

# FIENDER® 100 OWNER'S MANUAL

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### YOUR SECURITY SYSTEM

Your security system is designed to give you the specific type of protection you need.

The system can completely protect your premises when you are away, or you can automatically bypass interior zones for convenient "on premises" protection.

Your entire security system is supervised. This means that if something goes wrong with your system (i.e., a wire breaks or a detector malfunctions), an audible trouble signal from your operating panel will let you know so that you can take appropriate action.

#### **Access Codes**

Your security system is controlled by up to nine oneto five-digit acess codes. You can select the access codes you would like, and they can be changed at any time for increased security. Your installation company can program the codes to allow up to four levels of security. Each level is represented by a digit which is programmed by your installer. The choices are as follows:

SECONDARY KEY FUNCTIONS ONLY — No arming, disarming of the system. These codes can only access secondary key functions (i.e., trouble, alarm memory, chime, battery test/fire reset and test).

FULL FUNCTION — Allows arming, disarming and complete control of the system.

ACCESS TO INDIVIDUAL ZONES — Allows disarming and re-arming of one to seven individual zones.

DURESS — Allows normal system operation and allows a silent alarm to be sent via the digital communicator when this type of code is entered.

The security level of each code is determined when your system is installed. Only the installer can change a code's security level.

#### **Burglar Alarm**

Your easy-to-operate burglar alarm system takes a basic "two-stage" approach to the protection of your home or business.

The first "stage" protects perimeter access points such as doors and windows. The second "stage" consists of interior sensors designed to detect an intruder's motion inside your home or business.

When the building is empty, you may use both "stages" of protection. When the building is occupied, you may choose the first "stage," permitting normal movement inside the building while still providing perimeter protection. You can take this a step further by arming certain areas (or zones) within the building by using the keypad's Bypass feature.

The security system also features a unique sequential entry system. This allows you to enter through a PROTECTED entry door and pass through an internal sensor before you disarm the system. However, if an intruder enters through an UNPROTECTED opening and violates an internal sensor, the burglar alarm will activate immediately.

#### **Emergency Alarms**

Your operating panel allows you the option of initiating up to three different types of emergency alarms. You can alert help in a police, fire or medical emergency by designating individual zones for those emergencies, or by pressing key pairs for those emergencies (if your system has been programmed for this type of operation).

#### **Remote Operating Panel**

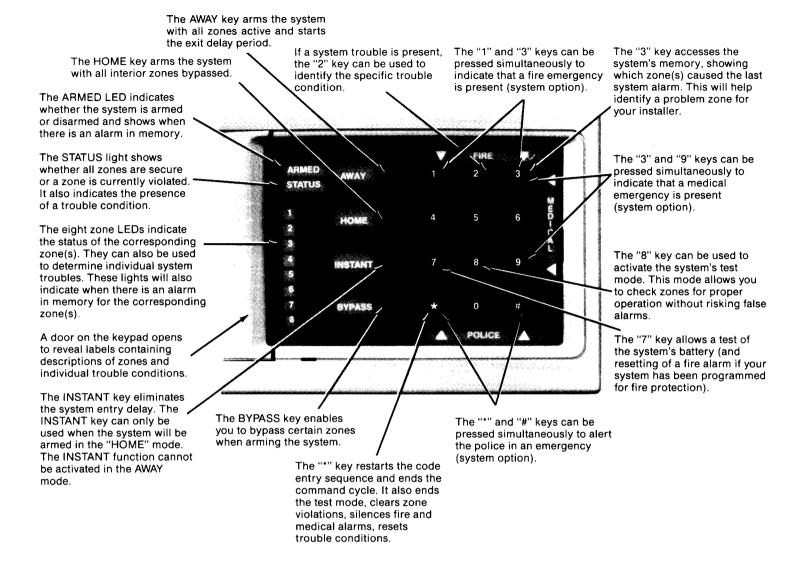
The security system is easily programmed and operated using the remote operating panel. The operating panel features lights to show the status of your system and the status of each of the protected areas in your home.

A door on the operating panel swings open to reveal labels used for identification of individual zones and trouble conditions. You or your installer can write zone descriptions on the zone identification label. These descriptions will indicate which zones protect which areas of your home or business and, when a trouble condition occurs, will help identify the nature of the trouble within the system.

#### **Alarm Memory**

If an alarm occurs, the system's memory feature causes the corresponding light(s) (lights 1-8) on your operating panel to remain flashing, indicating which protective zone caused the alarm. The Armed light will blink when there is an alarm in memory.

# REMOTE OPERATING PANEL FUNCTIONS



#### **Visual Indicators**

LIGHT	ON	OFF	FLASHING
Armed	System is armed	System is not armed	Fast — Delay timer is operating. Slowly — Active alarm in memory.
Status	All zones are secure	A zone has been violated	System trouble or test mode.
Zone 1-8	Zone is violated  Display value of a function in programming mode.	Zone is secure	System is in programming mode (all zone lights will flash). Zone bypassed. Alarm memory.

# SYSTEM PROGRAMMING

Your security system provides a user programming mode which allows you to program particular system functions including: the nine access codes, the number of uses for the ninth access code and a special user program code. Each of these options has a corresponding location in the programming mode.

LOCATION	USE
1	Access code 1
2	Access code 2
3	Access code 3
4	Access code 4
5	Access code 5
6	Access code 6
7	Access code 7
8	Access code 8
9	Access code 9
10	User program code
11	Number of uses for access code 9

#### To program locations 1-10 (access codes):

1. Access the programming mode by entering the user program code. Your system comes with a user program code of 98888.

All zone lights will flash to indicate that you have entered the user programming mode, and they will continue flashing until you begin the programming, or until you press the "\*" key to exit the user programming mode.

If three minutes elapse and you have not pressed a key, the system will automatically exit the user programming mode and return to normal operation.

2. Enter the location number of the code you would like to add or change (see chart above) and press the "#" key. The present code will be displayed by the zone LEDs according to the binary format. For example if the first digit of the code is 7, the LEDs for zones 1, 2 and 3 will light. The binary values of these numbers are 1, 2 and 4 respectively (see chart below). Adding up the binary values gives you a sum of 7, indicating that the first digit of the code is 7.

ZONE LED ON	<b>BINARY VALUE</b>
None	0
1	1
2	2
3	4
4	8
5	16
6	32
7	64
8	128

3. Enter the digits of the new code you would like to use.

Five digits must be entered for each code used.

**NOTE:** If you would like to program an access code of less than five digits, use trailing zeros (12900 for an access code of 129, 56000 for an access code of 56).

4. Once the fifth digit of a code has been entered, the system will automatically exit the programming mode. To program another code, you must begin at step 1. You can exit the programming mode at any time by pressing the "\*" key.

#### To program a limited number of uses for code 9:

1. Access the programming mode by entering the program code. Your system comes with a user program code of 98888.

All zones lights will flash to indicate that you have entered the user programming mode, and they will continue flashing until you begin the programming, or until you press the "\*" key to exit the user programming mode. If three minutes elapse and you have not pressed a key, the system will automatically exit the user programming mode.

- 2. Enter "11" (the location for the number of uses for code 9), and press the "#" key. The current value of the code 9 usage counter will be displayed by the LEDs according to the binary format. For example, if the code 9 usage counter is programmed for 100, the LEDs for zones 3, 6 and 7 will light. The binary values of these numbers are 4, 32 and 64 respectively (see chart at bottom of left column). Adding to the binary values give you a sum of 100.
- 3. Enter the number you would like to program for the number of uses for code 9.
- 4. Push the "\*" key to store the new value. The system will now automatically exit the programming mode.

For an indication of the new value, repeat steps 1 and 2.

You can exit the programming mode at any time by pressing the "\*" key.

# **OPERATING INSTRUCTIONS**

#### Arming and Disarming the System

# To arm the system — Away mode (when leaving the premises)

- 1. Check to see that the green Status light is on and the red Armed light is off.
- Enter a valid access code. The operating panel will beep three times to confirm that a valid code has been entered.
- Press the Away key. The exit delay period will begin.
  The Armed light will begin flashing and the remote
  operating panel will begin beeping. YOU MUST
  LEAVE THE PREMISES BEFORE THE EXIT DELAY
  PERIOD EXPIRES OR AN ALARM WILL OCCUR.
- 4. Leave through the normal exit/entry door.

Once the exit delay period expires, your home or business will be protected in the Away mode.

**NOTE:** To arm the system using a keyswitch, simply turn the key.

To disarm the system — Away mode:

- Enter through the normal exit/entry door. The remote operating panel will begin emitting a continuous tone to indicate that the entry delay period has begun. YOU MUST DISARM THE SYSTEM BEFORE THE ENTRY DELAY TIME EXPIRES OR AN ALARM WILL OCCUR.
- Enter a valid access code. The system will beep twice to confirm that a valid access code has been entered. The continuous tone will stop, and the Armed light will go out. The system is now disarmed.

**NOTE:** To disarm the system using a keyswitch, simply turn the key.

# To arm the system — Home mode (when staying on premises)

1. Check to see that the green Status light is on and the red Armed light is off.

**NOTE:** If the Status light is off and an interior zone light is on, you can still arm the system. The system will ignore violated interior zones during the Home mode.

- Enter a valid access code. The operating panel will beep three times to confirm that a valid code has been entered.
- 3. If you would like the system to operate with an entry delay period in this mode, go to step 4.
  - If no entry delay period is desired, press the INSTANT key. This will cause the system to alarm immediately if someone enters the premises after it is armed.
- 4. Press the Home key. The system will beep six times and the Armed light will begin flashing to indicate that the exit delay period has begun. ANYONE LEAVING THE PREMISES MUST DO SO BEFORE THE EXIT DELAY PERIOD EXPIRES OR AN ALARM WILL OCCUR.

#### To disarm the system — Home mode:

Enter a valid access code. The operating panel will beep twice to confirm that a valid code has been entered, and the Armed light will go out. The area is no longer under protection.

# To arm the system with a zone(s) bypassed — Home or Away mode:

- 1. Check to see that the green Status light is on and the red Armed light is off.
- Enter a valid access code. The operating panel will beep three times to confirm that a valid code has been entered.
- Press the Bypass key, and then the number key corresponding to the zone you would like to bypass. The light for the bypassed zone will begin flashing.

NOTE: Press Bypass key prior to each zone selection.

- Repeat step 3 for any other zones you would like to bypass.
- 5. Once the selection of bypassed zone(s) is complete, press the Home or Away key. The operating panel will beep and the Armed light will begin flashing to signal that the exit delay period has started.
  - The light(s) corresponding to the bypassed zone(s) will continue to flash for 30 seconds after the Home or Away key has been pressed.
- Once the exit delay period has ended, the system will protect your home with the specified zones bypassed.

**NOTE:** If you disarm the system during the exit delay, the bypasses will remain when you re-arm the system.

If you complete steps 3 and 4, but would like to restore protection to a certain zone, press the Bypass key followed by the number of the zone you would like to restore. The light for that zone will go out, and the zone will now be protected when the system is armed.

#### Selective Zone Disarming

When your system is completely armed, up to eight zones can be individually disarmed and re-armed. Your installer can program the system so that a certain access code(s) will disarm and re-arm only a specific zone(s). This feature is useful if you wish to give someone access to part, but not all, of the protected area.

#### Resetting the System

Press the "\*" key to end the test mode, to clear burglary zone violations from the system's memory, or to restart the code input sequence. If a mistake is made entering a valid access code, depress the "\*" key and enter the proper code. The "\*" key can also be used to silence medical and fire alarms. Entering code, plus "2" key, plus "\*" key clears alarm memory for fire, police and medical zones.

continued

#### Chime Mode

Your system features a chime mode which, when activated, will cause the remote operating panel to beep when a perimeter or exit/entry zone is violated while the system is disarmed. No alarm will occur.

To activate or deactivate the chime feature:

- 1. Check to see that the green Status light is on and the red Armed light is off.
- Enter a valid access code. The system will beep three times to confirm that a valid code has been entered.
- 3. Push the "6" key. The operating panel will beep

three times. The chime feature is now activated. If it was activated, the operating panel will beep two times. The chime is now deactivated.

The chime feature can be alternately turned on and off by repeatedly pressing the "6" key. After you press the "6" key, the number of beeps will indicate whether the chime feature is on or off: 3 beeps — on, 2 beeps — off.

**NOTE:** While programming the chime feature, if 30 seconds pass and no key has been pressed, you must return to step 1.

# **QUICK REFERENCE CHART**

FUNCTION	ACTION	RESULT	
Arming System — Away	Enter access code Press Away Key	Three beeps Armed light will flash. Operating panel will begin beeping. Exit delay will start.	
Arming System — Home	Enter access code Press Home key	Three beeps Operating panel will begin beeping. Armed light will begin to flash. Exit delay will start.	
Disarming System	Enter access code	Two beeps Armed light will go out.	
Bypass	Enter access code Press Bypass key and number key of zone to be bypassed. If more than one zone is to be bypassed, press the Bypass key before each zone number. Press "Home" or "Away" key	Three beeps Zone light(s) will flash.  Operating panel will begin beeping. Exit delay will start.	
Changing Codes	Enter user program code Enter location of code to be changed and press "#" key. A code location will display first digit of code. To view all five digits press "#" key to advance one digit. Enter digits of new code (if less than five digits, use trailing 0's).	All zone lights will flash. Zone lights will display current data stored in that location.  Zone lights will display new code digits.	
Programming Number of Uses for Code 9	Enter program code Enter location (11) and press "#" key. Enter new value for counter and press "*" key.	All zone lights will flash. Zone lights will display counter value. Zone lights will display new counter value.	
Instant	Enter access code Press Instant key Press Home key	Three beeps Three beeps Operating panel will begin beeping. Armed light will begin to flash. Exit delay will start.	
Test Mode	Enter access code Press "8" key  Press "*" key to exit test mode.	Three beeps Three beeps Operating panel will then beep every 30 seconds. Status light will light steadily. Zone light(s) will go out.	
Trouble Mode	Press "2" key for more than one second. Press "*" key to clear trouble condition.	Zone lights will indicate trouble condition. Status light will light steadily.	
Reset Fire Alarm	Press "*" key or enter code. Enter code Press "7" key Press "2" key Press "*" key	Stops audible alarm. Three beeps Interrupts power to the detectors. Displays memory. Clears alarm.	
Reset Burglary Alarm	Enter code Enter code Press "*" key	Three beeps, stops audible alarm, disarms system. Three beeps Clears alarm memory [blinking zone light(s)]	
Reset Police Alarm	Enter code Press "2" key Press "*" key	Three beeps, stops audible alarm. Displays memory. Clears alarm.	
Reset Medical Alarm	Enter code Press "2" key Press "*" key	Three beeps, stops audible alarm. Displays memory. Clears alarm.	

# 24-HOUR EMERGENCY ALARM OPERATION

Your system can initiate up to three different types of emergency alarms: fire, police and medical. Your system can be programmed to alert help by either an automatic or a manual alarm.

Your installer can also program the system to activate one alarm sound for fire emergencies and a different sound for burglary violations, medical emergencies and police emergencies. This type of programming is suggested.

#### Fire Alarm — automatic

This feature can be used if a zone is designated for fire protection and heat/smoke alarms are installed. When the system senses heat or smoke in the zone, it will automatically send a fire alarm signal to the central monitoring station, regardless of whether the system is armed or disarmed.

#### Fire Alarm — manual

If programmed, the "1" and "3" keys pressed simultaneously will send a fire alarm signal to the central monitoring station.

#### Police Alarm — automatic

This feature can be used if a zone is designated as a police zone. When this zone is violated (e.g. when a remote button is pressed), it will automatically send a police emergency alarm signal to the central monitoring station, regardless of whether the system is armed or disarmed.

#### Police Alarm — manual

If programmed, the "\*" and "#" keys pressed simultaneously will send a police emergency alarm signal to the central monitoring station.

#### **Medical Alarm** — automatic

This feature can be used if a zone is designated as a medical zone. When the system detects a medical emergency (e.g. when a remote button is pressed), it will automatically send a medical alarm signal to the central monitoring station, regardless of whether the system is armed or disarmed.

#### Medical Alarm — manual

If programmed, the "3" and "9" keys pressed simultaneously will send a medical alarm signal to the central monitoring station.

# **TESTING YOUR SYSTEM**

To test your system's zones and annunciators:

- Enter a valid access code. The remote operating panel will beep three times to confirm that a valid code has been entered.
- 2. Press the "8" key. The remote operating panel will beep three times to indicate that the system is in the test mode. During the test mode, the remote operating panel will beep every 30 seconds.
- Test protective zones by violating the protective device(s) in each zone (i.e., opening doors and windows, walking in front of motion detectors). The operating panel will begin beeping and the corresponding zone light(s) will begin flashing to signal the zone violation(s).
  - When you restore the protective device to a normal condition, the remote operating panel will stop beeping, but the zone light(s) will continue to flash.
- 4. Return to the operating panel. A red zone light will be flashing for each zone you have violated/tested.

Test each emergency keypair ("1" and "3", "\*" and "#", "3" and "9") individually by pressing both keys of the pair simultaneously for more than two seconds. When a keypair is tested, any annunciator connected to it will activate. The digital communicator will not activate.

Press the "1" and "7" keys simultaneously to test the bell or siren.

5. The test is now complete. Press the "\*" key to exit the test mode.

**NOTE:** When using the "\*" and "#" keys, make sure you do not press the "\*" key before the "#" key. If the "\*" key is pressed first, the system will exit the test mode.

Your installer can also program your security system's digital communicator to send a periodic test signal to the central monitoring station. This ensures that the digital communicator is in proper operating condition, and that the central monitoring station is receiving the communicator's transmission.

### SYSTEM OPERATING PROBLEMS

Trouble Mode	<b>ZONE LIGHT</b>	TROUBLE CONDITION
Your security system features a Trouble mode, designed to help identify individual troubles by	1	AC power failure
condition. This makes it easy for your installer to	2	Low battery Blown fuse
troubleshoot the system.	3	Failure to communicate
If a trouble condition occurs, the Status light will flash.	4	EEPROM error
You can determine which type of trouble is present	5 6	Supervisory Fire memory
by entering your access code and holding down the "2" key for more than one second. A zone light will	7	Police memory
come on to indicate the nature of the trouble. The	8	Medical memory

#### **System Operating Problems Chart**

INDICATIONS	MOST PROBABLE CAUSE	CORRECTIVE ACTION
System will not arm	You are entering an invalid access code.	Check whether you are entering a valid code. Press "*" and begin again.
	Someone has changed or deleted your access code.	Call installer. Enter user program mode and read access codes.
Status light is flashing	System trouble is present.	Enter access code, press "2" key and open operating panel door. Zone light(s) 1-8 will indicate specific trouble. Call installer and report trouble.
System will not arm in the Home mode	Door or window open (zone lights will confirm)	Close door or window.
System will not arm in the Away mode	Door or window open (zone lights will confirm)	Close door or window.
	Defective keyswitch, if installed.	Arm system from operating panel. Ask installer to check keyswitch.

### FIRE PROTECTION

#### **Smoke Detector Location**

Smoke detectors should be installed in accordance with National Fire Protection Association (NFPA) Standard 74. The following is from NFPA 74:

zone lights correspond to the following conditions:

Smoke detectors shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms and on each additional story of the family living unit including basement and excluding crawl spaces and unfinished attics.<sup>1</sup> (See note next page.)

For family living units with one or more split levels (i.e., adjacent levels with less than one full story separation between levels), a smoke detector required by the above shall suffice for an adjacent lower level, including basements.

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

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

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

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

continued

Heat from a fire rises to the ceiling, spreads out across the ceiling surface and begins to bank down from the ceiling. The corner where the ceiling and the wall meet is an air space into which heat has difficulty in penetrating. In most fires, this "dead" air space measures about 4 in. (0.1 m) along the ceiling from the corner and 4 in. (0.1 m) down the wall as shown in the drawing on the left below. Heat or smoke detectors should not be placed in this "dead" air space.

#### Fire Prevention and Escape

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

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

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

IN CASE OF FIRE: Leave immediately. Don't stop to pack, or search for valuables. In heavy smoke, hold your breath and stay low — crawl if necessary. The clearest air is usually at the floor. If you have to go

through a closed door, carefully feel the door and door knob to see if undue heat is present. If relatively cool, brace your foot against the bottom of the door with your hip against the middle, and one hand against the top edge. Open slightly. If there is a rush of hot air, slam the door quickly and latch it. Unvented fire will build up considerable pressure. Be sure all the household realizes this danger.

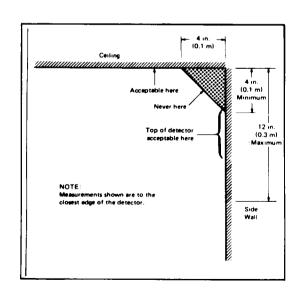
Use your neighbor's phone or a street fire alarm box. The job of extinguishing the fire should be left to the professionals. Too many unforeseen things can occur when inexperienced people try to extinguish a fire.

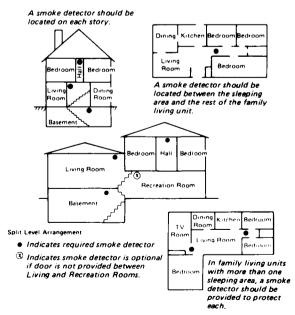
BE PREPARED: Perform fire drills regularly. Use them to assure recognition of an alarm signal. For your protection, simulate different circumstances (smoke in hall, in living room, etc.). Then have everyone react to the situation. Draw a floor plan and show two exits from each room. It is important that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

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

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

Become familiar with the distinctive sounds of your fire alarm and burglar alarm signals.





### **GLOSSARY**

ACCESS CODE — A one- to five-digit code which allows operation of the system. Five-digit access codes provide the best security.

ARMING — The process of putting the system in the protective mode. When the system is armed, violations are detected and alarms occur. Once the system is armed, it will stay armed until you disarm it by entering a valid access code.

AWAY — A mode which offers maximum protection when no one is on the protected premises. All zones are protected in this mode.

EXIT/ENTRY DELAY — Selected period of time in which you can leave the premises after arming your system, without causing a false alarm. Also allows you to enter the premises and disarm the system without causing a false alarm.

HOME — A mode which protects against unwanted entry, but allows movement within the protected area.

KEYSWITCH — A momentary switch used to arm and disarm the system with a key.

MEMORY — A feature which stores alarms and causes the corresponding zone lights on the operating panel to flash. This allows service personnel to easily pinpoint potential problems which may be interfering with proper system functioning.

SENSOR — An alarm system device which detects an intrusion, or a device which senses smoke.

TROUBLE CONDITION — Refers to any malfunctioning of your security system. Individual trouble conditions can be determined by checking zone lights and trouble descriptions behind the operating panel door.

ZONES — Physical areas of your home or business which are protected.

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