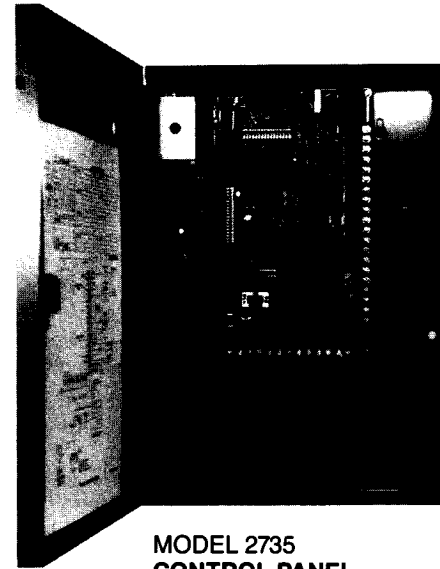
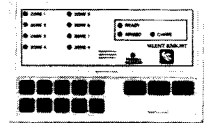


# MODEL 2735



MODEL 2735  
CONTROL PANEL



MODEL 2087  
REMOTE MODULE

## OPERATION MANUAL



**SILENT  
KNIGHT**

SECURITY SYSTEMS  
1700 Freeway Boulevard North  
Minneapolis, MN 55430

## CONTENTS

INTRODUCTION .....	1
BASIC DESCRIPTION AND CONTROL FUNCTIONS .....	1
FIGURE 1—MODEL 2735 CONTROL PANEL .....	2
MODEL 2087 REMOTE KEYPAD .....	3
KEYPAD INDICATOR LIGHTS .....	3
BUILT-IN SPEAKER TONES .....	3
FIGURE 2— MODEL 2087 REMOTE KEYPAD .....	4
OPTIONAL SYSTEM FEATURES .....	5
SYSTEM OPERATION .....	5
A. To Enter Your Access Code .....	5
B. To Correct A Mistake .....	6
C. To Arm The System .....	6
D. To Disarm The System .....	6
E. To Disarm And Reset An Alarm .....	7
F. To Shunt A Zone .....	7
G. To Unshunt A Zone .....	7
H. To Silence A Trouble .....	8
I. To Test The System .....	8
J. To Use Door Chime Feature .....	8
K. To Activate Duress .....	8
L. To Locate A Bad Zone .....	8
GLOSSARY .....	9, 10
PROGRAMMING ACCESS CODES .....	10
A. Make A List Of Access Codes .....	10
B. To Place System In Program Mode .....	10
C. To Program Access Codes .....	11
D. To Change An Access Code .....	11

**IMPORTANT:** Silent Knight products should be tested every month (under no circumstances less than every three months) to insure complete and proper operation and proper input and output connections

### LIMITED WARRANTY

Silent Knight Security Systems warrants that the products of its manufacture shall be free from defects in materials or workmanship for one year from the date of invoice if such goods have been properly installed, are subject to normal proper use, and have not been modified in any manner whatsoever. Upon return of the defective product to the nearest Silent Knight dealer, Silent Knight will, at its sole discretion, either repair or replace, at no cost to the customer, such goods as may be of defective material or workmanship. Customers outside the United States are to return products to their distributor for repair.

SILENT KNIGHT SECURITY SYSTEMS SHALL NOT UNDER ANY CIRCUMSTANCES BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM LOSS OF PROPERTY OR OTHER DAMAGE OR LOSSES OWING TO THE FAILURE OF SILENT KNIGHT SECURITY SYSTEMS PRODUCTS BEYOND THE COST OF REPAIR OR REPLACEMENT OF ANY DEFECTIVE PRODUCTS.

SILENT KNIGHT SECURITY SYSTEMS MAKES NO WARRANTY OF FITNESS OR MERCHANTABILITY AND NO OTHER WARRANTY, ORAL OR WRITTEN, EXPRESS OR IMPLIED, BEYOND THE ONE YEAR WARRANTY EXPRESSLY SPECIFIED HEREIN.

## TESTING YOUR SYSTEM

Your system should be tested regularly. Weekly testing is recommended. Consult your alarm installer on proper testing procedures. (See Warranty)

The Silent Knight Model 2735 is designed to provide you with many years of reliable trouble-free protection.

System Installed by: \_\_\_\_\_

Date: \_\_\_\_\_

For Service Call: (    ) \_\_\_\_\_ and/or (    ) \_\_\_\_\_

Before Testing Call: (    ) \_\_\_\_\_ and/or (    ) \_\_\_\_\_

Your account number is: \_\_\_\_\_

**Keep this number confidential.**

# YOUR MODEL 2735 DELUXE SECURITY SYSTEM

## INTRODUCTION

Your Silent Knight Model 2735 Security System utilizes microprocessor state-of-the-art technology to provide reliable electronic protection against intrusion and other emergencies. Because of the flexibility of the Model 2735, your installation company will "custom design" a complete security system to fit your needs. All the features of the Silent Knight system are controlled via the Model 2087 remote keypad. It is important that you are familiar with the operation of your system to maximize its effectiveness and, just as importantly, prevent false alarms.

## BASIC DESCRIPTION AND CONTROL FUNCTIONS

The basic security system consists of the control panel (Model 2735), a remote keypad (Model 2087) and the system sensors (door contact switches, motion detectors, and various other sensors).

The Model 2087 keypad allows the use of up to ten (10) separate access codes. These access codes allow you to arm and disarm the system. As an added security feature, these access codes can be quickly changed, by you, at any time.

Many of the features of the Model 2735 are exclusive to Silent Knight. The Model 2735 is programmed by your alarm installer at the time of installation to provide you with the feature best suited to your security needs. Because of the flexibility of the Model 2735, your particular installation might have more or fewer features than those discussed here; your alarm installing company should explain which features are appropriate for your situation.

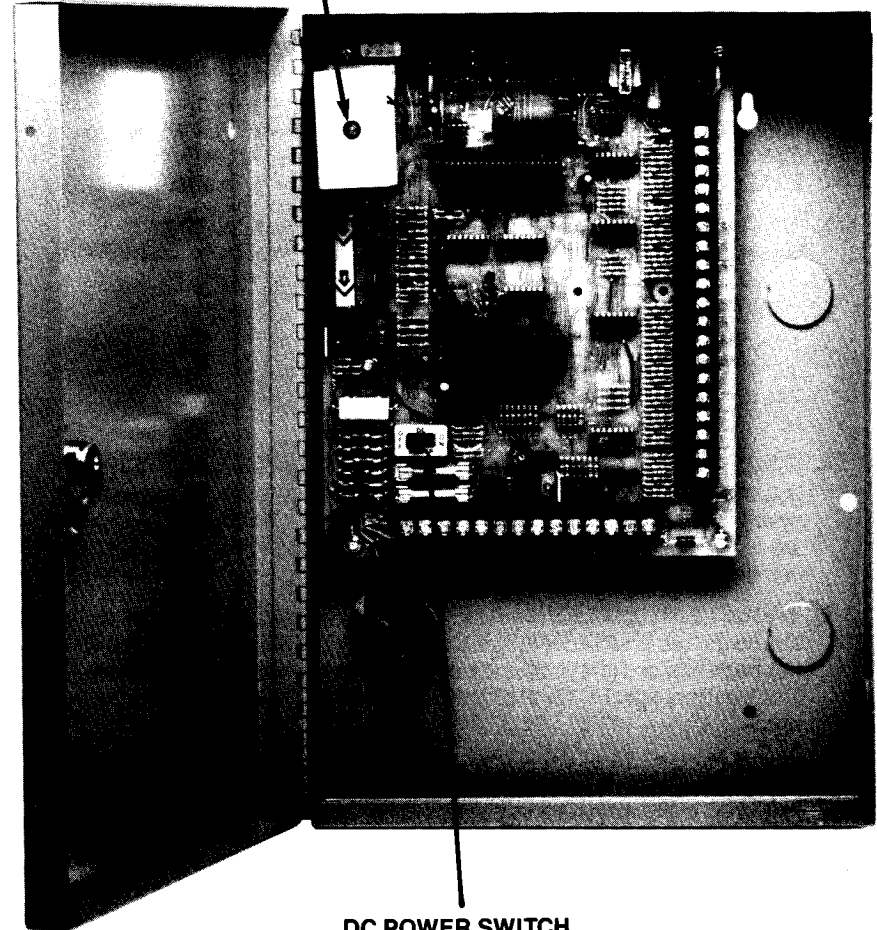
The control panel (Model 2735) is normally installed well within the perimeter of the security system, sometimes in a basement, utility room or closet. The control panel is the electronic center of your system, providing most the electronic functions. Normally, you will not have to open the control panel cabinet once it is installed. The only operator control on the control panel is the DC power switch. This should be left in the "ON" position. Figure 1 shows the control panel and the location of the DC power switch and the AC power indicator light.

The remote keypad is normally installed at the main exit and entry points of the building. Additional keypads may be installed to allow for a more convenient operation of the security system. Figure 2 shows the remote keypad. The keypad is used to arm and disarm the system and to enter system commands such as activating the door chime feature.

**NOTE:** Refer to the glossary for definitions of the terms used in this manual.

The security system sensors will be installed wherever necessary, to monitor the condition of doors, windows and open spaces. These intrusion sensors will be turned on and off (armed and disarmed) as required. It is important that the intrusion system be on at all times when your building is not occupied.

AC POWER INDICATOR LIGHT



DC POWER SWITCH

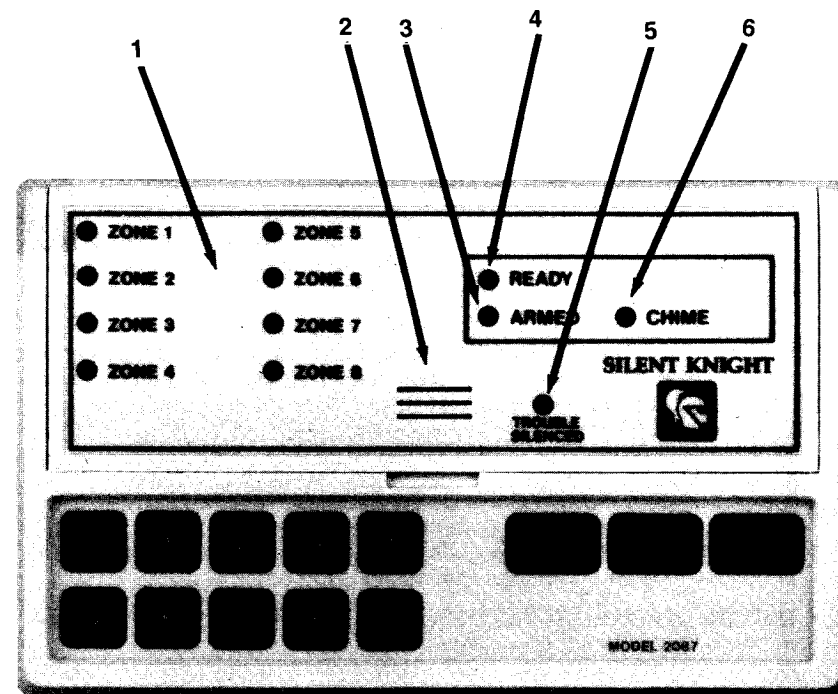
MODEL 2735 CONTROL PANEL  
FIGURE 1

## MODEL 2087 REMOTE KEYPAD

The Model 2087 Remote Keypad is used to control all the functions of your security system. In addition to the keypad touch switches, the Model 2087 contains the system status lights and an internal speaker for audible indications. The following list explains the meaning of each light and describes the audible indications. Each item is numbered and called out in Figure 2 on the following page. In other words, a light that is on may indicate a certain condition but the same light flashing indicates a different condition. You will quickly become familiar with these indications as you use your system.

1. **ZONE STATUS LIGHTS 1-8**—A zone status light that is OFF indicates a normal zone condition. A zone light that is ON indicates a bad zone. (A door or window in that zone is not closed). A SLOWLY FLASHING zone light indicates a zone that has been shunted or "bypassed". A RAPIDLY FLASHING zone light indicates a zone that was or is in alarm.
2. **BUILT-IN SPEAKER**—The Remote Keypad's built-in speaker gives audible indications of alarms, troubles, exit/entry warning tones and a short "beep" whenever a Key is pressed. The following is a short description of each audible indication.
3. **ARMED LIGHT**—Red Armed light OFF indicates that the controlled zones (zones that are turned on and off) are off or disarmed. Armed light ON indicates that the controlled zones are active or armed. Armed light FLASHING indicates that the system is in alarm.
4. **READY LIGHT**—Green Ready Light OFF indicates that either the system is armed or one or more of the zones are bad (window or door sensor is open). Ready light ON indicates that the system is disarmed and all zones are either good or have been shunted. Ready light FLASHING indicates that the system is communicating.
5. **TROUBLE SILENT LIGHT**—Red Trouble Silent light OFF indicates a normal condition. Trouble Silent light ON indicates that the audible trouble tone has been silenced (the lights is a reminder that a trouble condition still exists). Trouble silent light FLASHING indicates that the system is in the program mode.
6. **DOOR CHIME**—Yellow Door Chime light is turned on and off by touching the Door Chime.

**SYSTEM DISARMED**—Door Chime Light OFF indicates that the Door Chime feature is off or disabled. When ON indicates that the perimeter zones will cause a chime when a sensor in those zones is opened or closed.



KEYPAD

## MODEL 2087 REMOTE KEYPAD

Figure 2

- Emergency Alarm**—A high volume, low pitch intermittent tone.
- Intrusion Alarm**—A high volume, alternating high/low pitch constant tone.
- Trouble Condition**—A low volume, high pitch tone that sounds for 1 second every 10 seconds.
- Exit Tone**—A low volume, low pitch intermittent tone. (beep-beep-----beep-beep...) Last 8 seconds of Exit delay changes to rapid intermittent tone. (beep-beep-beep-beep...)
- Entry Tone**—A low volume, alternating high/low pitch intermittent tone. (deedle-deedle-----deedle-deedle-----deedle-deedle...)
- Door Chime**—A low volume, high to low pitch tone similar to a doorbell. Sounds once each time a perimeter sensor is opened or closed.
- Key "Beep" Response**—A short, low volume "beep" that sounds each time you press a switch on the Keypad.

## OPTIONAL SYSTEM FEATURES

The Model 2735 offers many optional features which can be programmed into your system by your alarm installation company. The following paragraphs explain some of these optional features. Check with your alarm installer to see which features apply to your system.

- **24 HOUR ZONES**—Any intrusion zone can be programmed to be a 24 hour zone. A 24 hour zone will be active 24 hours a day regardless of whether the system is armed or disarmed.
- **EXIT/ENTRY DELAYED ZONES**—Any Intrusion zone can be programmed to be an Exit/Entry Delayed zone. These zones will not cause an alarm until after the Exit or Entry delay time has elapsed. An Exit delay gives you enough time to Arm the system and leave the premises without causing an alarm. An Entry delay gives you enough time to enter your home or building and go to the Keypad to Disarm the system before it goes into alarm.
- **BELL TEST WHEN ARMING**—This option will cause a brief audible alarm indication to sound whenever the system is armed.
- **DURESS REPORTING**—This option allows you to signal the central station if you are being forced to disarm the system by an intruder.
- **CODES 8 AND 9 CANNOT DISARM**—This option could be used if you wish to give someone an access code to Arm the system only.
- **CODES 1-9 CANNOT ARM OR DISARM**—This option only allows Code 0 to Arm and Disarm the system. The other codes could only be used to shunt/unshunt.
- **CHIME ZONES (Perimeter Zones)**—In a commercial system, only those zones not programmed as Interior Zones will cause a chime when the chime feature is on and the system is disarmed.

## SYSTEM OPERATION

### A. To Enter Your Access Code:

Access codes must first be programmed into the system. Then they can be used to access the following functions:

- Arming the system.
- Disarming the system or resetting an alarm and unlatching smoke detectors.
- Silencing a trouble indication.
- Testing the automatic dialer. (Code 0 only)
- Shunting zones (depending on programming you may or may not need to enter your access code when shunting zones.)

An access code is entered as follows:

1. Press the digits of your code in the proper sequence.
2. A slightly longer beep will be heard when you press the last digit.

### B. To Correct A Mistake:

If you are entering an Access Code of 2 to 4 digits and you realize that you have made a mistake; **DON'T PANIC!!!** There are two ways to correct the situation.

1. Wait 5 seconds or more then re-enter the correct code. The simplest way to determine how long to wait is to count using the 1000 method.  
EXAMPLE: 1000, pause, 1001, pause, 1002, pause, 1003, pause, 1004, pause, 1005.  
When you reach 1005, re-enter the correct code.
2. If you do not want to wait 5 seconds, press "TEST" and re-enter the correct code.

**NOTE:** If 5 seconds have elapsed after you have pressed the last digit, **DO NOT** press "TEST" before entering the new code. This will cause an additional 5 second delay.

If your Access Code is 5 digits in length and you **HAVE NOT** entered all 5 digits, you may press "TEST" and re-enter the correct code.

If your Access Code is 5 digits in length and you **HAVE** entered all 5 digits, you **MUST** wait a full 5 seconds before entering the new code. Pressing "TEST" in this situation will cause an additional 5 second delay thus you will have to wait 10 seconds to enter the new code.

### C. To Arm the System:

**NOTE:** If the red ARMED light is on, the system is already armed.

1. The green READY Light should be on. If it is off refer to section L.
2. Enter your access code. The red ARMED light will turn ON. If open/closing reports are used, the green READY light will flash while the system is reporting to the central station and it will turn OFF when the report is complete. If the green READY light continues to flash, the system failed to communicate with the central station.

Depending on programming you may hear.

- a. Bell Test—The bell or Siren may sound for 2 seconds.
- b. Exit Warning Tone—The pulsing exit warning tone will sound while the exit zones are disabled (allowing you to leave). When the tone stops the system will be fully armed.

### D. To Disarm the System (normal opening):

**NOTE:** If the red ARMED light is off, the system is already disarmed.

1. Enter your access code. The ARMED light will turn off. The READY light will turn on or begin flashing if the system was programmed to report openings.

If you came in through an Exit/Entry zone to reach the keypad, you will hear the pulsing entry tone as you approach. If you do not disarm the system during the entry delay, the system will go into alarm.

Depending on programming the following may occur:

- a. If the system was programmed for Auto-Unshunt at Disarm, all shunted zones will be unshunted whenever the system is disarmed.

#### **E. To Disarm and Reset the System from an Alarm Condition:**

**NOTE:** The ARMED light will be flashing along with the zone light indicating an alarm condition.

1. Enter your access code. If the audible alarm indication was sounding, it will stop. If the ARMED light turns off then the system is disarmed. If the ARMED light keeps flashing then one of the 24 hour zones is still violated.
2. The zone(s) light that is flashing indicates the zone that caused the alarm condition. This light will continue to flash even after the system is disarmed. This feature alerts you to which zone caused the alarm, so you may restore that zone. When you re-arm the system these lights will turn off. To clear alarm memory when disarmed, press the "SHUNT" key, then press the "TEST" key.

#### **F. To Shunt (Bypass) a Zone:**

**CAUTION:** Do not try to shunt a zone which is already shunted. You would unshunt it since shunt status changes by toggling.

1. Press the "SHUNT" key.
2. Press the zone number you wish to shunt (Only one zone at a time).
3. If you don't hear a long beep, then enter your access code.

If the system is disarmed then the shunted zone light will begin slowly flashing. Depending on programming, you may not be able to shunt certain zones. Check with your alarm system installer.

**NOTE:** Depending on the system programming, if the system is in the "ARMED" mode, shunt status may or may not be displayed.

#### **G. To Unshunt (Re-enable) a Zone:**

**NOTE:** The procedure for shunting and unshunting is the same. The status simply toggles or changes to the opposite condition.

1. Press the "SHUNT" key.
2. Press the zone number you wish to unshunt (Only one zone at a time).
3. If you don't hear a long beep, then enter your access code.

The flashing light representing the shunted zone will stop flashing.

#### **H. To Silence a Trouble: (Trouble is a 1 second tone every 10 seconds.)**

1. Press the "SHUNT" key
2. Press the "0" key.
3. Enter your access code. The trouble tone will stop. The "TROUBLE SILENT" light will turn on as a reminder that a trouble condition still exists. The "TROUBLE SILENT" light will turn off as soon as the trouble has been repaired.

**NOTE:** Contact your alarm company to repair the trouble condition. The trouble will adversely affect system performance.

#### **I. To Test the Communicator:**

**IMPORTANT:** Before testing, be aware of your alarm company's policy regarding system tests.

1. Press the "TEST" key.
2. Enter the "0" access code. The test code will be sent to the Central Station only if the dialer is NOT sending something else. The Burglary Alarm tone will sound for 2 seconds. All keystation lights will come on for 2 seconds so you can verify their operation. The "READY" light will begin to flash, indicating that the dialer is active.

#### **J. To Turn On and Off the Door Chime Feature:**

1. Press the "DOOR CHIME" key. The "DOOR CHIME" light will toggle on or off. When the system is disarmed and this light is on, you will hear a chime each time a perimeter zone sensor is opened or closed. When the system is disarmed and this light is off, no chime will be heard. You will not hear this door chime when the system is armed.

#### **K. To Activate Duress:**

If you are being forced to disarm the system, by an intruder, you can signal the Central Station as follows:

1. Press the "9" key, as if it were a normal step in disarming the system.
2. Enter your access code. A duress code will be reported to the Central Station; however, the "READY" light will not flash as it normally does when communicating.

**NOTE:** Use caution in selecting the Duress option and know how to use it. Be careful to avoid false duress activations.

#### **L. To Locate a Bad Zone:**

If the system is disarmed and the "READY" light is not on, one or more of the intrusion zones are bad. Check the zone status lights to determine which zone(s) is bad. A zone status light that is on steadily indicates a bad zone.

## GLOSSARY

**Access Code**—A confidential code, 2 to 5 digits in length used to Arm/Disarm, Silence Troubles, and Test the system. Up to ten (10) different access codes can be used. Each code must have a different first digit.

**Armed**—The system is armed when the controlled zones are switched on. All zones are either controlled zones (switched on and off) or 24 hour zones (always active).

**Disarmed**—The system is disarmed when the controlled zones are switched off.

**Door Chime Feature**—When the system is disarmed and the door chime feature is selected, a two tone chime will sound each time a perimeter zone sensor is opened or closed.

**Duress**—The duress reporting feature allows you to alert central station personnel when you are forced to disarm the system by an intruder.

**Entry Delay**—An entry delay provides you with enough time to enter your home or building and get to a keypad to disarm the system before it goes into alarm. This delay time is programmable, by your alarm installer, from 10 to 150 seconds in duration.

**Exit Delay**—An exit delay provides you with enough time to leave the premises, after you have armed the system, without causing an alarm. This delay time is programmable, by your alarm installer, from 10 to 150 seconds in duration.

**Intrusion Zone**—A zone which is designed for protection against intrusion as opposed to a zone designed for protection from fire or emergency.

**Perimeter Zone**—A zone which protects an outer part of your home or building. Typically, outside doors and windows are located in perimeter zones.

**Program Mode**—To change or program access codes the system must first be in the program mode. The program mode is indicated by a flashing trouble silent light.

**Shunted Zone**—A zone which is bypassed or disabled. The zone shunting feature of the 2735 allows you the flexibility to selectively bypass any zone(s) you wish.

**Silencing a Trouble**—A trouble tone is heard at the keystation whenever a trouble condition exists in the fire or emergency zones. A trouble condition could be a broken wire, for example. You may silence the trouble tone until your alarm company can repair the trouble.

**Silent Zone**—A zone in which an alarm will not cause the audible alarm tone to sound. The alarm will, however, be reported to the central station as always.

**Toggle**—To change from one condition to the opposite condition (on to off/off to on) each time that key is pressed. For example, the instant key will toggle the instant light each time it is pressed.

**Trouble Condition**—A trouble condition exists when a supervised zone has a broken wire. The fire and emergency zones are supervised zones. Trouble detection is designed to alert you when a wiring problem exists.

**Trouble Tone**—A high pitched tone that sounds for one (1) second every ten (10) seconds when a trouble condition exists.

**Twenty Four (24) Hour Zones**—A 24 hour zone, as opposed to a controlled zone, is one that is active whether the system is armed or disarmed.

**Zone**—An area protected by one or more sensors. The entire home or building is divided up into zones to provide more flexibility of features and ease in locating the cause of an alarm.

## PROGRAMMING ACCESS CODES

### A. Make a List of Access Codes:

Before programming access codes you should fill out a list of confidential access codes similar to the following:

CODE 0	<u>0</u>	<u>4</u>	<u>2</u>	<u>3</u>	<u>7</u>
CODE 1	<u>1</u>	<u>9</u>	<u>8</u>	<u>5</u>	<u>4</u>
CODE 2	<u>2</u>	<u>2</u>	<u>3</u>	<u>2</u>	<u>—</u>
CODE 3	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>
CODE 4	<u>4</u>	<u>7</u>	<u>—</u>	<u>—</u>	<u>—</u>
CODE 5	<u>5</u>	<u>4</u>	<u>8</u>	<u>2</u>	<u>1</u>
CODE 6	<u>6</u>	<u>9</u>	<u>8</u>	<u>—</u>	<u>—</u>
CODE 7	<u>7</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>6</u>
CODE 8	<u>8</u>	<u>5</u>	<u>—</u>	<u>—</u>	<u>—</u>
CODE 9	<u>9</u>	<u>3</u>	<u>2</u>	<u>7</u>	<u>7</u>

**NOTE:** Code 9 is not available if the Duress feature is used.

First digit of each code is different.

**NOTE 1:** All codes **MUST** start with a different number. Access codes may be of varying lengths from 2-5 digits long. Any combination of numbers may be used.

**NOTE 2:** For U.L. Listed Systems, the Access Codes **MUST** be a minimum of 3 digits in length.

### B. To Place System in Program Mode:

To program these access codes, the 2730 must be in the program mode. The program mode is indicated by a flashing "TROUBLE SILENT" light on the remote keypad. There are two ways to place the system in the program mode.

1. To place the system in the program mode when it is already operating you must know the 0 code or use step #2 below. To use the 0 code the system must be disarmed with no shunted zones.

Press "Shunt" Key.

Press "Test" Key.

Enter the 0 Code.

The system should now be in the program mode.

2. The system will automatically enter the program mode when it is first powered up. Go to the Control Panel and open the cover. Move the DC Power Switch to the ON position if it was OFF or turn it OFF and then ON again, if it was already ON. Go to a remote keypad and begin entering codes. You have 1 minute to get to a keystation and begin entering codes or the system will arm itself. Each time you press a key, this time is extended to one full minute. If the keypad is too far away to reach within 1 minute, enlist the aid of an assistant to operate the DC power switch while you remain at the remote keypad. Refer to step "C" below To Program Access Codes.

**NOTE:** The access codes will be stored in the systems memory so that you won't have to reprogram them each time you power the system up.

#### C. To Program Access Codes:

With the system in the program mode:

1. From your list of codes, first enter the 0 code. Each code must be from 2-5 digits long and each code must begin with a different number.
2. Press the "Test" key after each code. To clear an error, press the "Shunt" key or wait for 5 seconds and system will auto-clear.
3. Repeat steps 1 and 2 for each code on your list.

**NOTE:** Code 9 is not available if the Duress feature is used.

4. After entering all the codes on your list press the "Test" key three (3) times and the system will exit the program mode.

#### D. To Change An Access Code:

To change one or more of your access codes simply follow the steps in section C above, but enter only those codes you wish to change. The rest of the codes will remain unchanged.

(tear along perforation)

(KEEP THIS IN A SAFE PLACE)

YOUR ACCOUNT NUMBER IS \_ \_ \_ \_

KEEP THIS NUMBER CONFIDENTIAL!!

0 \_ \_ \_ \_  
1 \_ \_ \_ \_  
2 \_ \_ \_ \_  
3 \_ \_ \_ \_  
4 \_ \_ \_ \_

5 \_ \_ \_ \_  
6 \_ \_ \_ \_  
7 \_ \_ \_ \_  
8 \_ \_ \_ \_  
9 \_ \_ \_ \_