.
4. Crawling and holding breath techniques during a fire.
5. Escape. FAST. DO NOT STOP for packing.
6. Emphasize that no one is to return to a burning building.

## 2.2 Fire Prevention And Escape

The purpose of heat and smoke detectors is to detect a fire in its earliest stages and sound an alarm, giving you more time to exit the premises before smoke reaches a dangerous level.

### Know Fire Hazards

No detection device can protect life in all situations; therefore, safeguards should be taken to avoid such potentially dangerous situations as smoking in bed, leaving children home alone, and cleaning with flammable liquids such as gasoline.

The best fire protection is minimizing fire hazards through proper storage of materials and good housekeeping practices. Careless use of combustible materials and electrical appliances or overloading of electrical outlets are major causes of fire. Explosive and fast burning materials must be eliminated from the home.

### In Case Of Fire

**Leave immediately!** Do not stop to pack or search for valuables. In heavy smoke, hold your breath and stay low – crawl if necessary. The clearest air usually is at the floor. If you have to go through a closed door, carefully feel the door and door knob to see if undue heat is present. If relatively cool, brace your foot against the bottom of the door with your hip against the middle, and one hand against the top edge. Open slightly. If there is a rush of hot air, slam the door quickly and latch it. Unvented fire will build up considerable pressure. Be sure that all the household realizes this danger.

Use your neighbor's phone or street fire alarm box. The job of extinguishing the fire should be left to the professionals. Too many unforeseen things can occur when inexperienced people try to extinguish a fire.

## Be Prepared

Perform fire drills regularly. Use them to assure recognition of an alarm signal. For your protection, simulate different circumstances (smoke the hall, living room, etc.). Then have everyone react to the situation. Draw a floor plan and show two exits from each room. It is important that children be instructed carefully. Their tendency is to hide in a crisis.

It is imperative that one meeting place outside the home be established. You should insist that everyone meet there during an alarm. This will eliminate the tragedy of someone re-entering the house for a missing member who is actually safe.

If you have small children and/or invalids residing in your household, you can help your fire department by placing decals on bedroom windows. Most fire departments supply the decals.

Become familiar with the distinctive sounds of your Fire alarm and Burglar alarm signals.

## 2.3 Fire Protection

### Smoke Detector Location

Smoke detectors should be installed in accordance with the National Fire Protection Association (NFPA) Standard 72.

The following is from NFPA 72: Smoke detectors shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms and on each additional story of the family living unit including basement and excluding crawl spaces and unfinished attics (see FIGURE 2-1). In new construction, a smoke detector also should be installed in each sleeping room. For family living units with one or more split levels (i.e., adjacent levels with less than one full story separation between levels), a smoke detector required by the above shall suffice for an adjacent lower level, including basements.

**EXCEPTION:** Where there is an intervening door between one level and the adjacent lower level, a smoke detector shall be installed on the lower level.

Ceiling mounted smoke alarms should be located in the center of the room or hall, not less than 4 inches from any wall. When the detector is mounted on a wall, the top of the detector should be 4 to 12 inches from the ceiling.

Do not install smoke alarms where normal ambient temperatures are above 100°F (37.8°C), or below 40°F (4°C).

Also, do not locate smoke detectors in front of air conditioners, heating registers, or other locations where normal air circulation will keep smoke from entering the detector.

Heat from a fire rises to the ceiling, spreads out across the ceiling surface and begins to bank down from the ceiling. The corner where the ceiling and wall meet is an air space into which heat has difficulty in penetrating. In most fires, this 'dead' air space measures about 4 inches (0.1m) along the ceiling from the corner and 4 inches (0.1m) down the wall (see FIGURE 2-1). Heat or smoke detectors should not be placed in this 'dead' air space. (See FIGURE 2-1 on Page 2-5).

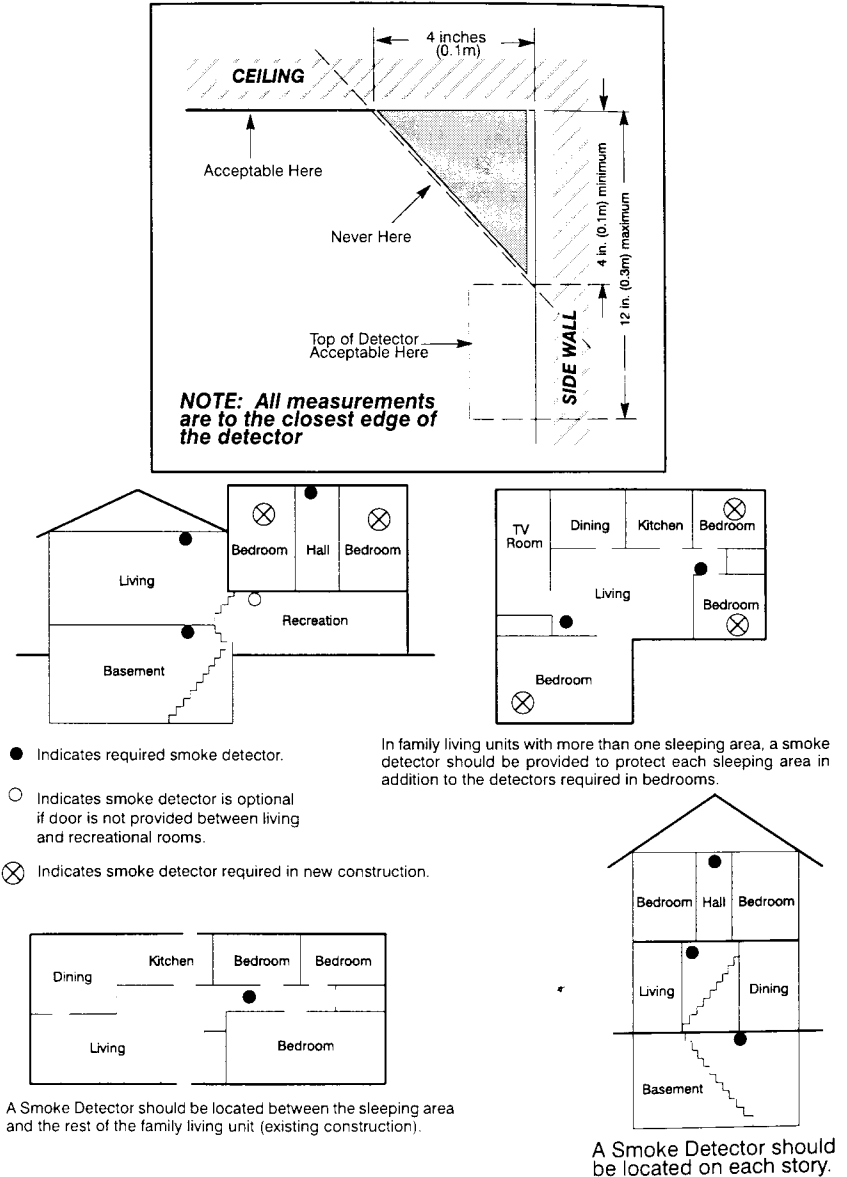


FIGURE 2-1. Smoke Detector Placement



User Code 8 may be programmed as a Temporary User Code with a limited number of valid uses, after which it becomes inoperable. This code may be assigned to a maintenance person, maid, or anyone who you would like to be able to arm and disarm the system for a selected number of times without having to reveal your regular code.

### Changing User Codes

Determine your desired new User Code or Master User Code sequence. If you make an error while programming, press the **Reset** (\*) key five times and start over from step 1.

Pressing the **Bypass** (#) or **Reset** (\*) key while programming a code may result in improper code operation, therefore you **MUST** return to step 1 when an error is made.

#### To Change A User Code

1. The system must be disarmed.
2. Press key 9 and hold for three seconds. The keypad will beep three times.
3. Enter the Master User Code. The keypad will beep two times. The **READY** and **ARMED** indicators will blink alternately, and the other indicators will blink repeatedly when the programming mode is successfully entered (see remote programming note on Page 3-1).
4. Press a key (2-8) which corresponds to the User Code you wish to program, or press key 1 to change the Master User Code. Then press the **Bypass** (#) key. The keypad will beep three times to signify acceptance.
5. Enter the desired new 4 digit code sequence. After the fourth digit is entered, the keypad will emit one short beep followed by one long beep; then the system will exit the programming mode automatically. To program another code, return to step 2.

**CAUTION**

**USE EXTREME CARE WHEN CHANGING OR DELETING CODES. DO NOT DELETE MASTER USER CODE 1.**

### Deleting A Code

1. The system must be disarmed.
2. Press key 9 and hold for three seconds. The keypad will beep three times.
3. Enter the Master User Code. The keypad will beep two times. The **READY** and **ARMED** indicators will blink alternately, and the other indicators will blink in sequence with each other when the programming mode is successfully entered (see remote programming note on Page 3-1).
4. Press key 1, then key 2, then the **Bypass** (#) key which instructs the control that you wish to delete a code. The keypad will beep three times to signify acceptance.
5. Enter the number of the code (2-8) to be deleted.
6. The code is now deleted. The system will automatically exit the programming mode.

### Programming A Temporary Code (User Code 8)

An optional feature of your system allows you to assign a certain number of valid uses to User Code 8. After the code has been used the programmed amount of times, it automatically becomes disabled. This code may be assigned to a maintenance person, a maid, or anyone who you would like to be able to arm and disarm the system for a selected number of times without having to give out your regular code. After the uses have expired, the code will cease to function. It can be re-enabled by programming in another number indicating how many times that it can be used. It will not be necessary to re-program the actual code 8 unless changing the code itself is desired.

1. The system must be disarmed.
2. Press key 9 and hold for three seconds. The keypad will beep three times.
3. Enter the Master User Code. The keypad will beep two times. The **READY** and **ARMED** indicators will blink alternately, and the other indicators will blink in sequence with each other when the programming mode is successfully entered (see remote programming note on Page 3-1).

4. Press key 8, then **Bypass** (#) key to instruct the control that you wish to program the desired code sequence for User Code 8. The keypad will beep three times.
5. Enter the desired four digit code sequence. After the fourth digit is entered, the keypad will emit one short beep followed by one long beep; then, the system will exit the programming mode automatically.
6. Repeat steps 2 and 3 to re-enter the programming mode.
7. Press key 9 plus the **Bypass** (#) key to instruct the control that you wish to program the number of valid uses for User Code 8. The keypad will beep two times.
8. Enter the number of uses desired, 1–254, then press the **Reset** (\*) key. The keypad will beep two times.
9. Press the **Reset** (\*) key again to exit the programming mode.

<b>NOTE</b>
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**The temporary code may perform all of the functions of your regular User Codes. Only the Master User Code (Code 1) will permit entry into the programming mode of operation. Remote Programming is not available in U.L. Listed Systems.**

## Glossary

**Alarm Memory:** A history of the alarm that last occurred.

**Arm:** To turn the intrusion detection system on.

**Bypass:** To temporarily remove a zone from operation. To Shunt a zone.

**Control Station:** The remote station used to enter instructions to the control panel such as to arm, disarm and bypass. Also called a keypad.

**Delay Zone:** Zone which allows a programmable amount of time to enter and disarm the system without activating an alarm. Also provides an exit time to leave the premises after arming. “Delay” may be assigned to any number of zones.

**Disarm:** To turn the intrusion detection system off.

**Entrance Delay:** Time permitted to enter the armed premises through a delay defined zone.

**Faulted:** A detection area which is not secure, such as a protected door or window which has been left open causing the control to loose its “Ready” status.

**Force Arm:** To override. To force the system to arm when one or more zones are not ready.

**Hardwire Zones:** The areas of protection referred to as zones on the control station.

**Indicator Lights:** The lights (LEDs) on the control station.

**Interior:** The backup or second line of defense. Consists of one or more zones that detect intruders that have already entered the building. Interior detection devices usually consist of motion detection devices, interior door contacts, and under carpet sensors, designed to surprise the intruder.

**Interior Follower Feature:** Converts interior zones to delay zones upon entry through a delay door. Interior follower provides passage through interior detection zones to the control station in order to disarm the system.

**Keypad:** A generic term for the control station.



**Master User Code (Master User Authorization Code):** A code which functions identically to the User Codes; also may be used to enter the programming mode.

**Perimeter:** The first line of defense. Consists of one or more zones which detect intrusion through doors and windows.

**Program:** To set the operating characteristics of the main system electronics such as the code which is used to arm and disarm.

**Ready:** The system is ready to be armed.

**Remote Programming:** The ability to service the system from a remote location (specified by your security representative) with the aid of a computer.

**Reset Key:** The (\*) key. Used to clear improper numeric entries and to silence the control station sounder.

**Sensors:** Devices that detect violations and report such conditions to the control panel. Sensors include door and window contacts or any device used to inform the control of a particular condition.

**Shunt:** See "Bypass."

**Supervisory/Trouble:** Your installer may have defined one or more of your controls' zones for supervisory/trouble condition indication. (All Fire zones are automatically supervisory/trouble zones). If a wire breaks on supervisory/trouble Fire zone, the control station sounder will beep continuously to alert you of the problem. Pressing the **Reset** (\*) key will silence the control station sounder. In some cases, burglar zones may be also defined as such to indicate a broken wire when the system is disarmed. An example of this would be for a store with alarm for protecting the glass. If the foil is cut during store hours, the owner will be alerted and not have to wait until closing time to find out that service is required.

**Twenty Four (24) Hour Zone:** A zone that is permanently active 24 hours a day such as a FIRE zone.

**User Code (User Authorization Code):** A code which is used to arm and disarm the system.

**Zone:** The areas of protection represented by zone indicators.

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**FCC COMPLIANCE**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**CAUTION:** Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

An AC surge arrestor should be installed in the system's AC power outlet.

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