

Security System Control

MOOSE Z1200

User Guide

MOOSE

A Product of Sentrol, Inc.

Introduction

By purchasing the Z1200 Security System, you have taken a major step toward protecting your home or business. Read these instructions carefully to familiarize yourself with the system. Your system is custom designed to meet your specific requirements and may include features not discussed in this manual. If you have any questions, contact your security installation representative.

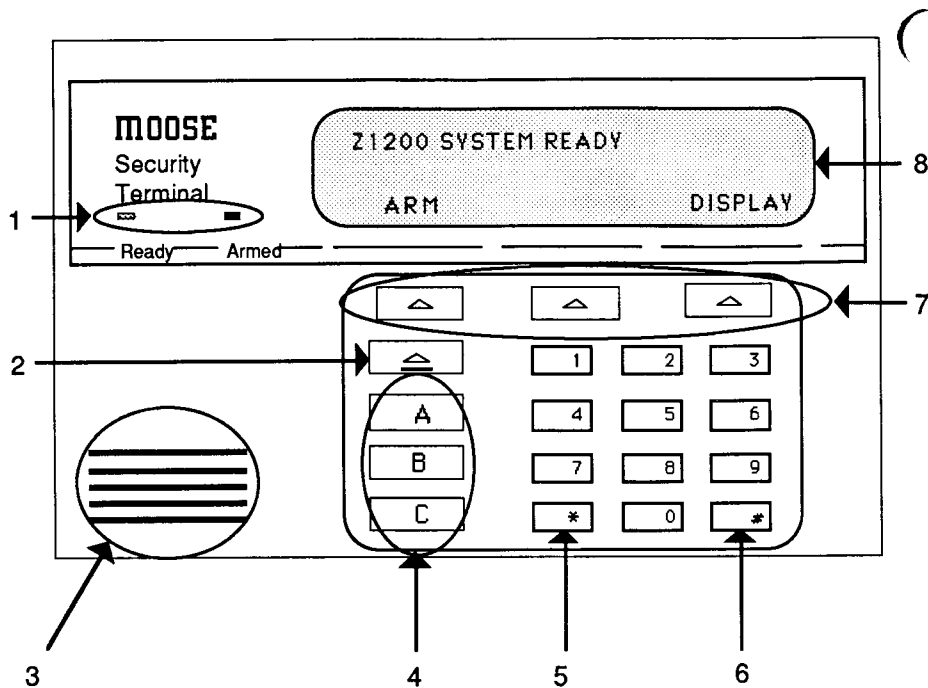
Precautions

1. **Read this manual entirely** and keep it in a secure place.
2. The system must be tested at least once per week to ensure proper operation. Contact your security representative for testing procedures and scheduling of a regular maintenance program.
3. If the system is malfunctioning, have it serviced by a qualified professional as soon as possible.
4. If the electrical system of the building(s) is altered, be sure that the changes do not create an interruptible power supply to the control panel.
5. If the telephone system is serviced, test the security system to ensure that communication to the central station is intact.
6. No security system can detect intrusion or other emergency conditions in all circumstances. Your security representative can instruct you on the limitations of your system and may recommend future upgrades to the system.
7. Motion detectors are designed to detect specific types of motion within a defined area. Be sure that you understand which areas are protected and under what conditions the system is active (temperature and time variations, etc.).
8. Smoke detection devices cannot detect all types of fire under all circumstances. Have your security representative explain the limitations of your fire system. Have smoke detectors cleaned and tested on a regular basis.
9. Security systems rely upon AC as a primary power source. When AC fails, the control is powered by a standby battery. The standby battery is automatically checked by the system and should be replaced by a qualified service technician at regular intervals.
10. The system can be armed without AC power. The system could then fail if the battery voltage falls below the acceptable range before AC power is restored. It is possible to arm the system with the standby battery disconnected.
11. In the event of a trouble indication, contact your security representative immediately to determine the nature of the trouble condition.
12. If upon returning to the building, you discover that an alarm has occurred, **DO NOT ENTER THE PREMISES**. Immediately contact the proper authorities.
13. Be sure to inform your neighbors that a security system has been installed. Also explain the meanings of the various audible signals and ask them to contact the appropriate authorities upon activation of an alarm.
14. UL requires that audible burglar alarms be sounded by a bell and fire alarms by a horn. For combination burglar and fire alarm 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 bell.
15. UL requires that exit times not exceed 60 seconds. Entrance times may not exceed 45 seconds. Cut-off time for siren/bell cannot be less than 4 minutes for residential fire and burglary and 15 minutes for commercial burglary.

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LCD Overview



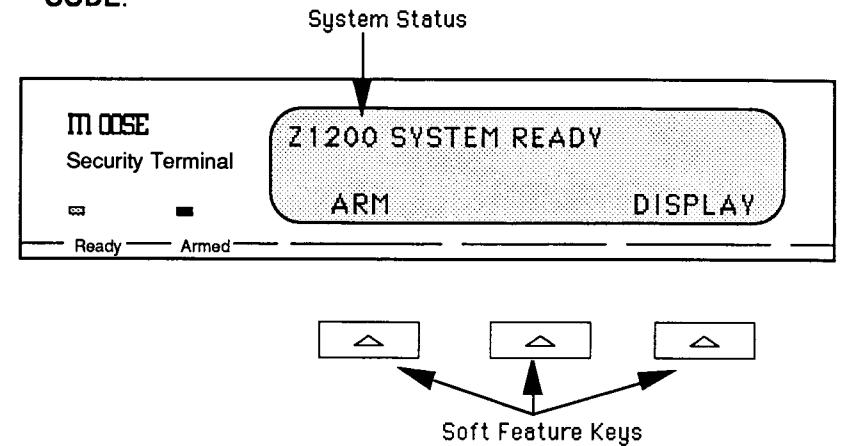
1. **Status Lights**
 - Ready: On - System is ready to arm.
Off - System is not ready to arm.
 - Armed: On - Intrusion detection system is armed.
Off - Intrusion detection system is disarmed.
Blinking - A burglar alarm has occurred.
2. **Menu Scroll Key** Allows the user to scroll through menu options.
3. **Keypad Audible** Sounds tones and alarms.
4. **Auxiliary Panic Keys** Activates auxiliary alarms
5. **Clear/Quit Key** Clears incorrect entries or return to previous screen.
6. **Enter Key** Causes the system to accept data after it is typed in.
7. **Soft Feature Keys** Allows the user to make selections from the LCD display screen.
8. **LCD Display** Displays system status and menu options.

Arming & Disarming the System

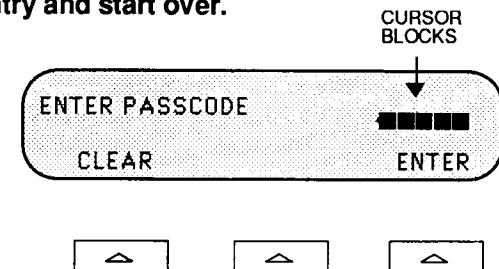
With the system off (disarmed) and all zones secure (all contacted doors, windows, etc. closed), the LCD displays **Z1200 READY**. Since the word **Z1200** may be customized at the time of installation, your display may be slightly different. **Note: Refer to "System Not Ready" if the LCD displays Z1200 NOT READY.**

To Arm

1. Press the **ARM** soft key. The display prompts you to **ENTER PASSCODE**.

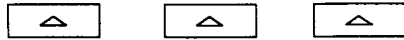


2. Enter your user code. As you enter each digit, cursor blocks appear above the **ENTER** prompt. Press the **ENTER** soft key. **Note: If you make an error entering your user code, press the CLEAR key to clear the entry and start over.**

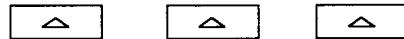
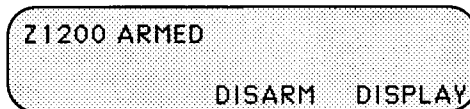


3. The LCD now displays the **ARMING LEVEL** prompt. **AWAY** instructs the control to completely arm all detection devices. **STAY** instructs the control to arm only perimeter zones while bypassing interior zones. **NIGHT** instructs the control to arm all perimeter and specified interior zones.

Select the desired level of arming.



The screen briefly displays the selected arming level (**Z1200 ARMING: AWAY**). Next, the control station counts through the arming time with a visual display (**ARMING IN XX SECONDS**) and with audible beeps, if so programmed. When the system is armed, the screen display:

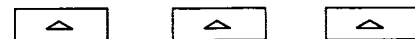
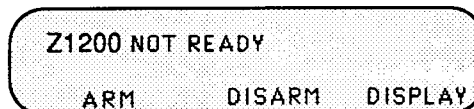


To Disarm

Disarming the security system is basically the arming procedure reversed. Select the **DISARM** soft key. At the **ENTER PASSCODE** prompt, enter your user code and press the **ENTER** soft key. The system disarms and displays **Z1200 READY TO ARM**.

System Not Ready

When one or more detection zones are open (a door or window is not properly closed, for example), the LCD indicates **Z1200 NOT READY** and gives you the option to **DISPLAY** the name of each open zone.



1. Press **DISPLAY** to see which zone is open. If more than one zone is open, press **NEXT** to display the other violated zone(s) consecutively. When all zones are identified, press **QUIT**.
2. Attempt to secure open zone(s) by checking appropriate doors, windows, etc.
3. If you are unable to secure the open zone(s), check with your security representative to find out if your system is programmed to partially arm by temporarily bypassing the open zone(s). If this programming is enabled, after you select **ARM**, the display indicates that the system is not ready and gives the option to **BYPASS** the open zone.
4. When **ARM** is pressed, the control station prompts you for your user code. The user code must be of a sufficient authorization level to arm in these circumstances.

For specific information regarding the zone bypassing and force arming features in your system, consult your installing company.

Note: Bypassing zones reduces the degree of security designed for your building. Do not instruct temporary users how to employ the bypass function.

Testing the Burglar Alarm Audibles

UL Listed burglar alarm systems which have separate audible sounding devices require a weekly test. Use the following procedure.

1. Notify the central station or the appropriate authorities before and after conducting the test.
2. Arm the system by following the instructions on the preceding pages.
3. Upon expiration of the exit delay, open a non-delayed door, window, or motion detector. The sounding device activates.
4. To reset, follow the instructions on disarming the system.

What To Do If The Alarm Is Sounding

The display indicates that an intrusion has occurred.

1. Press **SILENCE**.
2. Enter your user code. **If you make an error entering your code, press CLEAR and re-enter the code.**
3. Press the soft key corresponding to **ENTER**. The LCD then displays the **EVENT HISTORY** prompt.
4. Press the soft key corresponding to **TIME** to display the time and date that the system alarmed. Press **QUIT** to exit and return to normal mode.

Auxiliary Panic Keys

These activations have various uses. **Most** are used as distress signals and always work regardless of whether the system is armed. These keys can be programmed to activate different types of alarms. The keys may be assigned as follows:

- **Burglar Alarm** - may activate silently with a visual display or with both audible and visual alarm indications, depending on programming.
- **Fire Alarm** - activates with audible and visual alarm indications.
- **Hold-up Alarm** - may activate silently with no visual display or with both audible and visual alarm indications, depending on programming.
- **Medical Alarm** - activates with audible and visual alarm indications.

To determine when or if to use these keys on your system, refer to the table in the back of this guide for the assignments of these keys.

To Activate Panic Keys

Press Auxiliary Panic Key **A**, **B**, or **C**. The activation may be instant or you may have to hold the key down for three seconds, depending on programming. Your installation company's representative will work with you to determine the best options for your system.

To Silence And Reset Auxiliary Zones

1. Notify the central station or the appropriate authorities **immediately** if an alarm was activated unintentionally.
2. Press **SILENCE** and enter your code when prompted.
3. Press the soft key corresponding to **ENTER**.

Note: To reset a silent hold-up alarm, you must access the RESET ALARM menu. See the definitions of the menu features on the following pages.

Using a Duress Code

Your installer may have enabled the duress code feature. When this code is used to arm or disarm, the system arms or disarms normally while sending a silent Panic Report to your central station. The central station will respond accordingly. **The installer must enable this code for it to operate.**

Special Conditions

This control can schedule openings, closings, automatic arming and automatic disarming. If the arming schedule attempts a closing (system arming) while the system has one or more violated zones, one of several scenarios may occur:

1. The violated zones will inhibit the arming sequence and the control will report a Fail to Close signal to the central station (if programmed). Some central station monitoring facilities will detect the failure to close as set by a time parameter at the central station.

2. If the installer has enabled the area force arm feature, the area will arm. When the area is force armed, the control will report a separate force arm closing code to the central station along with the reporting ID of the zones which were force arm bypassed.
3. If the installer has not enabled the force arm feature, the area will remain disarmed and the control will report a Fail to Close signal to the central station (if programmed).

Trouble Conditions

If a trouble condition exists, the LCD displays **SYSTEM TROUBLE**. Pressing **DISPLAY** will further define the situation. Examples of **SYSTEM TROUBLE** conditions include **MISSING KEYPAD** (a control station has been removed), **FIRE TROUBLE** (a fire system wire is broken), **LOW BATTERY/BLOWN FUSE, A.C. POWER FAILURE**, etc.

System Power

If the standby battery is weak, the display will read **LOW BATTERY**. Extended power outages will discharge the standby battery. With AC applied to the control, the battery will recharge within 16 hours. The system battery may be tested by pressing the Menu Scroll Key to obtain **SYSTEM TEST**. After pressing the **SYSTEM TEST** soft key, the **BATTERY TEST** option will appear. Pressing the soft key below this option will activate the test, and the display will indicate the present battery voltage. Optimum battery voltage is approximately 14.0 VDC. The battery test will fail below 11.2 VDC. If the battery fails the test, allow sufficient time for the standby battery to recharge, then test again. Depending on your system's programming, the central station may be notified when this or other trouble conditions exist. If the system fails the test again, call your alarm company's service representative.

Zone Trouble

The ready light on the control station is on when the assigned area has no violated burglary zones (all the contacted doors and windows are closed and the interior devices are stable). If this light is out, then the area has **at least** one violated zone. Pressing the soft key corresponding to **DISPLAY** will indicate the open point(s).

Your installer may have assigned an additional degree of security to one or more of the system zones. Even when the system disarmed, if an internal problem exists the control station sounder will beep, the display will read **TROUBLE**, and the system will report the condition to the central station (if programmed). Pressing **DISPLAY** will further define the condition. For example, if a fire zone has a broken wire, the display will read **FIRE TROUBLE**.

If the trouble condition cannot be resolved, call your alarm company's service representative.

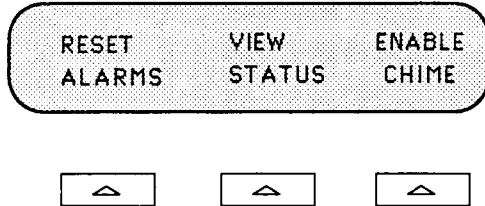
Menu Features

The Z1200 has menu selections that enable you to perform a variety of functions, including user level programming. The menu key allows you to scroll through the available options. Each time you press the menu key, a new selection of options appears on the LCD screen. Pressing the soft key below an option activates that function. After you select an option, the display prompts you to **ENTER PASSCODE**. After you enter your user code, additional sub-menus may appear. You can return to the status screen by pressing the * key. Note: When an area is armed or in alarm, only the first level of menu options ("1st Menu Key Press") is accessible.

Main Menu Definitions

(Note: The user code must be of sufficient authorization level to perform a particular function. Your installation company representative will go over the authorization levels for the functions on your system.)

First Menu Key Press:

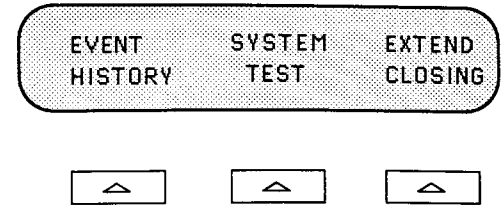


RESET ALARM : Resets silent Hold-up Alarms only. **You must perform this function or a disarm of the entire area to get a new Hold-up Alarm.**

VIEW STATUS : Allows you to view the status of each zone and area. While viewing zone status, you may be permitted to bypass any zones defined as bypassable. **Note: Bypassing burglary zones in armed areas is not permitted. You must disarm first, bypass the zone, and then re-arm.**

ENABLE CHIME: Provides an audible annunciation from the control station(s) when certain doors and windows are opened while the system is disarmed. The feature is commonly used for residential door annunciation or as customer entry notification in retail establishments. The display screen on this feature is similar to the status screen. Pressing the **CHANGE** soft key turns the chime on or off.

Second Menu Key Press:



EVENT HISTORY: Permits you to display a limited number of past events from the event memory log. This memory displays events such as openings, closings, alarms, troubles, and access. Along with the type of event, the log contains information such as date, time, user, zone, etc. Events are stored on a first-in, first-out basis. After pressing the corresponding soft key and entering your user code, the LCD displays **EVENT HISTORY** with menu choices **QUIT**, **PRINT**, and **DISPLAY**.

QUIT: Resets system.

PRINT: Allows you to print the history data on an external printer if your system is equipped with one.

DISPLAY: Displays the history data on the LCD. It prompts **START WITH MOST RECENT?** with menu choices **QUIT**, **YES**, and **NO**.

QUIT: Returns display to previous screen.

NO: Prompts you for the date that the list should begin.

YES: Lists the events beginning with the most recent. When the desired event is displayed on the screen, additional information such as user name, zone name, date, and time may be viewed by pressing the **DISP** key.

SYSTEM TEST: Allows the testing of various aspects of the system.

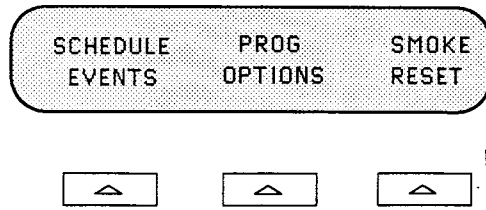
VOLT: Displays the system operating voltage.

LOCAL TEST: When you press this, all audible and visual indicating devices (alarms, etc.) in the area activate for two seconds. The LCD displays which zones have been tested and which zones are left to test. To test a zone, you must violate that zone. When you press exit, all the pixels in the keypad(s) for that area briefly illuminate. Your installation company's representative will go over the local test procedure for your system. See Figure 15 - Local Test Procedures.

BATTERY TEST: Displays the battery voltage.

EXTEND CLOSING: Permits you to delay the Auto Arm time by one hour, or extend the Late to Arm window by one hour. Extend Closing can only be activated once per day and can never extend past midnight. Activation of this function is reported to the central station and is posted in the event log. Your installation company's representative will go over this function as it applies to your system.

Third Menu Press:



SCHEDULE EVENTS: Allows the master user to set up or alter the schedule for the area's opening and closing times. The schedule is set up on a seven-day cycle. The control may be instructed to automatically arm and disarm the control or area or to expect the user to arm and disarm within specified times in the schedule. Compliance or failure to comply is reported to the central station, provided the installer enables the necessary report code fields. Note: Time is programmed in four-digit military time. Days are selected as digits 1-7.

PROG OPTIONS: Allows entry into the following modes. The master user code is required to access this option.

KEYPAD OPTIONS: Allows you to adjust beeps, adjust lamp, and change the viewing angle of the screen for the keypad in use for the programming.

USER CODES: Allows you to set and change user codes. (See **Programming User Codes section**)

SET CLOCK: Allows you to adjust the system's clock.

SMOKE RESET: Allows you to reset the smoke detectors after an alarm. If an alarm continues or reoccurs after a reset, contact your installation company's representative.

SCHEDULE EVENTS Definitions

Many options are accessible under the Schedule Events menu. Press **SELECT** to program this menu.

SCHEDULED MANUAL ARMING AND DISARMING This menu is used to set up daily schedules for authorized opening and closings. The schedule indicates when the control expects an area to be armed and disarmed. A programmable time window allows reasonable variation before and after the time set for the user to arm and disarm the control. All arming or disarming that occurs within the programmed time windows is logged locally. If the arming or disarming occurs outside the time window, it may be reported to the central station which responds accordingly. There is no control station warning during this window. (Note: The Late To Close deadline may be extended by one hour, as long as that extension does not go past midnight. Engage this function by selecting the **EXTEND CLOSING** option.)

01 **A1 SCH CLS DAYS {SMTWTFS}** Schedule Closings: This entry allows designation of the day(s) of the week that the control "expects" to be armed by an authorized user. Select each day of the week by entering the corresponding number (1-7).

02 **A1 SCH OPN DAYS {SMTWTFS}** Schedule Openings: This entry allows the designation of the day(s) of the week that the control "expects" to be disarmed by an authorized user. Select each day of the week by entering the corresponding number (1-7).

AUTOMATIC ARMING AND DISARMING If Automatic Arming is enabled, the control produces a three-second audible warning signal at the appropriate control station(s) once every minute beginning ten minutes prior to the event. During this warning, the same control station displays a visual indication of the impending action and the amount of time remaining. This allows the user ample warning to exit or override the impending action as necessary. The time window is not used for this feature. **Scheduled Opening/ Closing and Automatic Arming must not be enabled for the same time.** (Note: The time of an Auto Arm may be extended by one hour, as long as that extension does not go past midnight. Engage this function by selecting the **EXTEND CLOSING** option.) Automatic Disarming occurs at the scheduled time with no warning. Auto Arming arms the control **only** in the **AWAY** mode.

03 **A1 AUT ARM DAYS {SMTWTFS}** Automatic Arming: Select the day(s) of the week that the system automatically arms.

04 **A1 AUT DIS DAYS {SMTWTFS}** Automatic Disarming: Select the day(s) of the week that the system automatically disarms.

The following menu items establish a timetable for the events in items 1-4. If scheduled opening and closing events are enabled, the control "expects" the events to occur within the time parameters set (+/- the time window). If Automatic Arming is selected, the control arms/disarms the area on schedule (provided the system is able to arm, i.e. number of violated zones does not exceed limitations set for force arming, etc.)

05 **A1 TIME WINDOW: 0__** Time in minutes that the scheduled opening and closing may deviate +/- from the programmed timetable. Valid range = 0 - 255. **Note:** The time window does not extend past midnight.

06 **A1 CLOSE TIME SUN: 00:00/___** Programmed time for automatic arming or scheduled closing on Sunday. **Enter all times in military (24-hour) time values.**

07 **A1 CLOSE TIME MON: 00:00/___** Programmed time for automatic arming or scheduled closing on Monday.

08 **A1 CLOSE TIME TUE : 00:00/___** Programmed time for automatic arming or scheduled closing on Tuesday.

9. When all codes and names have been added or changed, press the star key to return to the main system status display.

Deleting a User Code

To delete a user code, select the **PROGRAM OPTIONS** menu, enter the master code and select the **USER CODES** option. Select the appropriate code using the **NEXT** soft key, enter a **0** and select **STORE**.

Programming A Temporary Code

The installer may program an optional temporary code (level 4) in your system. This code is designed as a convenience feature. It is for use by people (baby-sitters, maintenance personnel, etc.) to whom you may wish to give limited, temporary access to the area protected by your security system.

This temporary code can be used to arm the control. However, the control can only be disarmed with this temporary code if the temporary code was used to arm the control in the first place. Once a regular user code is entered, the temporary code can no longer disarm the control.

For example, you arrange for a neighbor to water your plants while you are on vacation. You give the neighbor the temporary code. When you leave for vacation, you arm the system using the temporary code instead of your own regular code. Your neighbor can disarm the system to come in and water the plants, and then re-arm it when he leaves. When you come home, you disarm the system with your regular code, automatically cancelling the temporary code's effectiveness as a means of disarming the system.

The same code can be re-enabled at a future time by an authorized user. It will not be necessary to re-program the actual code unless you have deleted it or just wish to change the code itself.

The installer can set a code aside for this purpose. Consult your alarm company for information on using this feature.

Using a Duress Code

Your installer may have enabled the duress code feature. When this code is used to arm or disarm, the system will arm and disarm normally and send a silent panic report to your central station. The central station will respond accordingly. **The installer must enable this code for it to operate.**

LED Keypad Operation

Your system may be equipped with an LED keypad. This type keypad allows you to operate the control in a very simple manner and is limited to away level arming. The keypad can arm, disarm and view system status. This keypad may also be used in a system where limited or restricted access to specific areas of the protected premises is necessary.

Before the system/area can be armed, the ready LED must be lit. To arm or disarm, enter the user authorization code and press the * key.

The control now arms the burglary detection system. The armed LED is now lit and all pre-programmed entry and exit times are in effect. Disarm by repeating steps 1 and 2.

Note: If a zone is violated when the arming sequence is entered, the keypad will emit a two-second protest tone. If the force arming feature is enabled, the user may press the # key and the system (or area) will force arm. This bypasses the violated zone(s) and activates the other burglary detection devices assigned to the keypad.

Indicator LEDs for the LED Keypad

STATUS LED: Is lit when all zones assigned to this keypad are in a secure state. This indicates the control is ready to be armed.

ARMED LED: Is lit when the burglary detection system assigned to this keypad is active.

ALARM LED: Is lit when the burglary detection system assigned to this keypad has detected an intrusion. **WARNING ! An intrusion may have been detected and the premises may be occupied by unauthorized persons. Do not enter the premises without having consulted the responding authorities.**

TROUBLE LED: Is lit when the system detects a condition which warrants attention. Conditions of this type include, but are not limited to, AC Power Failure, Low Battery, Smoke Detection Circuit Trouble, and Supervisory Trouble, on specially programmed devices. If this LED is lit and you cannot find and correct the cause, contact your alarm service representative.

Fire Detection

Your system may include fire detection, depending upon purchased options and the local codes or regulations for your area. If so, please notify your local fire department that a fire alarm system has been installed. 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 alarm company service representative for a scheduled maintenance program. UL Listed fire alarm systems require a weekly test of the fire alarm horn or bell. This can be done by following the instructions of your alarm company representative or the procedure in this manual pertaining to the "Fire Panic Key" (key A).

What To Do If The Fire Alarm Sounds

If the alarm was set off unintentionally, use the following procedures to silence and reset the system.

1. Press **SILENCE**.
2. Enter your user code to silence the control station sounder and the audible fire alarm. The system will continue to report the condition to the central station.
3. Notify the alarm monitoring service or the proper authorities immediately.

If the display indicates **FIRE TROUBLE**, a fire system wire may be broken making the fire system inoperable. Contact your alarm company's service representative.

The following information is from the National Fire Protection Association (NFPA) Standard 74.

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 is usually 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. Instruct all family members or workers in this procedure. Never stop inside a burning building to call the fire department. Instead, use a nearby phone to notify authorities of a fire.

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 occupants more time to exit the premises before smoke reaches a dangerous level. Instruct family member and workers to exit immediately when an alarm sounds.

Know Fire Hazards

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

The best fire protection is minimizing fire hazards through proper storage of materials and good housekeeping practices. Overloading of electrical outlets and careless use of combustible materials and electrical appliances are major causes of fire. Explosive and fast burning materials should be eliminated from the home and used with proper safeguards in the workplace.

Be Prepared

Establish a fire evacuation plan and perform fire drills regularly. Use them to ensure recognition of an alarm signal. For your protection, simulate different circumstances and have everyone react to the situation. Draw a floor plan and show two exits from each room. Establish one meeting place outside of the home or business and insist that all workers or family members meet there during an alarm. This will eliminate the tragedy of someone re-entering a building to search for a missing person who is actually safe. It is important that children be instructed carefully. They tend to hide in crisis situations. Train children in proper fire evacuation procedures.

Become familiar with the distinctive sounds of your fire and burglar alarm signals. Your installer can demonstrate the different audible signals emitted by your particular system.

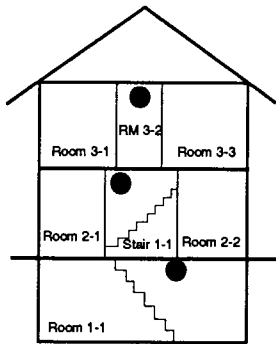
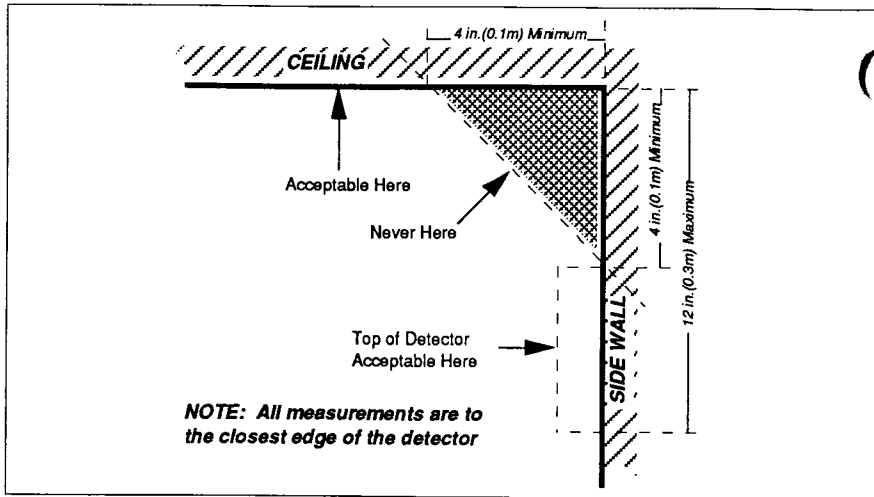
Smoke Detector Placement

Smoke detectors should be installed in accordance with NFPA Standard 74. For residential applications, smoke detectors should 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 basements and excluding crawl spaces and unfinished attics (see the illustration on the next page). 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 suffices for an adjacent lower level, including basements. **EXCEPTION: Where an intervening door is between one level and the adjacent lower level, a smoke detector shall be installed on the lower level.** For commercial applications, smoke detectors should be installed in each separate working area, including hallways and storage areas.

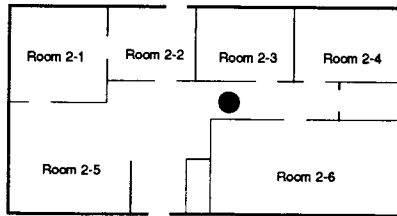
Ceiling-mounted smoke alarms should be located in the center of the room or hall, not less than 4 inches from any wall. When the detector is mounted on a wall, the top of the detector should be 4 to 12 inches from the ceiling. Smoke detectors should not be mounted where the normal ambient temperatures are above 100°F (37.8°C) or below 40°F (4°C) or 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. Corners where the ceiling and walls meet form air spaces into which heat has difficulty penetrating. Usually, this 'dead' air space measures about 4 inches (10 cm) along the ceiling from the corner and 4 inches (10 cm) down the wall as shown in the illustration on the next page. Heat or smoke detectors should not be placed in this 'dead' air space.

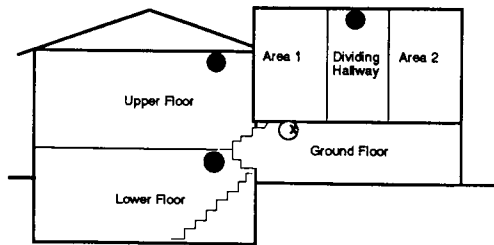
Smoke Detector Locations



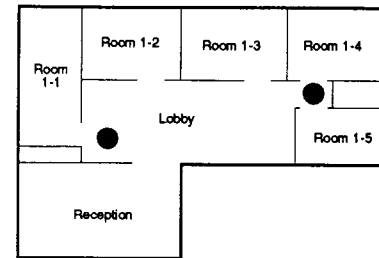
A Smoke Detector should be located on each story.



A Smoke Detector should be located between the sleeping area and the rest of the dwelling unit. (residential applications).



● Indicates required smoke detector. Consult Smoke Detector Specifications and local & National codes for coverage descriptions.



Ⓞ Indicates smoke detector is optional if door is not provided between living and recreational rooms. (residential applications).

Glossary

AC POWER: Alternating current supplied from the plugged-in transformer.

ARM: To turn the intrusion detection system on.

AUXILIARY PANIC KEYS: Programmed to activate different types of distress signals (fire, medical, burglary, hold-up). Are always working, regardless of whether the main system is armed.

BYPASS: To remove a zone from service by causing the system to ignore a zone. Bypasses are automatically removed when the system is disarmed.

CENTRAL STATION: A facility which monitors your security system and contacts the police, fire department, etc., in response to alarms from that system.

CONTROL PANEL: The main system electronics housed in a metal enclosure

DISARM: To turn the intrusion detection system off.

FORCE ARM: To activate the intrusion detection system in spite of the presence of faulted zones. If a faulted zone is secured during the armed period, that zone is automatically armed by the system.

INTERIOR: Zones consisting of motion detectors or interior door contacts designed to detect intruders within the building.

LED KEYPAD: Remote arming station with light-emitting diode display.

MASTER USER CODE: A code which must be entered to permit entry into the programming mode of operation.

PERIMETER: Zones consisting of exterior door and window contacts. The first line of defense.

PRE-ALARM DELAY: A specified length of time before the system activates an alarm after certain zones (such as entry doors) are violated. This is designed to give the user an opportunity to enter and disarm the system. "Delay" may be assigned to any or all zones.

PROGRAM: To set the specific features of the control station or control panel.

PROMPT: A request by the control station for input from the user.

TWENTY-FOUR-HOUR ZONE: A zone that is permanently active 24 hours a day (such as a fire zone).

USER CODE: Set of numbers which allows a user to perform an operation of the control.

ZONE: A specific area of protection that can be individually controlled.

FCC COMPLIANCE

Part 68 Notification

This security equipment complies with Part 68 of the Federal Communications Commission (FCC) rules. All connections to the telephone network must be made through standard telephone company plugs and jacks, RJ31-X or equivalent, in such a manner as to allow for easy and immediate disconnection of the equipment. If the connecting cord is unplugged from the jack there shall be no interference to the telephone equipment still connected to the telephone network.

The FCC registration number and Ringer Equivalence Number (REN) can be found printed on the wiring connection label located inside the Control Box Enclosure. If requested, provide this information to your telephone company. The REN is useful to determine the quantity of devices that may be connected to your telephone line and still have all of those devices ring when your number is called. In most, but not all areas, the sum of the RENs of all devices should not exceed five.

In the unlikely event that the equipment should ever fail to operate properly, it should be disconnected from the telephone jack to determine if the problem is with the telephone network or with the equipment. If a problem is found with the equipment, leave disconnected until it is repaired or replaced.

In the unlikely event that the equipment should ever cause harm to the telephone network, the telephone company may temporarily discontinue your service. If possible, they will notify you in advance. However, if advance notice isn't practical, the telephone company may temporarily discontinue service without prior notification. In the case of temporary discontinuance, the telephone company shall promptly notify the telephone subscriber who will be given the opportunity to correct the situation. The customer also has the right to bring a complaint to the FCC if he feels the disconnection is not warranted.

Your telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the proper operation of your equipment. If they do, you will be given advance notice so as to give you and opportunity to maintain uninterrupted service.

You should notify the telephone company if this equipment is removed from the premises and the telephone jack is no longer needed.

The FCC prohibits the connection of this equipment to party lines the use of this equipment in conjunction with coin-operated telephone service.

Part 68 Registration Number: A79USA-74490-AL-E

Part 15 Notification

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 or 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.

System Reference Guide

Emergency Telephone Numbers

Police _____ Fire _____

Neighbor _____ Doctor _____

Central Station _____ Service Rep. _____

Delay Times

_____ Seconds of exit delay time for Zone(s)

_____ Seconds of pre-arming delay (Delay 1) for Zone(s)

_____ Seconds of pre-arming delay (Delay 2) for Zone(s)

Central Station Information

Subscriber Number _____

Features Enabled

Intrusion

Household Fire

Hold-up

Auxiliary Alarms

Bypassing Enabled

Force Arming Enable

Panic Key (Key "A") Definition: _____

Panic Key (Key "B") Definition: _____

Panic Key (Key "C") Definition: _____

Passcode Attempts Before Keypad Lockout: _____

(Note: The lockout is a temporary measure that affects only the keypad in use for the passcode attempts.)

Note: The Auto - Arm feature must not be enabled on UL Listed systems.