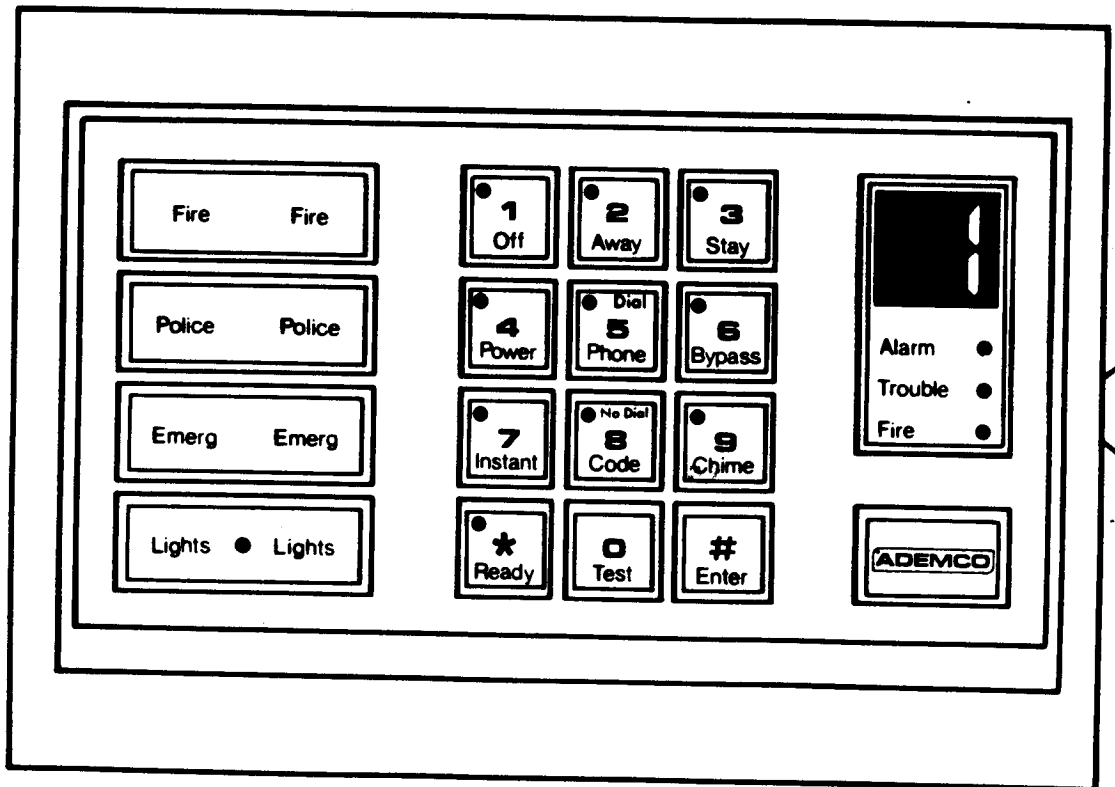# ADEMCO

SECURITY CENTER

**Protection System**

4180

USER'S MANUAL

SYSTEM'S MAJOR COMPONENTS

Your system consists of the Control/Communicator, one or two Master Consoles and up to four optional Remote Keypads.

THE CONTROL/COMMUNICATOR

The Control/Communicator is the "brains" of your system. Located out of sight, it receives signals, analyzes them, initiates alarms and transmits alarm messages to your police department or to a central alarm monitoring service.
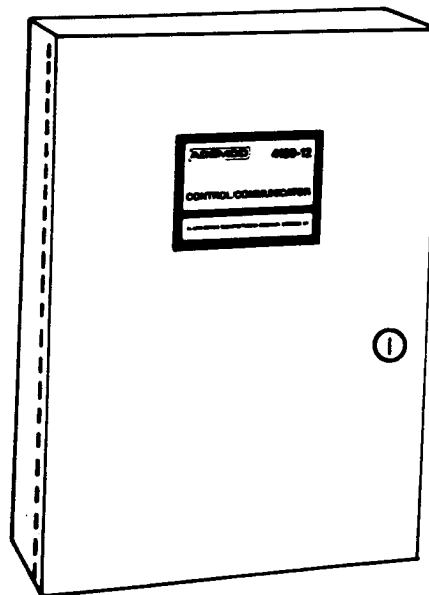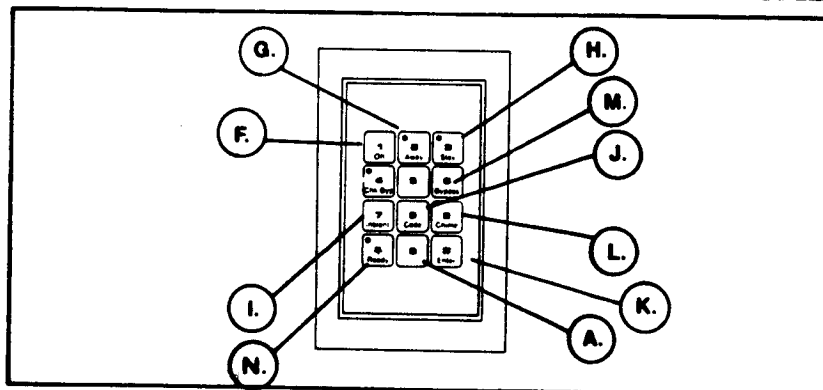
THE MASTER CONSOLE

The Master Console is centrally located to suit your convenience. Its individual indicator lights display messages that inform you of the status of your system. The console enables you to arm or disarm the burglary portion of your system, and is also the source of alarm and warning sounds.
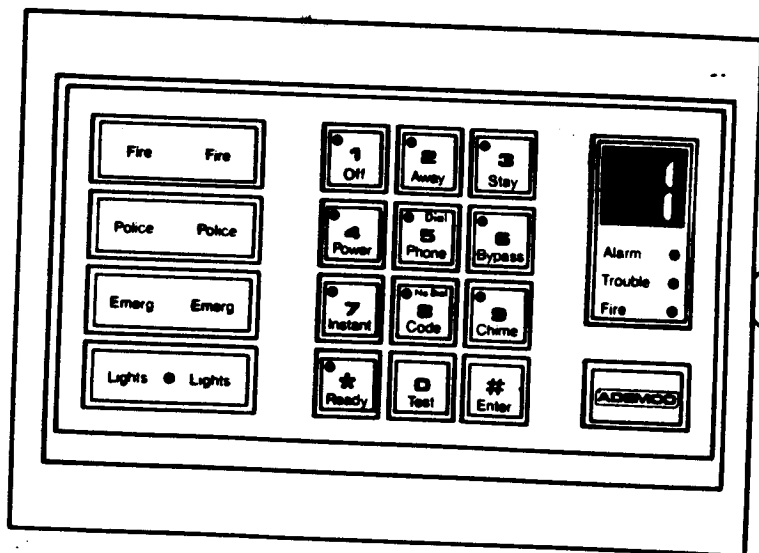
L. CHIME KEY & INDICATOR LIGHT. In disarmed (OFF) state, enter Code, then depress key to set CHIME mode. Any opening of a sensor in selected chime zones will produce a short tone from the speaker(s) at any console(s), thereby signaling an entry (Code + CHIME). The Yellow indicator lights when the CHIME mode is on.

M. BYPASS KEY & INDICATOR LIGHT. **1. Arming in the Presence of a Fault.** Depress either the AWAY or STAY keys, then the BYPASS KEY. This turns off protection monitoring from any currently violated burglary zones (e.g., an improperly-functioning sensor that is preventing the arming of the system, or an intentionally violated sensor that likewise inhibits the arming of the rest of the system). The Yellow indicator light will light to reveal that your burglary protection is incomplete because the monitoring of one or more protective sensors has been temporarily discontinued. [Code + AWAY (or STAY) + BYPASS]. **2. Individually Bypassing Particular Zone(s).** Depress the BYPASS Key and then the number of the zone to be bypassed. The Yellow Indicator function is as described (Code + BYPASS + "N"). See Zone Identification Display.

NOTE: Only applicable to those zones enabled for bypass function at installation time.

N. READY KEY & INDICATOR LIGHT. The Green indicator reveals the status of your burglary protection. If lit, your burglary protection is turned off and all sensors are closed/ready for arming. If not lit (and neither the STAY nor AWAY indicators are lit) your burglary system is turned off/not ready for arming. (In this event, do not arm your system. See "How to Remedy a Malfunction in a Specific Zone," page 18.) Normally, the one-digit numeric display will not indicate which zones are violated except when an attempt is made to arm the system. To view the individual zone's status at other times, press the READY key. The zone status display can be turned off by entering your Security Code and then the OFF key.

O. TEST KEY. Causes execution of the fire test function and permits entry to the system test mode, both described in TESTING AND SERVICING PROCEDURES (code + TEST).

P. ZONE IDENTIFICATION DISPLAY. This one-digit numeric display identifies violated burglary zones (1→8) at arming time or subsequent to an alarm for determination of entry point. This display also provides a sequential viewing of zones bypassed as described in the sections for INDIVIDUAL ZONE BYPASS and HOW TO REMEDY A

MALFUNCTION IN A SPECIFIC ZONE. If your system is equipped with optional zone expander(s) (adding more zones to the system) a violation in one or more zones located in those expansion units will be indicated by "0" on this display (go to the zone expander to determine which of its zones was violated). If the system is equipped with an optional device to detect if the telephone line connected to your system is intact, an interruption of that line will cause an "F" to be displayed.

Q. POWER INDICATOR LIGHT (Green). Indicates the presence of AC power.

R. "DIAL" INDICATOR LIGHT (Red). Lights when an audible alarm, trouble, or other message is being transmitted to a central alarm monitoring service. Flashes for 30 seconds after successful receipt of the message is acknowledged.

S. "NO DIAL" INDICATOR LIGHT (Red). Lights when the system has a message to transmit to a central monitoring service and is unable to get that message through after repeated attempts. It remains lit until the system is next armed.

T. TROUBLE INDICATOR LIGHT (Red). Lights when Fire or Day/Night Burglary Zones (determined at installation time) are open during disarmed period if Day/Night Burglary and at any time if Fire.

U. ALARM INDICATOR LIGHT (Red). Lights when an intrusion has been detected during the armed period or an audible emergency is activated. It remains lit after the alarm sounder has silenced, as a warning upon your return.

V. PULL-OUT DRAWER. Contains numbered zone identification information (so that a number displayed on the Master Console can be quickly translated into the Zone I.D.) and brief user instructions.

W. KEYPAD ILLUMINATION LIGHT. Lights for convenient use of the Master Console in a darkened room.

X. INTERNAL SPEAKER. Source of audible internal warning and confirmation sounds, as well as alarms.

FUNCTIONS OF OPTIONAL REMOTE KEYPAD

Functions A and F thru N (as described above) can be performed at the remote Keypad(s) via the same procedures as at the Master Console. However, rather than the indicator lights described, the remote Keypads contain only four indicator lights.
AWAY—Red (Same meaning as above plus it flashes for memory of previous alarm)
STAY—Red (Same meaning as above plus it flashes for memory of previous alarm)
READY—Green (Same meaning as above)
CHK. BYP—Yellow: Steady-Zone Bypassed, Flashing—Trouble in Fire or Day/Night Burglary Zone. A buzzer serves as a source of audible internal warning and confirmation sounds, as well as alarms.

KEY TO AUDIBLE SIGNALS _____

INTERNAL SPEAKER SOUND	EXTERIOR SOUND (IF USED)	CAUSE	DISPLAY(S) PRESENT
LOUD, INTERRUPTED, RAPIDLY PULSATING SIREN SOUND*	INTERRUPTED, RAPIDLY PULSATING SIREN SOUND OR PULSING BELL RING	FIRE ALARM	"FIRE" indicator lit. The number of the zone in alarm will be displayed (i.e., 1 through 8)
LOUD, RAPIDLY PULSATING SIREN SOUND*	RAPIDLY PULSATING SIREN SOUND OR STEADY BELL RING	BURGLARY/AUDIBLE POLICE/EMERGENCY ALARM	"ALARM" indicator lit. The number of the zone in alarm will be displayed (i.e., 0 through 8, F)
ONE SHORT BEEP, NOT REPEATED.	NONE	SYSTEM WAS TURNED OFF OR AN ATTEMPT WAS MADE TO ARM THE SYSTEM WHEN ONE OR MORE SENSORS WERE FAULTED.	GREEN "READY" indicator may or may not be lit. GREEN "OFF" indicator lit.
TWO SHORT BEEPS	NONE	SYSTEM HAS JUST BEEN ARMED IN THE "AWAY" MODE.	RED "AWAY" indicator lit.
THREE SHORT BEEPS	NONE	SYSTEM HAS JUST BEEN ARMED IN THE "STAY" MODE	RED "STAY" indicator lit.
ONE LONG BEEP	NONE	SYSTEM IS DISARMED AND IN THE CHIME MODE AND A SENSOR IN A CHIME ENABLED ZONE HAS JUST BEEN ACTIVATED.	The number of the zone is displayed if READY button has been depressed.
RAPIDLY PULSING BEEPS*	NONE	1. A PROBLEM IN A FIRE ZONE (IF USED) AT ANY TIME OR IN DAY/NIGHT BUR-GLARY ZONE (IF USED) WHEN DISARMED. 2. AC POWER HAS BEEN LOST FOR MORE THAN AN INSTALLER PRO-GRAMMED INTERVAL (0-36 minutes) 3. A MEMORY OF ALARM THAT IS ACTIVATED DURING ENTRY 4. TELEPHONE LINE TO SYS-TEM HAS BEEN INTER-RUPTED WHEN DISARMED (IF DETECTION CAPA-BILITY INSTALLED)	"TROUBLE" indicator lit plus the number of the zone having the problem. GREEN "POWER" indicator not lit. "ALARM" or "FIRE" indicator lit plus the number of the zone that caused the alarm. "F" displayed on the Zone Identification Display.
ONE SHORT BEEP, REPEATED EVERY 15 SECONDS	BRIEF SOUND WHEN ZONE IS TESTED	SYSTEM IS IN THE "TEST" MODE	Zone number displayed when zone is tested.
ONE OR MULTIPLE SHORT BEEPS, NOT REPEATED	NONE	ZONE(S) HAVE JUST BEEN BYPASSED OR A DISPLAY OF PREVIOUSLY BYPASSED ZONES IS REQUESTED	"BYPASS" indicator lit and the number(s) of the Zone(s) that have been bypassed are displayed.
CONTINUOUS LOW TONE**	NONE	PROLONGED AC POWER OUTAGE HAS RESULTED IN SYSTEM SHUTDOWN. SYSTEM INOPERATIVE.	GREEN "POWER" indicator not lit. "C" appears in ZONE ID display area.

*Any pulsating tone (beeps) or alarm sounds from the Console will be immediately silenced when the first digit of your security code is keyed (any alarms from external sounders will continue, however). This will allow the confirmation (feedback) tone emitted by the Console to be heard as each key on the keypad is depressed. If the entire security code, plus OFF, are not keyed within 10 seconds, the pulsating tones or alarm sounds will resume at the Console.

**The continuous tone can be silenced by depressing the "4" key, but note that until AC power is restored and the built-in battery sufficiently charged, the System will be incapable of sounding and communicating alarms. After a sustained AC power outage, the battery may require a recovery period of up to 24 hours before the System is again fully operative.

BURGLARY PROTECTION

HOW TO ARM YOUR BURGLARY SYSTEM

Your system provides two levels or burglary protection, exterior and interior. The former guards doors, windows, etc., sounding an alarm if one is opened by an intruder. Interior protection offers backup defense, sensing when an unauthorized person is moving inside.

FOUR-DIGIT SECURITY ACCESS CODES

At the time of installation, you choose a personal four-digit code, known only to you and yours, and programmed by your installer. ARMING and DISARMING of your burglary alarm system is accomplished by entering this code and the desired function (e.g. STAY, AWAY, etc.) at the Master Console and at any Remote Keypad.

NOTE: If more than 2 seconds elapse after a keystroke, the security access code and function must be re-entered.

Security Code + [● 3 Stay] Or [● 2 Away]

As an additional safety feature, up to 7 secondary (temporary) codes may be utilized at any time for designated users 2 through 8. An employee who, in your absence, must arm the system upon departure, can be provided with a different temporary code that allows arming and disarming and all other system functions except assigning or changing codes (the secondary code for user 2 can additionally assign or change codes for users 3 through 8).

NOTE: Your master code remains in effect even when a secondary code is present (unless an option has been selected with your installer at installation time which will inhibit the master code's use once a secondary code for user 2 has been selected and entered by you. With that option selected, user 2's code must be the first secondary code entered. Once entered it cannot be changed without assistance from your service company).

A secondary code can be entered, or changed, at the Master Console or at any Remote Keypad, as follows: Enter the master code (or user 2's code, if it is in effect), depress the CODE key, then key in the code designator (2 through 8 or, with user 2's code, 3 through 8) and the desired temporary secondary code. To eliminate a secondary code, repeat this sequence, keying-in another code as a secondary code (not the master code).

Master Code + [● No Dial 8 Code] + Code Designator 2 Thru 8 + Secondary Code

Or

User 2's Code + [● No Dial 8 Code] + Code Designator 3 Thru 8 + Secondary Code
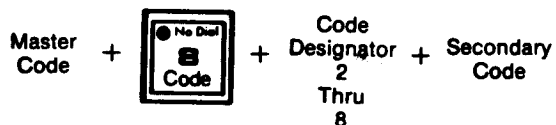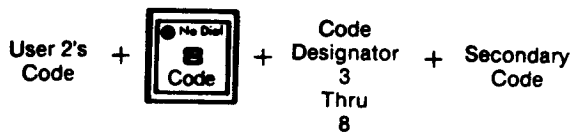
INDIVIDUAL ZONE BYPASS

There may be times when it is desired to leave doors (for access), windows (for ventilation) or parts of your system unprotected intentionally. This may be accomplished by selectively bypassing one or more zones of protection. PRIOR to (or AFTER) arming.

1. At your Master Console, enter your security code and depress the BYPASS key followed by the number(s) of the zone(s) to be bypassed. The Yellow BYPASS Indicator Light will turn on here and at remote keypads (CHK-BYP). In addition, your console Zone Identification Display will sequentially show each zone bypassed, once, producing a single beep tone as each zone is displayed.

2. Check to see that the bypass is effective by depressing the READY key and by opening and closing sensors in the "bypassed" zones to see if the Green READY Light will turn off and if the Zone Identification Display indicates the number of the bypassed zone. If it does, the procedure of steps 1 and 2 should be repeated.

3. Arm the system using the procedures in the following sections if the BYPASS was performed prior to arming.

4. The zone BYPASS is automatically removed when the system is turned OFF.

NOTE: If it is desired to view a display of bypassed zones at any time, enter your security code and press the BYPASS key. The sequential display described above will be produced once.

IMPORTANT: Only those zones agreed upon with your installer at installation time can be bypassed using this procedure.

Security Code + [6 Bypass] + Numbers(s). of the Zone(s) to be Bypassed

WHILE INSIDE

1. Check the Green READY Indicator Light on your Master Console or Remote Keypad. It should be on to indicate that your system is ready to be armed. Enter your security code and depress the STAY Key at your console. The Red STAY Indicator Light will illuminate and you will hear three tones from your Master Console and any Remote Keypads. You have now ARMED successfully with the ability to walk freely through the interior.

Security Code + [3 Stay]

2. "Delay Off" Armings. If you wish the act of opening one of your main access doors to instantly trigger an alarm, do the following; Enter your security code. Depress the STAY Key and then the INSTANT Key. Both the Red STAY and the Yellow INSTANT Indicator Lights will illuminate and you will hear three tones from your Master Console and any Remote Keypad(s). Disarming automatically removes the "Delay Off" function.

Security Code + [3 Stay] + [7 Instant]

NOTE: If the Green READY Indicator Light on your Master Console is not on, check the Zone Identification Display after depressing the READY Key or after attempting to arm the system. A number appearing there indicates a violated zone (and its location). The problem must be corrected before arming can take place. See "How To Remedy a Malfunction in a Specific Zone" on page 18.

## WHEN LEAVING WITH NO ONE REMAINING

1. Check the Green READY Indicator Light on your Master Console. It should be on, indicating that the system is ready for arming.

2. Enter your security code and depress the AWAY Key. The Red AWAY Indicator Light will illuminate and you will hear two tones from your Master Console and any Remote Keypad(s) signifying that the system is ARMED. You have 15 to 135 seconds (programmed at time of installation, in 15 second increments) to leave through your chosen exit door before such passage will cause an alarm to sound.

Security Code + [• 2 Away]

HOW TO DISARM YOUR BURGLARY SYSTEM UPON ENTERING

1. Enter via a door in your Delay Zone. You will hear a slowly pulsating tone from your Master Console and any remote Keypad(s). Depending on the programming at time of installation, you have 15 to 135 seconds (programmed at time of installation in 15 second increments) to reach your Master Console or Remote Keypad and DISARM the burglary portion of your system.
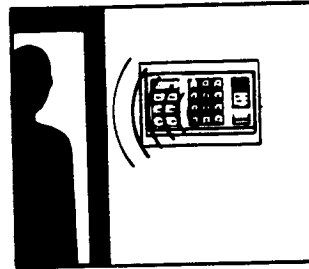
2. Enter your code and depress the OFF Key. The Red AWAY Indicator Light will go out and you will hear a single tone from your Master Console and any Remote Keypad(s). You may open and close doors and windows, and move freely inside, without setting off an alarm. The Green OFF Indicator Light will then be ON.

Security Code + [• 1 Off]

NOTE: Keying of the first digit of your security code will immediately silence any pulsating tones or alarm sounds that your Console may be emitting as you enter (any alarms from external sounders will continue, however). This will allow you to hear the confirmation tone emitted by the Console as each key on the keypad is depressed. If the entire security code, plus OFF, are not keyed within 10 seconds, the pulsating tones or alarm sounds will resume at the Console.

IMPORTANT

BEFORE keying your code, observe the ALARM Indicator on your Master Console. If it is lit, or if you hear a rapidly-pulsating tone from your Console, an intrusion has occurred during your absence. Leave immediately and contact the police from the nearest safe location.

WHILE INSIDE

1. Go directly to the nearest Console or Keypad, enter your code and depress the OFF Key. The Red STAY Indicator Light will go out and the Green OFF Indicator Light will go on, and you will hear a single tone from your Master Console and any Remote Keypad. You may now open and close doors and windows, and move freely inside without setting off an alarm.

Security Code + [• 1 Off]

NOTE: While the system is DISARMED, the Green READY Indicator Light will go on and off as various sensors are activated by your normal activities.
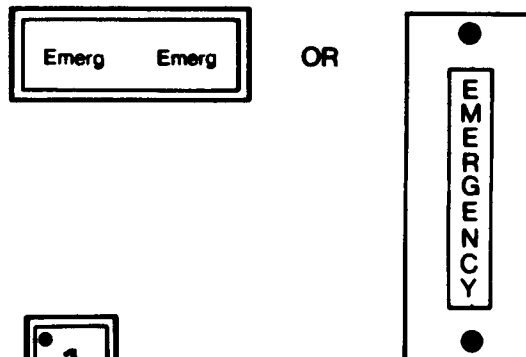
EMERGENCY ACTION _____

## HOW TO SOUND AN AUDIBLE PANIC ALARM (IF INSTALLED)

1. To trigger the alarm, you have two
options:
   A. Simultaneously depress both
      EMERG Keys on any console.
   B. Press any remote emergency
      switch.

2. In either case, a loud, rapidly pulsating
siren will sound at your Master Console.
Your exterior siren or bell will sound. The
Red ALARM Indicator Light on your Master
Console will illuminate.

3. To reset, enter your security code and
depress the OFF Key at the Master
Console or nearest Remote Keypad.

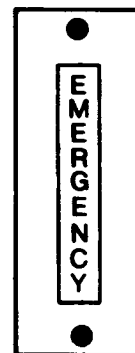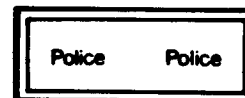| Emerg Emerg	OR	E M E R G E N C Y

Security + [1 Off]
Code
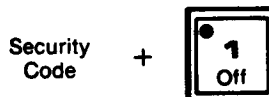
HOW TO SEND A SILENT EMERGENCY ALARM (IF INSTALLED)

NOTE: Usage of this feature is relevant only if connected to a local police
   department or alarm monitoring service.

1. You have three options:
   A. Simultaneously press both POLICE
      Keys on any Console.
   B. Press any Silent Emergency switch.
   C. Enter your Duress Code to disarm
      the system. The latter is your normal
      master or temporary access code
      with the addition of one to the fourth
      code digit (e.g. If normal code is 1-2-
      3-4, the Duress code is 1-2-3-5). If
      the code is keyed with this special
      last digit, normal system disarming
      takes place plus the action of the
      next step. This code could be used if
      you were hostage to an intruder and
      were directed to disarm your system.

2. Your system's Silent Emergency
communication equipment will activate
immediately, but no siren or bell will sound.
The Red ALARM and DIAL Indicator
lights on your Master Console will not
illuminate.

3. To turn off your Silent Emergency alarm, enter
your security code and press the OFF Key at the
nearest console.
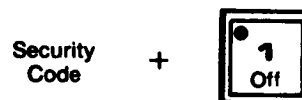
NOTE: If an emergency button is locked in, the
       system may not subsequently arm even if
       the READY light is on.

Police   Police

E M E R G E N C Y

Security + [1 Off]
Code

NOTE:
The two EMERG keys and the two POLICE keys only function to activate a panic alarm if your installer has
configured zones of your system for use as panic zones to be activated by these keys. If zones have not been so
configured, these keys are non-functional.
Whether or not these alarms are audible or silent is determined between you and your installer at the time of
system installation.

CHIME ANNUNCIATION

Your system is capable of alerting you to the opening of a door or window during the DISARMED state. To use this feature:

1. Enter your security code, then press the CHIME Key.

2. Should a door or window open, a single tone will sound from the Master Console.

3. To turn off this feature, again enter your security code and press the CHIME Key.

Security Code   +

REMOTE CONTROL OF YOUR SYSTEM

If your system is equipped with the ability to be remotely armed from a distant telephone, the procedure to arm is as follows:

1. Call the phone number of the phone line to which your alarm system is connected from a TouchTone phone.

2. The system will answer the call after a predetermined number of rings and will respond with a single tone to advise you that it is ready.

3. Press the "2" key on the TouchTone phone for at least 1/4 second.

4A. If the system was intact, it will arm as if AWAY arming had been selected and you will hear two "beep" tones from the telephone.

4B. If the system was not intact, the system will automatically attempt to arm by bypassing any zone that is not intact. If the zone to be bypassed is one agreed upon with your installer at installation time as being bypassable, the system will arm as indicated previously, with the zone that is not intact bypassed and you will hear two "beep" tones.

If the zone to be bypassed is one not pre-selected for bypass, the system will not be armed and you will hear only a single "beep" tone from the telephone.
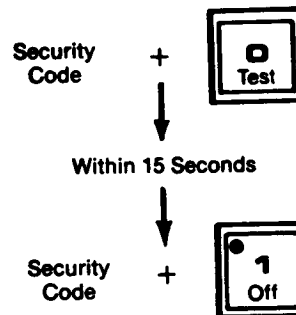
TESTING AND SERVICING PROCEDURES

HOW TO TEST YOUR FIRE ALARM SYSTEM

IMPORTANT: It is recommended that your fire alarm system be tested at least once a week. (If connected to a fire department or alarm monitoring service, that agency should be alerted before the test is conducted, and afterwards informed of its successful completion.)

1. Enter your security code and press the TEST key on your console. Your Master Console will emit a loud, interrupted 3 second long warbling tone, similarly sounded outside, unless an exterior bell is used. The Red Fire Indicator Light will illuminate and "8" will be displayed.

2. To reset the system, enter the security code and press the OFF key **within 15 seconds**.

NOTE: After each alarm condition, the system should be tested in order to make certain that all circuits are operating.

Security Code + [**O** Test]

Within 15 Seconds

Security Code + [**1** Off]

HOW TO TEST YOUR BURGLARY SYSTEM

IMPORTANT: It is recommended that your burglary system be tested at least once a week (if connected to a police department or alarm monitoring service, that agency should be alerted before the test is conducted and afterwards informed of its successsful completion.)

1. Enter the security code and press the TEST key on the console. After the fire test is automatically performed and 15 seconds elapses, the system's test mode is entered.

2. Create an intrusion on each of the burglary zones.

3. The outside alarm sounder will immediately produce a brief 1/2 second sound and the Zone Identification Number of the intruded zone will appear on the Master Console Display.

NOTE: As long as the system remains in this mode, the console will "beep" briefly every 15 seconds.

4. To end this mode, enter the security code and then depress the OFF key.

Security Code + [**O** Test]

Security Code + [**1** Off]
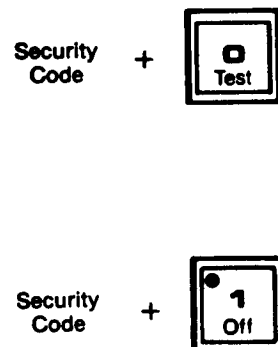
RESPONDING TO A TROUBLE CONDITION

Your day/night burglary zone(s) are programmed to produce a TROUBLE condition if the zone(s) are faulted during the disarmed period. If your system is configured with fire zone(s), an open in the zone at ANY time will produce a TROUBLE condition.

1. The TROUBLE indication will appear on your Master Console display or the "CHK.BYP" LED will flash on a remote keypad.

2. If the zone indicated is a day/night burglary zone, check the problem zone in an attempt to correct the problem. If the zone is a fire zone, proceed to Step 3.

3. At the Master Console or any Remote Keypad, enter your security code and press the OFF Key. The audible TROUBLE sound will cease but the display remains. When the problem is corrected, the TROUBLE display on the console (and audible, if present) will be automatically turned off. If you cannot correct the cause of the TROUBLE indication, contact your service company for assistance.

AC POWER OUTAGE

In the event of an AC Power outage, the indicator light on the POWER key will go out immediately, but the system will continue to function on the back-up battery. A rapidly pulsing warning tone will only start when AC power has been off longer than the programmed time period (0-36 minutes, as set by the installer).

To turn off this warning tone, simply enter your security code and press the OFF key.

> If AC power is off for a **prolonged** period, the System may eventually go into a shutdown condition, at which time the Console will emit a continuous low tone, and "C" will appear in its Zone ID display area. The tone can be silenced by depressing a "4" on the keypad, but note that until AC power is restored and the battery sufficiently recharged, the System will be incapable of sounding and communicating alarms.

HOW TO REMEDY A MALFUNCTION
IN A SPECIFIC ZONE

Any attempt to ARM your burglary system will fail if a sensor is open. The Green READY Light Indicator at your Master Console will remain off. A single tone will sound from your Master Console and any Remote Keypad to indicate your system is still in the OFF condition. Your Zone Identification Display will show the numeric location of any open zone(s).

1. Check the condition of any identified zone to be sure that it is properly closed and unactivated.

2. If this is the case, yet the Master Console display continues identifying the zone(s) as open even after another opening and closing, the problem requires the attention of your service company.

3. If you desire to arm the system with partial protection [excluding the problem zone(s)], enter your security code and press either the STAY or AWAY key. Then press the BYPASS Key. The appropriate arming mode Indicator should light, as well as the Yellow BYPASS Indicator Light. Depending on mode selected, either two or three tones will be heard, as audible confirmation of arming.

The Zone Identification Display will sequentially show each zone bypassed, once, producing a single beep tone as each zone is displayed.

4. The Zone BYPASS is automatically removed when the system is turned OFF.

IMPORTANT: Only those zones agreed upon with your installer at installation time can be bypassed using this procedure.

Security Code + [3 Stay] / [2 Away] + [6 Bypass]