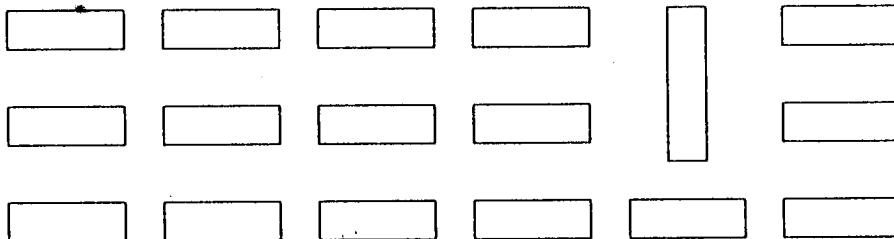


OPERATING GUIDE for your

RP3005LCD KEYPAD



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DESIGN PATS. PENDING

INTRODUCTION

The RP3005LCD is a "smart" user-friendly, menu-driven keypad designed for your MA3900 control panel. The keypad is interactive. Its alphanumeric screen will not only display the status of your system, but will also give you step-by-step instructions to guide you through all operations.

This booklet contains important information about the operation of your system with this RP3005LCD Keypad. Read it carefully and keep it handy for

future reference. Check the Glossary for an explanation of terms that may be unfamiliar to you.

You'll probably find subjects mentioned in this booklet that do not apply to your system. Napco control panels have such a wide variety of features that few security systems, if any, will ever need them all. Your alarm professional has chosen appropriate features for your particular needs.

Regardless of how your system has

been configured, rest assured that it has been carefully designed and engineered to the highest industry standards. To assure optimum safety and security, familiarize yourself with this equipment. Periodically check its condition and state of readiness by testing it at least once a week in both the ac/battery and battery-only modes (ask your alarm professional how to make these tests).

IMPORTANT — TEST YOUR SYSTEM WEEKLY!

Test your sounding device.

1. While disarmed, enter your User Code, then press the [FUNCTION] Button.
2. Answer NO (press [INSTANT] Button) until "ACTIVATE BELL TEST Y/N" appears in the window.
3. Press YES ([INTERIOR] Button) to execute the test. The alarm will sound for about two seconds. If the alarm does not sound or sounds weak, call for service.

Test your telephone line.

1. Notify your central station of the impending test.

2. While disarmed, enter your User Code then press the [FUNCTION] Button.

3. Answer NO (press [INSTANT] Button) until "ACTIVATE DIALER TEST Y/N" appears in the window.

4. Press YES ([INTERIOR] Button) to send a test code to the central station.

5. If the test is *not* successful, "FAIL TO COMM" will display at the keypad. Call for service.

Note: Any subsequent successful transmission will clear a "Failure to Communicate" system trouble.

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**TO SHUT OFF AN ALARM,
ENTER YOUR CODE,
THEN PRESS THE
[ON/OFF] BUTTON.**

FOR SERVICE, CALL: _____

CENTRAL STATION: _____

EXIT DELAY: _____

ENTRY DELAY: _____

FIRE ALARM SOUND*: _____

BURGLAR ALARM SOUND*: _____

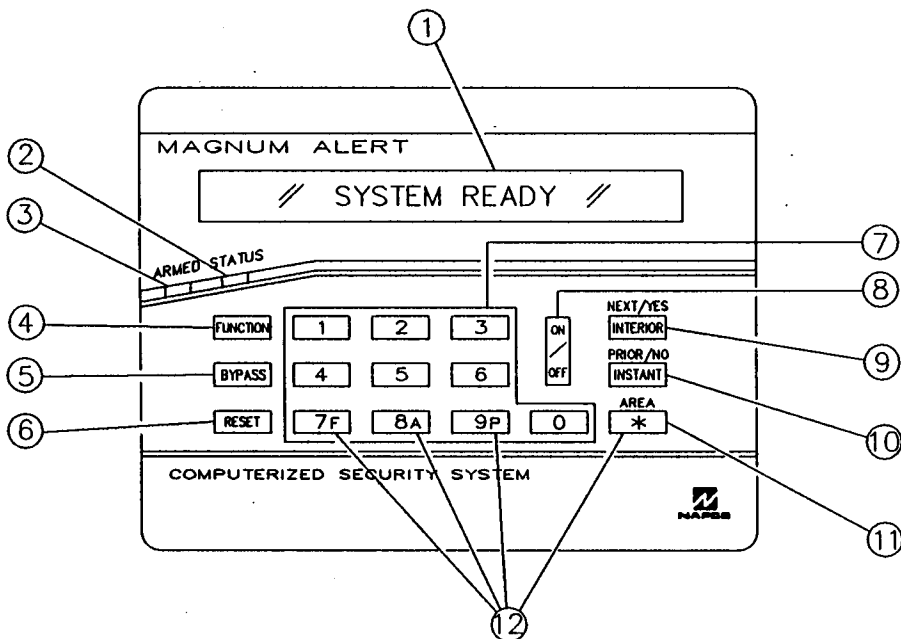
KEYPAD FIRE ENABLED?:
 YES NO

KEYPAD PANIC ENABLED?:
 YES NO

KEYPAD AUX. ENABLED?:
 YES NO

*FIRE HAS PRIORITY OVER BURGLARY.

KEYPAD CONTROLS & INDICATORS



KEYPAD CONTROLS & INDICATORS

- ① **Window.** Displays system status messages, zone descriptions, etc.
- ② **STATUS Light.** Lights (green) to indicate that the system is ready for arming. If a zone is not secured the light will be off and the zone will display in the window. If a zone has been bypassed, the STATUS light will blink while armed.
- ③ **ARMED Light.** Lights (red) to indicate that the system is armed. If an alarm has occurred, the ARMED LED will be flashing.
- ④ **FUNCTION Button.** Selects available system functions as displayed in the window. The selected function is executed by pressing the [ON/OFF] Button.
- ⑤ **BYPASS Button.** (1) Deactivates selected zones from the system. (2) Unbypasses a bypassed zone.
- ⑥ **RESET Button.** (1) Resets various system troubles, displays, etc. (See text.) (2) Resets residential smoke detectors.
- ⑦ **Numerical Keys (1-9, 0).** Used to enter codes, zone numbers, etc.
- ⑧ **ON/OFF Button.** Entry key. Causes the entered code or selected function to be executed.
- ⑨ **INTERIOR Button.** (1) Bypasses all Interior Zones simultaneously to allow free movement within the premises. (2) Scrolls the window display forward (NEXT). (3) Answers "YES" to questions in the window display.
- ⑩ **INSTANT Button.** (1) Cancels entry delay on Exit/Entry Zones, causing an instant alarm upon violation. (2) Scrolls window display backward (PRIOR). (3) Answers "NO" to questions in the window display.
- ⑪ **AREA Button (*).** (1) Selects and arms/disarms other areas. (2) Hold down to display the second line of a two-line message.
- ⑫ **Emergency Buttons.** Used with the [*] Button to signal an emergency, as follows:
 - Press [F] and [*] for Fire emergency.
 - Press [A] and [*] for Auxiliary Emergency
 - Press [P] and [*] for Police emergency.

SETTING THE ALARM (ARMING) WHEN LEAVING

SYSTEM READY

**ZONE FAULTS
02 BACK DOOR**

**BYPASS 02 BACK DOOR
BYPASSED**

**EXIT TIME XXX
PLEASE LEAVE NOW**

**ZONES NOT NORMAL
CAN'T ARM SYSTEM**

1. **Check the keypad.** The green STATUS light must be *on* in order to arm.
 - If the green light is off, "ZONE FAULTS" will display in the window followed by the number and description of each faulted zone. Note each problem zone and secure it by closing a window, door, etc. When all zones are secure, the green STATUS light will come on and the window will display "SYSTEM READY".
 - **Bypass faulted zones.** If you cannot locate or repair the problem yourself, call for assistance. If you cannot get immediate help, bypass the problem zone(s) from the system by pressing the [BYPASS] Button, then the zone number (or vice versa). **Note:** Bypassed zones are unprotected. If armed with zones bypassed, be sure to have the system checked as soon as possible.
2. **Arm the system.** Enter your code and press the [ON/OFF] Button. The green STATUS light will go off, the red ARMED light will come on and the window will alternately display "EXIT TIME XXX" and "PLEASE LEAVE NOW" (where "xxx" represents the exit time remaining, in 10-second steps). **Note:** If you enter a wrong code, the keypad will display "INVALID ENTRY, TRY AGAIN". Re-enter your code immediately.
3. **Leave the premises.** Leave through the exit door before exit time expires.

Priority Arming. If you attempt to arm a faulted *Priority Zone*, a 3-second tone will sound at the keypad. "ZONES NOT NORMAL" and "CAN'T ARM SYSTEM", will alternately display in the window, indicating that the trouble(s) must be corrected before the panel can be armed. A zone selected as *Priority Zone with Bypass* (check your Alarm Plan) may be bypassed if in trouble. If the problem cannot be corrected immediately, press the [RESET] Button, then arm the panel. A 3-second beep will sound at the panel to indicate arming with a Priority Zone in trouble. Be sure to have the trouble repaired as soon as possible.

SETTING THE ALARM (ARMING) WHEN LEAVING

SYSTEM TROUBLE
SYS.TBL LOW BATTERY

PRESS RESET KEY
CAN'T ARM SYSTEM

If you attempt to arm with a "SYSTEM TROUBLE" display (alternating with an indicated trouble, e.g. "AC POWER LOSS", "LOW BATTERY, etc.), a 3-second tone will sound at the keypad. The window will display "PRESS RESET KEY, CAN'T ARM SYSTEM". If you cannot correct the problem immediately, pressing the [RESET] Button will enable you to arm in this condition. Be sure to call for service as soon as possible.

Area Arming (Optional)

In a system that has been partitioned into multiple areas, one or more areas may be armed while others remain disarmed.

Manager's Mode. The Manager's Mode, if enabled, provides quick access to other areas without the system status display. (This is *not* a high-security feature.)

To arm any area,

1. Press the numerical key representing the area number.
2. Press the [*] Button, then [ON/OFF]. In effect, you will now be in that area.
3. Enter your code, then press [ON/OFF] to arm. **Note:** Your code must be valid in that area.

To arm all areas simultaneously (including the area you are in),

1. Press [9] then the [*] Button.
2. Enter your code, then press the [ON/OFF] Button.

If any zone is not secured, the keypad will alternately display "CAN'T ARM SYSTEM / AREA # IN TROUBLE", where "#" identifies the area number. All problem zones in the respective area must be secured or bypassed before the area can be armed. **Note:** If a system trouble is indicated, the system may not be armed using this method.

To disarm all areas, press [0], [*], enter your code and press [ON/OFF].

CAN'T ARM SYSTEM /
AREA # IN TROUBLE

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PROTECTING YOURSELF WHILE ON THE PREMISES

SYSTEM READY

INTERIORS I1 + I1

BYPASS

SYSTEM READY

BYPASS

SYSTEM ARMED

SYSTEM ARMED I

Bypassing Interior Zones

Interior Zones, when bypassed, allow free movement within the premises while the protection of armed perimeter zones is maintained. One or two groups of zones may have been designed as Interior Zones. If only one group of zones has been programmed, it will be selected for bypass when the [INTERIOR] Button is pressed, and will be bypassed upon arming. If two groups of zones were programmed, proceed as follows:

1. Select the Interior group by repeatedly pressing the [INTERIOR] Button. The window will display "I1", "I2", or "I1 + I2", each with its related description.
2. When the desired Interior group is displayed, press the [ON/OFF] Button to select it. "BYPASS" will display to indicate zones bypassed.
3. Enter your code, then press the [ON/OFF] Button. The red ARMED light will come on and the green STATUS light will blink, indicating zones bypassed. After the exit time has elapsed, the window will display "SYSTEM ARMED" with the "BYPASS" reminder.

Instant Protection

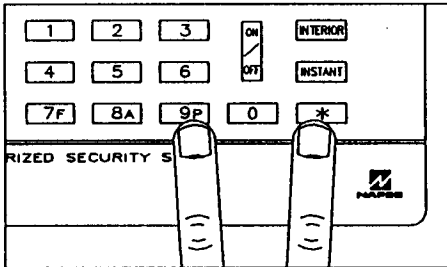
When retiring for the evening, after everyone is at home, you will probably want to cancel the entry delay on the Entry Zone(s). Then, if armed, opening the entry door will cause an Instant alarm. (When arming, exit delay will remain in effect.)

1. To cancel the entry delay while on the premises, merely press the [INSTANT] Button. (The [INSTANT] Button may be pressed either before or after arming.)
2. When armed, the window will display "SYSTEM ARMED I" and the red ARMED light will flicker rapidly to indicate *instant protection*.

PROTECTING YOURSELF WHILE ON THE PREMISES

Emergency Buttons (Only available if programmed)

The blue Emergency Buttons (F, A and P), if programmed, are *always active*, whether the system is armed or disarmed. The emergency signal will only be activated when the respective Emergency Button and the [*] button are pressed *at the same time*.



- **Fire Emergency.** Simultaneously press the blue [F] and [*] Buttons to alert the central station of a fire emergency.
- **Auxiliary Emergency.** Simultaneously press the blue [A] and [*] Buttons to alert the central station of some other emergency.
- **Police Emergency.** Simultaneously press the blue [P] and [*] Buttons to alert the central station of a police emergency.

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TURNING OFF THE ALARM (DISARMING) WHEN RETURNING

ENTRY TIME XXX
DISARM SYSTEM

1. Upon entry, the keypad sounder will come on as a reminder to disarm the panel. The red ARMED light will be on and the window will alternately display "ENTRY TIME XXX" and "DISARM SYSTEM", where "XXX" represents the entry time remaining in 10-second steps. During the final 10 seconds, the sounder will pulse a warning signal.

2. Immediately enter your code, then press the [ON/OFF] Button. The sounder will silence and the red ARMED light will go out.

Note: If you enter a wrong code, the keypad will display "INVALID ENTRY, TRY AGAIN". Re-enter your code immediately.

INVALID ENTRY
TRY AGAIN

ALARM
02 - BACK DOOR

Alarm Indication

If the red ARMED light is flashing and "ALARM" is displayed, an alarm occurred while you were out. *Proceed with caution!* If you suspect that an intruder may still be on the premises, leave immediately and call authorities from a neighbor's phone.

To silence an audible alarm,

1. Enter your code and press the [ON/OFF] Button. After the system is disarmed, the window will continue to display "ALARM" followed by the zone(s) violated.

2. To reset the display, note the zones violated, then press the [RESET] Button.

TURNING OFF THE ALARM (DISARMING) WHEN RETURNING

Ambush (*Ambush programmed?* YES NO.)

The Ambush Code (optional) is a 2-digit code that is entered just prior to your Disarm Code. If an intruder forces you to disarm your system, (a) enter your Ambush Code; (b) enter your Disarm Code; (c) press the [ON/OFF] Button.

Example: If your regular Arm/Disarm Code is 1234 and your Ambush Code is 99, press [9] [9] [1] [2] [3] [4] [ON/OFF]. This will send a silent alarm to the central station.

The red ARMED light will go out and the window will display "SYSTEM READY", as if the system were merely disarmed. There will be no indication that an alarm has been sent.

Day Zone (*Day Zone(s) programmed?* YES NO.)

A Day Zone is used to monitor a secured exit door, window foil, etc. A problem on this type of burglary zone will cause a "DAY ZONE TROUBLE" display and a pulsing keypad sounder while disarmed. To silence the sounder, press the [RESET] Button (or arm and disarm, if so programmed). Correct the problem to reset the Day Zone.

24-Hour Zone (*24-Hour Zone(s) programmed?* YES NO.)

This zone is always armed, even if the system is disarmed. If there is no audible output (bell, siren, etc.) programmed for this zone, it will behave as a regular Burglary Zone, however an alarm will be reported to the central station and recorded in the Alarm Event Log. If an audible output *is* programmed, a 24-Hour Zone will behave as an armed Burglary Zone. If the system is subsequently armed with a 24-Hour Zone in trouble, the keypad sounder will come on momentarily to indicate that there is a problem on the zone.

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FIRE PROTECTION

(Applicable only where local ordinance permits use of this alarm control panel for fire protection.)

FIRE ALARM

Fire-Zone Alarm

If a fire is detected, "FIRE ALARM" will be displayed and the keypad sounder will pulse.

1. If a fire is in progress, evacuate the premises immediately! If necessary, call the Fire Department from an outside phone.
2. If there is no evidence of a fire, enter your code and press [ON/OFF] to turn off the alarm.
3. Press the [RESET] Button to silence the keypad sounder.
4. Check smoke detector(s). If a smoke detector tripped, its red alarm indicator light will be on.
5. After the alarm condition is corrected (thermostat cooled down; smoke cleared from detector; etc.), pressing [RESET] again will reset the keypad within about 10 seconds.

FIRE TROUBLE

Fire-Zone Trouble

1. If a problem in the fire-circuit is detected, "FIRE TROUBLE" will display and the sounder will pulse to signal a malfunction.
2. Press the [RESET] Button to silence the sounder. *Call for service immediately!*

FIRE PROTECTION

Preparing a Fire Escape Plan

Even with the most advanced fire alarm system, adequate protection requires an escape plan.

To prepare your plan, draw floor plans of your building. (Space is provided on the next page.) Show two exits — a front or back door and a window from each room. (Make sure the window works. You may need a special fire-escape ladder if the window is high up.) Write down your outside meeting place.

Family Rehearsal.

Rehearse each of the following activities:

1. Everyone in his room with the doors closed.
2. One person sounds the alarm.

3. Each person tests his door.
4. Pretend the door is hot and use the alternate escape exit.
5. Everyone meets outdoors at the assigned spot.

Important! — Read Carefully

Discuss these escape procedures with all those who use the building:

1. In a residence, sleep with the bedroom door closed. A closed door will hold back deadly smoke while you escape.
2. When the fire alarm signals, escape quickly. Do not stop to pack.
3. Test the door. If it is hot, use your

alternate route through the window. If the door is cool, brace your shoulder against it and open it cautiously. Be ready to slam the door if smoke or heat rushes in. Crawl through smoke, holding your breath. Close the doors again on leaving to help prevent the fire from spreading.

4. Go to your specific outdoor meeting place so you can see that everyone is safe.

5. Assign someone to make sure nobody returns to the burning building.

6. Call the Fire Department from a neighbor's telephone.

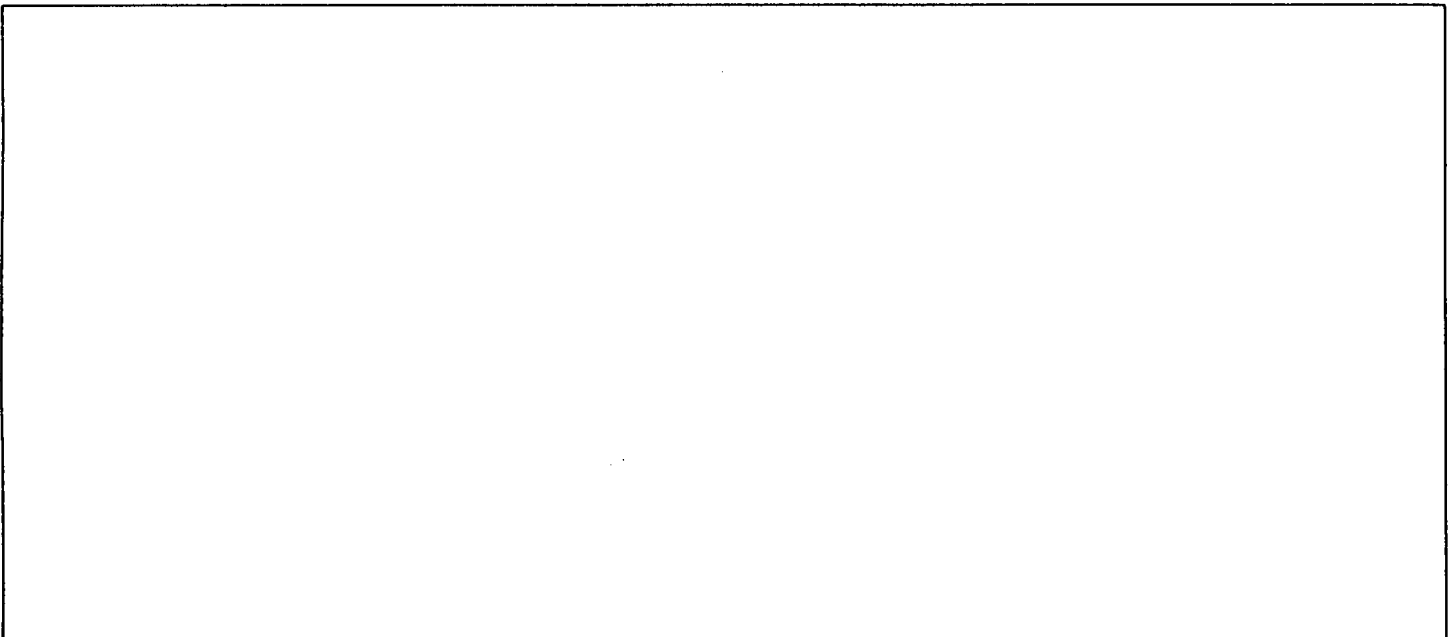
Would You Like More Safety Information?

For more information on home fire detection, burn safety, and home fire safety, write to the National Fire Protection Association, Public Affairs Dept. 05A, Batterymarch Plaza, Quincy, MA 02269.

FIRE PROTECTION

Floorplan

Draw a plan of your premises in the space provided below.



FIRE PROTECTION

LIMITATIONS OF FIRE ALARM WARNING SYSTEMS

Although a fire alarm system may be of a reliable and state-of-the-art design, neither it nor its peripheral detection devices can offer guaranteed protection against fire. Any such equipment may fail to warn for a variety of reasons:

- Control panels, communicators, dialers, smoke detectors, and many other sensing devices will not work without power. Battery-operated devices will not work without batteries, with dead batteries, or with improperly installed batteries. Devices powered solely by AC will not work if their power source is cut off for any reason.
- Fires often cause a failure of electrical power. If the system does not contain a working battery backup power supply, and if the electrical circuit feeding the devices is cut or is not providing power for any reason, the system will not detect heat or smoke or provide any warning of a possible fire.
- Telephone lines needed to transmit alarm signals to a central monitoring station may be out of service.
- Smoke detectors, though highly effective in reducing fire deaths, may not activate or provide early-enough warning for a variety of reasons: (a) they may not sense fires that start where smoke cannot reach them, such as in chimneys, walls, roofs, behind closed doors, etc.; (b) they may not sense a fire on a different level of the residence or building; (c) they have sensing limitations; no smoke detector can sense every kind of fire every time.
- Thermostatic heat detectors do not always detect fires because the fire may be a slow smoldering low-heat type (producing smoke); because they may not be near the fire; or because the heat of the fire may bypass them. These detectors will not detect oxygen levels, smoke, toxic gases, or flames. Therefore, they may only be used as part of a comprehensive fire-detection system in conjunction with other devices. Under no circumstances should thermostatic heat detectors be relied upon as the sole measure to ensure fire safety.
- Alarm warning devices such as sirens, bells, or horns may not alert someone behind a closed or partially-opened door. Warning devices located on one level are less likely to alert those on a different level. Even those who are awake may not hear the warning if the alarm is obscured by noise from a stereo, radio, air conditioner, or other appliance, or by passing traffic, etc. Alarm warning devices, however loud, may fail to warn the hearing impaired.
- Alarm products, as all electrical devices, are subject to component failure. Even though the equipment is designed for many years of trouble-free performance, electronic components could fail at any time.

Above are some of the reasons that fire alarm equipment could fail. The most common cause of an alarm system not functioning when a fire occurs is inadequate testing and maintenance. The system should be tested at least weekly to ensure that all the equipment is working properly.

While an alarm system may make one eligible for lower insurance rates, it is not a substitute for insurance. Homeowners, property owners, and renters are therefore urged to maintain adequate insurance coverage of life and property.

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KEYPAD FUNCTIONS

The keypad can provide a wide assortment of utility functions. The functions are displayed in a prompting "yes/no" format. To skip a function, answer NO (press [INSTANT] Button); to select and execute a function, answer YES (press [INTERIOR] Button or [ON/OFF] Button). The complete function list is provided here in its normal displayed sequence. However, since not all functions are designed for all systems (or intended for all users), *only functions that are applicable and active are displayed*. (For example, if no zones are bypassed, "DISPLAY ZN BYPASSED" will not appear.) Furthermore, functions that are intended for use by the installer or servicer will not be displayed. (Note: Functions may be manually scrolled forward or backward using the [FUNCTION] and [BYPASS] Buttons, respectively.)

To return to normal keypad operation, press the [RESET] Button. (The keypad will automatically return to its normal operating mode if no activity is detected for longer than one minute.)

Note: In all UL-listed applications and in high-security installations, only those users having valid codes can access the Function Mode.

DISPLAY
ZN FAULTS Y/N

Display Zone Faults? Identifies zones that are in not secured. Press the NEXT and PRIOR Buttons (as displayed on-screen) to scroll faulted zones.

DISPLAY
ZN BYPASSED Y/N

Display Zones Bypassed? Displays manually bypassed zones. Press the NEXT and PRIOR Buttons to scroll bypassed zones.

DISPLAY
ZN DIRECTORY Y/N

Display Zone Directory? Displays each zone by number and description. Press the NEXT and PRIOR Buttons to scroll forward and back, respectively.

ACTIVATE
BELL TEST Y/N

Activate Bell Test? Activates the alarm (while disarmed) for about 2 seconds. If the alarm does not sound, call for service.

KEYPAD FUNCTIONS

DISPLAY
PHONE #'S Y/N

Display Telephone Numbers? (*Phone numbers programmed?* YES NO.) The panel can dial any of four programmed telephone numbers. Select Telephone #1-4 using the NEXT and PRIOR Buttons. Press the or [ON/OFF] Button, then pick up the phone to automatically dial the displayed number.

DISPLAY
SYS TRBL Y/N

Display System Troubles? Displays any problem detected in the system (low battery, AC power loss, etc.). Press the NEXT and PRIOR Buttons to scroll system troubles.

DISPLAY
FIRE ALARM Y/N

Display Fire Alarms? Displays alarms that have occurred on the Fire Zone(s). Press the NEXT and PRIOR Buttons to scroll zones.

DISPLAY
FIRE TRBL Y/N

Display Fire Troubles? Displays trouble conditions that have been detected on the Fire Zone(s). Press the NEXT and PRIOR Buttons to scroll fire troubles.

DISPLAY
OP/CL Y/N

Display Opening/Closing Schedules? (*Opening/Closing Schedules programmed?* YES NO.) Provides a 2-line display of the programmed opening and closing schedules; use NEXT and PRIOR Keys to scroll through the days of the week. The first line indicates (a) the day of the week; (b) opening or closing suppression window; (c) "AUTO" if autoarming; and (d) NORMAL (or delayed) schedule. The second line indicates the starting and ending times of the suppression window.

MO OP AUTO NORM
12:00PM 01:00PM Y/N

TH CL AUTO DL1Hr
XX:XXxM 01:00AM Y/N

The closing of any suppression window may be delayed up to four hours, or the window may be totally disabled up to one week in advance. Select the DAY/OP/CL schedule using the NEXT and PRIOR Buttons, then select the delay (1 - 4 hours) or disable using the [ON/OFF] Button. **Note:** If the display indicates autoarming, arming will be delayed accordingly.

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KEYPAD FUNCTIONS

ACTIVATE
OVERVIEW Y/N

Activate Overview? (*Overview programmed for user?* YES NO.) In a partitioned system, this mode displays total system status at a glance, in order of area. (The SYSTEM READY display will be replaced by the "OV-----" display shown at left.) For each area: "R" = Area Ready; "z" = Zone Fault; "A" = Area Armed; "B" = Burglary Zone in Alarm; "N" = Normal Fire Area; "F" = Fire Zone in Alarm; "t" = Fire Trouble; "C" = Check Trouble; "D" = Area in Function-Display Mode.

OV(RRZR-----)

In this mode, all ready areas ("R") except the arming area (the area that you're in) may be armed simultaneously by pressing [9], [*], then entering a valid User Code. (The User Code must be valid in all areas, otherwise only those areas recognizing the code will arm.) Similarly, all armed areas ("A") may be disarmed by pressing [0], [*], then entering a valid User Code. To revert to normal keypad operation, press the [FUNCTION] Button repeatedly until "DEACTIVATE OVERVIEW" appears, then press the YES Button.

ACTIVATE
CHIME Y/N

Activate Chime? The Chime Mode will sound a tone at the keypad when the programmed zone is opened while disarmed. A "C" will appear in the display as long as the Chime Mode is active. To deactivate the Chime Mode, execute the DEACTIVATE CHIME function. **Note:** The Chime Mode is disabled while armed.

ACTIVATE
WATCH Y/N

Activate Watch Mode? (*Watch Mode programmed?* YES NO.) This optional feature simultaneously turns on all zones designated as Day Zones. When activated, a "W" will appear in the display. To deactivate the Watch Mode, arm, then disarm. All Day Zones will revert to regular Burglary Zones. **Note:** The Watch Mode is disabled while armed.

ACTIVATE
GUARD TOUR Y/N

Activate Guard Tour? (*Guard Tour programmed?* YES NO.) This feature is intended for commercial applications only.

KEYPAD FUNCTIONS

RESET
SYSTEM TRBL Y/N

RESET
SENSOR MSG Y/N

START
EXIT TIME Y/N

ACTIVATE
DIALER TEST Y/N

DISPLAY
ALARM LOG Y/N

DISPLAY
TOTAL LOG Y/N

DISPLAY
FIRE LOG Y/N

Reset System Trouble? System troubles display and sound at the keypad. Correcting the trouble will clear most indications, however the following require manual reset: EZM TAMPER; KEYPAD TAMPER; SENSOR WATCH; USER MEMORY FAIL (internal memory error); and DEALER MEMORY FAIL (internal memory error).

Reset Sensor Message? This function must be utilized to clear a "SENSOR FAILURE" message from the display.

Start Exit Time? (*Start Exit Time programmed?* YES NO.) In Commercial Burglary systems, exit delay may have been programmed to start after a central-station "ringback" (verification) signal has been received. If the ringback tone has not been received within about 30 seconds after arming, a communication problem may exist. Use the "START EXIT TIME" Function to start exit delay manually, then exit the premises immediately. Be sure to have your alarm specialist check communications with the central station as soon as possible.

Activate Dialer Test? (*Dialer Test programmed?* YES NO.) Sends a communicator test to the central station. A communication failure will be indicated at the keypad by a "FAIL TO COMM" display. Repeat the test to attempt to correct a communication failure, as any successful communication will clear this display.

Display Alarm Log? Displays all alarm conditions that have occurred by time, area, zone and date. NEXT and PRIOR Buttons scroll events backward and forward.

Display Total Log? Displays all events that have occurred. Use NEXT and PRIOR Buttons to scroll events backward and forward, respectively.

Display Fire Log? Displays all fire alarms, troubles and restores by area, zone, time and date. Use NEXT and PRIOR Buttons to scroll events backward and forward, respectively.

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KEYPAD FUNCTIONS

DISPLAY
OP/CL LOG Y/N

DISPLAY
SYSTEM LOG Y/N

TO ARM IN 1-4 HRS
PRESS 1-4 /N

DISPLAY
AUTO ARM SCHD Y/N

Display Openings/Closings Log? Displays openings (disarmings) and closings (armings) by date, time, area, and user. Use NEXT and PRIOR Buttons to scroll events backward and forward, respectively.

Display System Log? Displays system troubles and other system events by date, time and area (if applicable). Use NEXT and PRIOR Buttons to scroll backward and forward, respectively.

To Arm In 1-4 Hours, Press 1-4. (*Not for UL-listed systems.*) Allows automatic arming to be delayed up to 4 hours, 15 minutes, as follows:

For a 1-hour, 15-minute delay, press [1], then [ON/OFF].

For a 2-hour, 15-minute delay, press [2], [ON/OFF].

For a 3-hour, 15-minute delay, press [3], [ON/OFF].

For a 4-hour, 15-minute delay, press [4], [ON/OFF].

Fifteen minutes prior to arming, the siren will sound a 2-second warning and the keypad will begin a 15-minute countdown with the sounder pulsing. During this time, arming may be delayed an additional 1 to 4 hours (as above), or autoarming may be cancelled by arming and disarming the panel.

Display Autoarm Schedule? (*Autoarm programmed?* YES NO.) Displays the programmed autoarm schedule. Use NEXT and PRIOR Buttons to scroll forward and backward through the days of the week. While the programmed schedule cannot be changed at the keypad, autoarming may be delayed up to 4 hours, or it may be disabled, up to one week in advance. Select the day, as above, then select the delay (1-4 hours) or disable using the [ON/OFF] Button.

KEYPAD FUNCTIONS

ACTIVATE PROGRAM Y/N

ACTIVATE DOWNLOAD Y/N

DISPLAY RF XMITTER STAT Y/N

XM01 (123456) PT1
Z04 Normal SS15

RELAY CONTROL Y/N

CONTROL GRP1 - OFF (DESCRIPTION)

Activate Program? (*Program Mode programmed for user?* YES NO.)
Activates the Program Mode from Keypad No. 1 only. **Note:** *Activate Program* is disabled while armed.

Activate Download? Activates the Manual Download Mode from Keypad No. 1 (for installer or servicer's use only). **Note:** *Activate Download* is disabled while armed.

Display RF Transmitter Status? (*For systems that include wireless transmitters.*)
Press YES to check the status and condition of all transmitters. First the number of transmitters will display. Use NEXT and PRIOR Buttons to scroll forward or back. For each transmitter, the following information will be shown:

- Transmitter number (XM01-96)
- 6-digit ID (numbers and/or letters)
- Point number (PT1-4)
- Zone to which transmitter is mapped (Z01-96)
- Status (normal or open) or Trouble Condition (low battery, tamper, or supervisory failure)
- Signal Strength (SS1-15, 15 being the strongest) of its last transmission.

Relay Control? Turns on (or off) one or more of up to 8 programmed relay groups. (Each group may comprise up to 96 relays and can include a programmed description. Press [ON/OFF] to turn the displayed group on or off; press NEXT to proceed to the next group, or PRIOR to scroll back to the previous group. Press [RESET] when done.

CENTRAL-STATION MONITORING

Your alarm specialist may have programmed your system to be monitored by a central station. The built-in digital communicator can transmit emergency signals and status reports to the central station 24 hours a day.

COMMUNICATOR FEATURES

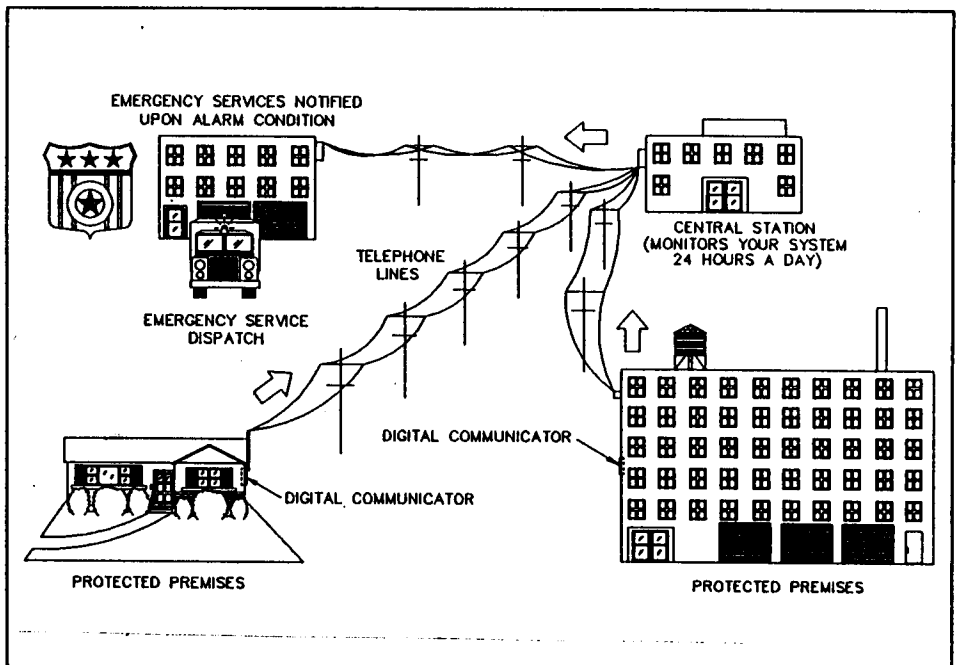
Abort Delay. Ask your installer which of your zones have abort delay, a delay that enables you to reset the system before it communicates to the central station.

- **Regular Burglary (Non-24-Hour)** Zone reports are aborted by disarming within the delay period.
- **24-Hour Zones and zones programmed to report restores** must be restored first, then the panel armed and disarmed, all within the delay period.

Opening and/or Closing Reporting. Your system can notify the central station every time it is disarmed or armed. Any or all of up to 96 different users can

each be identified. If your system reports on arming (Closing Report), the central station will acknowledge arm-

ing. This will signal at the keypad as a "ringback" beep. **Note:** If the ringback signal is not heard, call for service.



ADVANCED FEATURES

BYPASS ENABLED

DISPLAY...
ZN FAULTS Y/N

BYPASS
02-BACK DOOR

DISPLAY...
ZN DIRECTORY Y/N

BYPASS
02-BACK DOOR

Security Bypass/Unbypass

(*Security Bypass programmed?* YES NO.) In high-security applications, zones may be bypassed (or unbypassed) only if a valid code is entered first, as follows.

1. Enter a code valid for bypass, then press the [BYPASS] Button; "BYPASS ENABLED" will display.
2. Press the [BYPASS] Button then the zone number (or vice versa) to deactivate that zone.

Similarly, a bypassed zone may be *unbypassed* using the foregoing procedure.

Function-Mode Bypass/Unbypass

Zones may be bypassed (or bypassed zones may be *unbypassed*) in the Function Mode by either of the following methods. **Note:** When the panel is subsequently disarmed, all bypassed zones will revert to unbypassed zones.

- From "Display Zone Faults" screen. (1) Display zone faults. The number of faulted zones will display briefly. (2) Press the NEXT Button to display the first faulted zone, then press the [BYPASS] Button to bypass the zone. (3) Press the NEXT Button to display the next faulted zone; press the [BYPASS] Button to bypass that zone. (4) Repeat Step 3 for each zone to be bypassed. To "unbypass" a bypassed zone, display the zone, then press the [BYPASS] Button once again.
- From the "Display Zone Directory" screen. (1) Display the directory. The number of zones will display briefly. (2) Use the NEXT and PRIOR Buttons to select the zone to be bypassed. (3) When the zone is displayed, press the [BYPASS] Button. Repeat for each zone to be bypassed. To "unbypass" a bypassed zone, display the zone, then press the [BYPASS] Button once again.

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ADVANCED FEATURES

Start Exit Time After Ringback (*for Commercial Burglary Systems only*)

(*Start Exit Time programmed?* YES NO.) If your system reports to a central station, your panel may have been programmed to start exit delay after the central-station ringback (verification) signal. Then, after arming, the display will read "PLEASE WAIT" while your system communicates to the central station. After the central station acknowledges receipt (ringback), exit delay will start. If ringback is not heard within about 30 seconds, a communication problem may exist; call for service. The START EXIT TIME function may then be used to manually start the exit delay, however reporting capability may be sacrificed. (If your system does not report or the ringback feature was not programmed, exit delay will start as soon as your code is entered. Also note that if an exception window is programmed, and the closing is within that window, no ringback is provided. Ask your alarm professional if this feature is enabled.)

Exit-Delay Restart

(*Exit-Delay Restart programmed?* YES NO) On arming, the programmed exit delay will start. After the exit door has been opened and then closed, exit delay will change to 60 seconds. Thus, a long exit delay may be programmed, which will immediately be reduced to 60 seconds upon exiting. If re-entry occurs during that 60 seconds, exit delay will restart once again (and *only* once again) at 60 seconds. If so programmed, re-entry within 60 seconds after exit delay has expired, will cause the alarm to sound a 2-second warning (in addition to the entry sounder) to remind the user to disarm.

PROGRAMMING (Optional)

Introduction

The Program Mode (optional) is used to customize User Codes and Zone Descriptions to your specific needs. Access to the Program Mode requires a special User Code, therefore not all users may have the ability to make programming changes.

Note: (1) If the system contains more than one keypad, only the keypad designated "No. 1" may be used for programming (if in doubt which is No. 1, ask your installer). (2) Operation of the keypad buttons in the Program Mode is different from that for normal

operation. Refer to the accompanying diagram for keypad functions in the Program Mode. (3) While in the Program Mode, the ARMED and STATUS lights remain off and burglar and fire alarm functions are disabled. (4) If the keypad detects no activity in the Program Mode for more than 4 minutes, a tone will sound; to silence the tone, press any button. (5) The programmed code or description will not be permanently stored until you press the Save Button ([ON/OFF]). (6) To exit the Program Mode, press the [RESET] Button.

Accessing the User Program Mode

The User Program Mode is accessed from the Function Mode as follows:

1. Enter your code, then press the [FUNCTION] Button to enter the Function Mode.

2. Answer NO (press the [INSTANT] Button) until "ACTIVATE PROGRAM Y/N" is displayed, then press the YES Button ([INTERIOR]) or [ON/OFF] Button.

Note: If you pass "ACTIVATE PROGRAM", press the [BYPASS] Button to scroll back.

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PROGRAMMING (Optional)

Programming User Codes

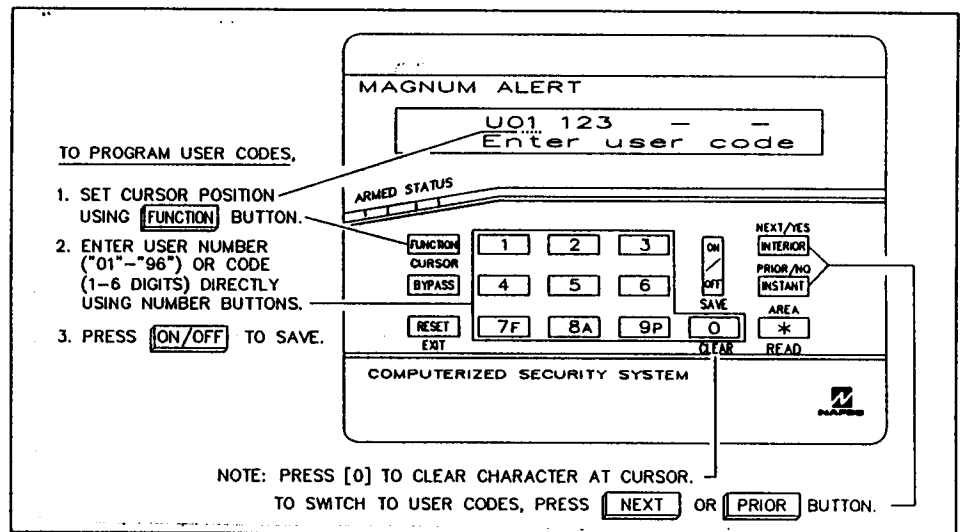
Up to 96 User Codes may be programmed. Do not attempt to program a code containing any blank spaces between digits. In selecting your codes, do not program repetitive numbers (1111), consecutive numbers (1234), your birth date, address, or other obvious combinations.

The first code displayed will be the default "U01 123●●●●●●" (123), which, for security reasons, may not be selected as a User Code. Choose up to six digits for your new code (a minimum of four is recommended, and required in UL installations)

1. Use the [FUNCTION] Button to locate the cursor (position indicator) over the User Number.

2. Enter a User Number directly as a two-digit number (01-96) using the number buttons. The cursor will automatically advance to the User Code and read the existing code, if any.

3. Enter the new User Code directly,



Programming User Codes.

using the number buttons. If an old code is displayed, simply program over it. To erase the digit at the cursor, press the [*] Button, then the [0] Button.

4. Press the [ON/OFF] Button to save the code in memory.

Repeat Steps 1 through 4 for each user.

Note: To void a code, blank out each digit by pressing [*] [0], then press the Save ([ON/OFF]) Button.

PROGRAMMING (Optional)

Programming Zone Descriptions

When entering zone descriptions,

- Keys [1] and [2] position the cursor within the display.
- Keys [3] and [6] scroll through numbers, letters, punctuation marks and a variety of symbols.

Enter an identifying description for each zone then press the Save Button ([ON/OFF]).

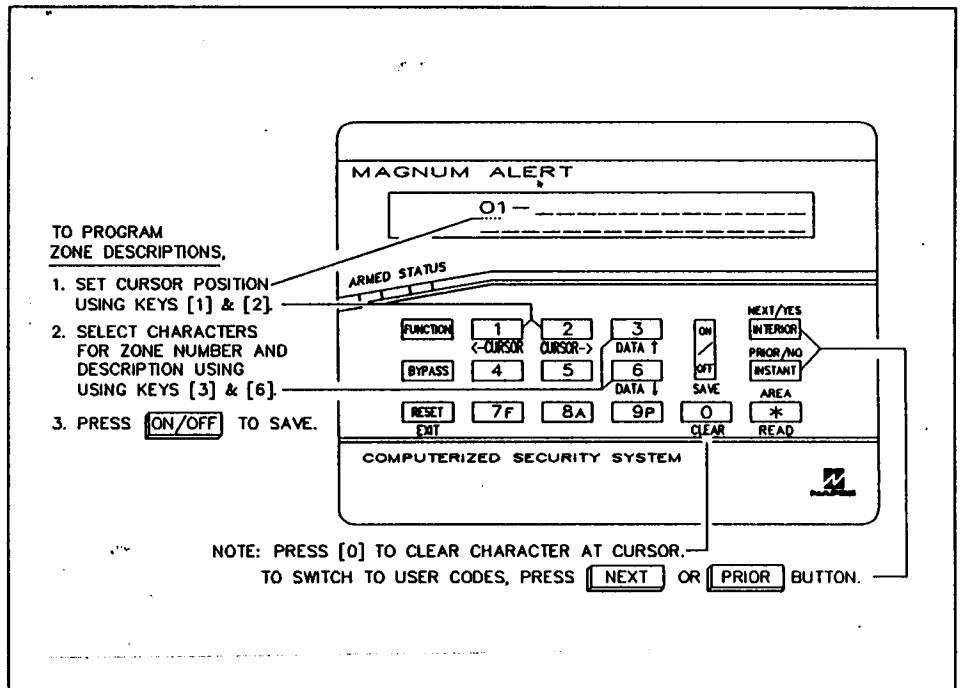
To advance to the next zone (or to any other zone, for that matter),

1. Position the cursor over the displayed zone number (i.e., "01") using Keys [1] and [2].

2. Change the zone number using Keys [3] and [6].

3. Position the cursor over the first character of the description and program a description for the new zone.

4. Press the Save Button ([ON/OFF]). Advance to the next zone using Keys [1] and [2] as described above and repeat until all zones (up to 96) have been programmed.



Programming Zone Descriptions.

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PROGRAMMING (Optional)

PROGRAMMING EXAMPLE

Example. Program User 3's Code as "3784".

1. Select the Program Mode:
 - (a) Enter your code, then press the [FUNCTION] Button.
 - (b) Answer NO (press [INSTANT] Button) until "ACTIVATE PROGRAM Y/N" is displayed, then press the YES Button. The

display will briefly read "USER PM #XXX", then "U01 123 - -", representing the default User Code.

2. Using the [FUNCTION] Button, position the cursor over the first digit of the User Number.

3. Press [0] [3] to select User 3. The cursor will automatically advance to the User Code.

4. Press [3], [7], [8], and [4]. If any other digits are left over from a previous User-3 code, delete each by pressing [*] [0].

5. Press the Save Button ([ON/OFF]) to memorize the code.

6. To exit the Program Mode, press the [RESET] Button.

KEYPAD MESSAGES

The keypad can display the following functional messages. Many are two-line messages; hold down [*] to display the second line. (In this booklet, both are shown simultaneously for convenience.) Other diagnostic messages are available for the installer or servicer. Should any unfamiliar message appear, call your dealer for service.

SYSTEM READY CW

All zones operating; system can be armed. If displayed, *C* denotes Chime Mode on; *W* denotes Watch Mode on. (Note: This message may have been customized by your installer.)

PLEASE WAIT

Panel reporting to central station on arming. If necessary, wait for ringback signal before exiting.

EXIT TIME XXX SI

Exit delay in progress. *XXX* denotes exit time remaining. If displayed, *S* indicates Service Code active; *I* indicates arming with Instant protection.

ENTRY TIME XXX

Entry delay in progress. *XXX* shows entry time remaining.

SYSTEM ARMED SI

Panel armed. If displayed, *S* indicates Service Code active; *I* indicates arming with Instant protection.

ZONE FAULTS

Zones not secured (doors or windows may be open). Faulted zone(s) will scroll.

**ZONES NOT NORMAL
CAN'T ARM SYSTEM**

Arming attempted with zone in trouble. Press [FUNCTION] Button to display zone faults. Correct trouble to arm.

DAY ZONE TRBL

(*With pulsing sounder.*) Trouble condition on a Day Zone (followed by one or more zone descriptions). Press [RESET] to silence sounder.

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KEYPAD MESSAGES

ALARM

Alarm condition, followed by zone description(s). "ALARM" and zones will display after system is disarmed. Note zones, then press [RESET] to clear keypad.

FIRE TROUBLE

(*With pulsing sounder.*) Trouble condition on a Fire Zone. Press [RESET] to silence sounder. Correct trouble or call for service.

FIRE

(*With pulsing sounder.*) Alarm condition on a Fire Zone. Press [RESET] to silence sounder. Evacuate premises or correct cause of alarm.

ZONES BYPASSED

(*When Zones Bypassed displayed*) Indicates zones that have been deactivated.

**CODE DENIED
INCORRECT AREA**

(*For partitioned systems only.*) Code not valid for area.

**CODE DENIED
INCORRECT TIME**

(*For Commercial Systems Only.*) Code not valid for programmed time window.

**INVALID ENTRY
TRY AGAIN**

Wrong code entered or "Easy Bypass" function not enabled.

**CAN'T ARM SYSTEM /
AREA # IN TROUBLE**

(*In Manager's Mode.*) Arming prevented due to unsecured zone. "#" represents number of area with unsecured zone. Press area number, then [*], then [ON/OFF] Button to view zones in that area. Correct problem, then arm as normal.

KEYPAD MESSAGES

SYSTEM TROUBLE

Indicates problem(s) detected on system (see below).

LOW BATTERY

Battery weak. If not recharged within 24 hours, replace battery.

AC POWER LOSS

Check power transformer. Check for blown fuse or circuit breaker; general power outage.

FAIL TO COMM

Communication failure to central station.

SENSOR FAILURE

Lack of sensor activity detected. Reset using the RESET SENSOR MSG function.

OV(R- - - - -)

(Commercial Systems Only.) Overview Mode. Simultaneously shows status of up to 8 areas.

ENTER NOW

(Commercial Systems Only.) Remote-access keypad unlocked for 5 seconds.

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GLOSSARY

Following are brief descriptions of terms and features used herein that may be unfamiliar to you. Some of the features are programmable options that may or may not apply to your particular system.

Abort Delay - A delay period that allows the control panel to be reset, thus aborting a report to a central station.

Access Code - A code (up to 6 digits) used to remotely unlock a door.

Ambush Code - A 2-digit code entered just prior to the User Code when forced to disarm. Sends a silent alarm to the central station with no indication at the keypad.

Arming/Disarming - Turning the system on/off by entering your code at the keypad, then pressing the [ON/OFF] Button.

Battery - Backup power source in the control-panel enclosure to provide protection in the event of a power failure.

BYPASS Button - Enables you to

manually remove one or more protective zones from the system.

Central Station - Monitors incoming reports and emergency messages from a digital communicator and notifies the proper authorities.

Chime - A keypad beep while disarmed alerting that the programmed zone has been opened.

Closing Window - *(Optional.)* A time interval within which closing (arming) is permitted without reporting to the central station.

Communicator - Reports intrusions, emergencies, openings, closings, etc. directly to the central station over telephone lines.

Control Panel - The brain of the system, it controls all system functions.

Directory - A listing of the

programmed zone descriptions stored in memory.

Easy Arming - Quick arming by pressing the [ON/OFF] Button (optional).

Exit/Entry Delays - Separate delays that let you exit and enter your premises without setting off an alarm when the system is armed.

Instant Protection - Arming without entry delay using the [INSTANT] Button while remaining on the premises.

INTERIOR Button - Bypasses Interior Zones on arming (see *Zones - Interior Zones*). Pressing this button repeatedly selects I1, I2 or I1 + I2.

Keypad - Puts control-panel functions at your fingertips. It can be mounted anywhere in your premises.

Manager's Mode - In a partitioned system, a low-security operating

GLOSSARY

mode that allows arming by area. Also see *Overview Mode*.

Opening Window - (Optional.) A time interval within which opening (disarming) is permitted without reporting to the central station.

Overview Mode - In a partitioned system, a high-security mode of operation allowing area arming wherein the status of all areas is simultaneously displayed at the keypad.

Panic Buttons - Blue buttons on the keypad ([*] and [F], [A] or [P]). If enabled, pressing [*] together with [F], [A] or [P] will alert the central station of a fire, auxiliary, or police emergency.

Partitioned System - A system that has been subdivided into two or more (up to eight) independent subsystems (areas).

Pre-Alarm Warning. - A keypad sounder alert of an impending alarm. This option is programmable by zone for the same duration as that

programmed for Abort Delay (see *Abort Delay*).

Report - A transmission to a central station notifying of a change in the status of the system (alarm, trouble, low battery, etc.).

RF Low Battery - (Wireless systems only) Weak transmitter battery.

RF Check In - (Wireless systems only) Periodic test report from transmitter (if a report is not received on time, a supervisory-failure system trouble will result).

Ringback - A beep after arming verifying the central-station's receipt of a closing report.

Service Code - A code intended for temporary use.

Sounder - A local warning device at each keypad to alert that (a) entry delay has started; (b) an attempt was made to arm with a zone in trouble; (c) a Day-Zone condition exists (see *Zones: Day Zone*); (d) 10 seconds exit time remaining; (e) Invalid code

entered; or (f) central station acknowledged arming (see *Ringback*).

System Trouble - A problem (low battery, power failure, etc.) detected in the system.

Trouble - A zone fault; an open door, window, or other problem that may prevent arming.

User Code - Your personalized code for arming and disarming the system. It may contain up to six digits.

Watch Mode - Turns all Day Zones on or off simultaneously.

Window - A time interval. See *Opening Window; Closing Window*.

Zones - Independent circuits that protect specific areas of the premises:

- **Auto-Bypass Zone:** A zone that will be automatically bypassed from the protection system if it is in trouble (faulty) when the system is armed.
- **Burglary Zone:** Detects intrusion.
- **Day Zone:** A zone that will cause a visual and audible indication at the keypad if it is in trouble while dis-

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GLOSSARY

armed.

- **Exit/Entry Follower Zone:** Provides exit and entry delay for interior devices. Entry delay only occurs if re-entry takes place through the normal exit/entry door first.
- **Fire Zone:** Detects fire alarms or trouble conditions.
- **Interior Zones:** Circuits within the premises, usually including space-

protection devices, interior doors, etc.; but not exterior doors or windows. These can all be bypassed simultaneously using the [INTERIOR] Button. (Two groups of Interior Zones may be programmed for each area.)

- **Priority Zone:** A zone that prevents arming if in trouble.
- **Priority Zone with Bypass:** A Priority

Zone that can be bypassed using the [RESET] Key.

- **Selective-Bypassed Zone:** A zone that can be individually bypassed using the [BYPASS] Button.
- **24-Hour Zone:** A zone that is armed and ready at all times to respond to an emergency situation.

NAPCO LIMITED WARRANTY

NAPCO SECURITY SYSTEMS, INC. (NAPCO) warrants its products to be free from manufacturing defects in materials and workmanship for thirty-six months following the date of manufacture. NAPCO will, within said period, at its option, repair or replace any product failing to operate correctly without charge to the original purchaser or user.

This warranty shall not apply to any equipment, or any part thereof, which has been repaired by others, improperly installed, improperly used, abused, altered, damaged, subjected to acts of God, or on which any serial numbers have been altered, defaced or removed. Seller will not be responsible for any dismantling or reinstallation charges.

In case of defect, contact the security professional who installed and maintains your security system. NAPCO shall have no obligation under this warranty, or otherwise, if the product has been repaired by others, improperly installed, improperly used, abused, altered, damaged, subjected to accident, nuisance, flood, fire or acts of God, or on which any serial numbers have been altered, defaced or removed. NAPCO will not be responsible for any dismantling, reassembly or reinstallation charges.

In order to exercise the warranty, the product must be returned by the security professional, shipping costs prepaid and insured to NAPCO. After repair or replacement, NAPCO assumes the cost of returning products under warranty.

There are no warranties, express or implied, which extend beyond the description on the face hereof. There is no express or implied warranty of merchantability or a warranty of fitness for a particular purpose. Additionally, this warranty is in lieu of all other obligations or liabilities on the part of NAPCO.

Any action for breach of warranty, including but not limited to any implied warranty of merchantability, must be brought within the six months following the end of the warranty period. In no case shall NAPCO be liable to anyone for any consequential or incidental damages for breach of this or any other warranty, express or implied, even if the loss or damage is caused by the seller's own negligence or fault.

This warranty contains the entire warranty. It is the sole warranty and any prior agreements or representations, whether oral or written, are either merged herein or are expressly cancelled. NAPCO neither assumes, nor authorizes any other person purporting to act on its behalf to modify, to change, or to assume for it, any other warranty or liability concerning its products.

In no event shall NAPCO be liable for an amount in excess of NAPCO's original selling price of the product, for any loss or damage, whether direct, indirect, incidental, consequential, or otherwise arising out of any failure of the product. Seller's warranty, as hereinabove set forth, shall not be enlarged, diminished or affected by and no obligation or liability shall arise or grow out of Seller's rendering of technical advice or service in connection with Buyer's order of the goods furnished hereunder.

NAPCO RECOMMENDS THAT THE ENTIRE SYSTEM BE COMPLETELY TESTED WEEKLY.

Warning: Despite frequent testing, and due to, but not limited to, any or all of the following; criminal tampering, electrical or communications disruption, it is possible for the system to fail to perform as expected. NAPCO does not represent that the product/system may not be compromised or circumvented; or that the product or system will prevent any personal injury or property loss by burglary, robbery, fire or otherwise; nor that the product or system will in all cases provide adequate warning or protection. A properly installed and maintained alarm may only reduce risk of burglary, robbery, fire or otherwise but it is not insurance or a guarantee that these events will not occur. 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. Therefore, the installer should in turn advise the consumer to take any and all precautions for his or her safety including, but not limited to, fleeing the premises and calling police or fire department, in order to mitigate the possibilities of harm and/or damage.

NAPCO is not an insurer of either the property or safety of the user's family or employees, and limits its liability for any loss or damage including incidental or consequential damages to NAPCO's original selling price of the product regardless of the cause of such loss or damage. If the user wishes to protect itself to a greater extent, NAPCO will, at user's sole cost and expense, obtain an insurance policy to protect the user, supplemental to user's own policy, at a premium to be determined by NAPCO's insurer upon written notice from user by Certified Mail, Return Receipt Requested, to NAPCO's home office address, and upon payment of the annual premium cost by user.

Some states do not allow limitations on how long an implied Warranty lasts or do not allow the exclusion or limitation of incidental or consequential damages, or differentiate in their treatment of limitations of liability for ordinary or gross negligence, so the above limitations or exclusions may not apply to you. This Warranty gives you specific legal rights and you may also have other rights which vary from state to state.

THE FOLLOWING STATEMENT IS REQUIRED BY THE FCC.

This equipment generates and uses radio-frequency energy and, if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class-B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be

determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: reorient the receiving antenna; relocate the computer with respect to the receiver; move the computer away from the receiver; plug the computer into a different outlet so that computer and 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 may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio-TV Interference Problems." This booklet is available from the U.S. Government Printing Office, Washington, DC 20402; Stock No. 004-000-00345-4.