• W A R N I N G •

This manual contains information on limitations regarding product use and function and information on the limitations as to liability of the manufacturer. The entire manual should be carefully read.

Instruction Manual



Software Version 2.3

WARNING Please Read Carefully

Note to Installers

This warning contains vital information. As the only individual in contact with system users, it is your responsibility to bring each item in this warning to the attention of the users of this system.

System Failures

This system has been carefully designed to be as effective as possible. There are circumstances, however, involving fire, burglary, or other types of emergencies where it may not provide protection. Any alarm system of any type may be compromised deliberately or may fail to operate as expected for a variety of reasons. Some but not all of these reasons may be:

■ Inadequate Installation

A security system must be installed properly in order to provide adequate protection. Every installation should be evaluated by a security professional to ensure that all access points and areas are covered. Locks and latches on windows and doors must be secure and operate as intended. Windows, doors, walls, ceilings and other building materials must be of sufficient strength and construction to provide the level of protection expected. A reevaluation must be done during and after any construction activity. An evaluation by the fire and/or police department is highly recommended if this service is available.

Criminal Knowledge

This system contains security features which were known to be effective at the time of manufacture. It is possible for persons with criminal intent to develop techniques which reduce the effectiveness of these features. It is important that a security system be reviewed periodically to ensure that its features remain effective and that it be updated or replaced if it is found that it does not provide the protection expected.

■ Access by Intruders

Intruders may enter through an unprotected access point, circumvent a sensing device, evade detection by moving through an area of insufficient coverage, disconnect a warning device, or interfere with or prevent the proper operation of the system.

Power Failure

Control units, intrusion detectors, smoke detectors and many other security devices require an adequate power supply for proper operation. If a device operates from batteries, it is possible for the batteries to fail. Even if the batteries have not failed, they must be charged, in good condition and installed correctly. If a device operates only by AC power, any interruption, however brief, will render that device inoperative while it does not have power. Power interruptions of any length are often accompanied by voltage fluctuations which may damage electronic equipment such as a security system. After a power interruption has occurred, immediately conduct a complete system test to ensure that the system operates as intended.

■ Failure of Replaceable Batteries

This system's wireless transmitters have been designed to provide several years of battery life under normal conditions. The expected battery life is a function of the device environment, usage and type. Ambient conditions such as high humidity, high or low temperatures, or large temperature fluctuations may reduce the expected battery life. While each transmitting device has a low battery monitor which identifies when the batteries need to be replaced, this monitor may fail to operate as expected. Regular testing and maintenance will keep the system in good operating condition.

Compromise of Radio Frequency (Wireless) Devices

Signals may not reach the receiver under all circumstances which could include metal objects placed on or near the radio path or deliberate jamming or other inadvertent radio signal interference.

System Users

A user may not be able to operate a panic or emergency switch possibly due to permanent or temporary physical disability, inability to reach the device in time, or unfamiliarity with the correct operation. It is important that all system users be trained in the correct operation of the alarm system and that they know how to respond when the system indicates an alarm.

Smoke Detectors

Smoke detectors that are a part of this system may not properly alert occupants of a fire for a number of reasons, some of which follow. The smoke detectors may have been improperly installed or positioned. Smoke may not be able to reach the smoke detectors, such as when the fire is in a chimney, walls or roofs, or on the other side of closed doors. Smoke detectors may not detect smoke from fires on another level of the residence or building.

Every fire is different in the amount of smoke produced and the rate of burning. Smoke detectors cannot sense all types of fires equally well. Smoke detectors may not provide timely warning of fires caused by carelessness or safety hazards such as smoking in bed, violent explosions, escaping gas, improper storage of flammable materials, overloaded electrical circuits, children playing with matches or arson.

Even if the smoke detector operates as intended, there may be circumstances when there is insufficient warning to allow all occupants to escape in time to avoid injury or death.

Motion Detectors

Motion detectors can only detect motion within the designated areas as shown in their respective installation instructions. They cannot discriminate between intruders and intended occupants. Motion detectors do not provide volumetric area protection. They have multiple beams of detection and motion can only be detected in unobstructed areas covered by these beams. They cannot detect motion which occurs behind walls, ceilings, floor, closed doors, glass partitions, glass doors or windows. Any type of tampering whether intentional or unintentional such as masking, painting, or spraying of any material on the lenses, mirrors, windows or any other part of the detection system will impair its proper operation.

Passive infrared motion detectors operate by sensing changes in temperature. However their effectiveness can be reduced when the ambient temperature rises near or above body temperature or if there are intentional or unintentional sources of heat in or near the detection area. Some of these heat sources could be heaters, radiators, stoves, barbeques, fireplaces, sunlight, steam vents, lighting and so on.

Warning Devices

Warning devices such as sirens, bells, horns, or strobes may not warn people or waken someone sleeping if there is an intervening wall or door. If warning devices are located on a different level of the residence or premise, then it is less likely that the occupants will be alerted or awakened. Audible warning devices may be interfered with by other noise sources such as stereos, radios, televisions, air conditioners or other appliances, or passing traffic. Audible warning devices, however loud, may not be heard by a hearing-impaired person.

Telephone Lines

If telephone lines are used to transmit alarms, they may be out of service or busy for certain periods of time. Also an intruder may cut the telephone line or defeat its operation by more sophisticated means which may be difficult to detect.

■ Insufficient Time

There may be circumstances when the system will operate as intended, yet the occupants will not be protected from the emergency due to their inability to respond to the warnings in a timely manner. If the system is monitored, the response may not occur in time to protect the occupants or their belongings.

Component Failure

Although every effort has been made to make this system as reliable as possible, the system may fail to function as intended due to the failure of a component.

■ Inadequate Testing

Most problems that would prevent an alarm system from operating as intended can be found by regular testing and maintenance. The complete system should be tested weekly and immediately after a break-in, an attempted break-in, a fire, a storm, an earthquake, an accident, or any kind of construction activity inside or outside the premises. The testing should include all sensing devices, keypads, consoles, alarm indicating devices and any other operational devices that are part of the system.

Security and Insurance

Regardless of its capabilities, an alarm system is not a substitute for property or life insurance. An alarm system also is not a substitute for property owners, renters, or other occupants to act prudently to prevent or minimize the harmful effects of an emergency situation.

About Your Security System

Your DSC security equipment has been designed to provide you with the greatest possible flexibility and convenience. Read this manual carefully and have your installer instruct you on your system's operation and on which features have been implemented in your system. All users of this system should be equally instructed in its use. Fill out the "System Information" page with all of your zone information and access codes and store this manual in a safe place for future reference.

Fire Detection

This equipment is capable of monitoring fire detection devices such as smoke detectors and providing a warning if a fire condition is detected. Good fire detection depends on having adequate number of detectors placed in appropriate locations. This equipment should be installed in accordance with N.F.P.A. standard #72. (N.F.P.A., Batterymarch Park, Quincey MA 02269). Carefully review the Family Escape Planning guidelines in this manual.

NOTE: Your installer must enable the fire detection portion of this equipment before it will work.

Testing

To insure that your system continues to work as intended, you must test your system weekly. Please refer to "Testing Your System" on page 13 of this manual. If your system does not work properly, call your installing company for service.

Monitoring

This system is capable of sending alarms, troubles and emergency information over telephone lines to a monitoring station. If you inadvertently initiate an alarm, immediately call the monitoring station to prevent an unnecessary response.

NOTE: Your installer must enable the monitoring feature before it will work.

General System Operation

Your security system is made up of a DSC control panel, one or more keypads and various sensors and detectors. The control panel will be mounted out of the way in a utility closet or in a basement. The metal cabinet contains the system electronics, fuses and stand-by battery. There is normally no reason for anyone but the installer or service professional to have access to the control panel.

All the keypads have an audible indicator and command entry keys. The LED keypads have a group of zone and system status lights. The LCD keypad has an alphanumeric liquid crystal display (LCD).

The keypad is used to send commands to the system and to display the current system status. The keypad(s) will be mounted in a convenient location inside the protected premises close to the entry/ exit door(s).

The security system has several protected areas (zones) and each of these will be connected to one or more sensors (motion detectors, glassbreak detectors, door contacts, etc.). A sensor in alarm will be indicated by the corresponding zone lights flashing on an LED keypad or by written messages on the LCD keypad.

IMPORTANT NOTICE

A security system cannot prevent emergencies. It is only intended to alert you and – if included – your monitoring station of an emergency situation. Security systems are generally very reliable but they may not work under all conditions and they are not a substitute for prudent security practices or life and property insurance. Your security system should be installed and serviced by qualified security professionals who should instruct you on the level of protection that has been provided and on system operations.

System Information

Fill out the following information for future reference and store this manual in a safe place.

Access Codes

Your Master Code is:_____

Additional Access Codes:

01	09	17	25
02	10	18	26
03	11	19	27
04	12	20	28
05	13	21	29
06	14	22	30
07	15	23	31
08	16	24	32

Zone Information

There are _____ active zones on the system.

Zone	Protected Area	Zone Type
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
)		

	Telephone #:
	Telephone #:
seconds.	
seconds.	

Access Codes

Access codes are used to arm and disarm the system. There are 37 access codes available: 1 master code, 32 regular access codes, 2 duress codes and 2 supervision codes. Ask your installer for more information on using the duress and supervision codes.

Only the Master Code can be used to program additional security codes and to change other system features as well as to arm and disarm the security system. The Master Code will be supplied to you by your installer. All keypad entries are made by pressing one key at a time.

All access codes can be programmed by following the procedure outlined in "Programming Security Codes" on page 7.

NOTE: An access code can be a four or six digit number depending on how your installer has programmed your system. Ask your installer for more information regarding access codes.

Arming the System

Arming from an LED Keypad:

If the Ready light is ON, the system is ready for arming. If the Ready light is OFF, check to see that all doors and windows are closed and that motion is stopped in areas covered by motion detectors. The system cannot be armed unless the Ready light is ON indicating that all zones are closed and the system is in the Ready state.

Enter your access code. As each digit is entered, the keypad sounder will beep. If the access code was entered incorrectly, the keypad buzzer will sound steadily for one second. If this occurs, press the [#] key and re-enter your access code. If the correct access code is entered, the keypad sounder will beep quickly and the Armed light will come ON. Exit the premises through the door indicated by your installer as the Exit/Entry door.

The panel will provide an exit delay period, indicated by keypad beeps, for you to exit the premises without causing an alarm. At the end of the exit delay period, all keypad lights, except the Armed light, will turn OFF and the system will be armed. You can restart the exit delay once by pressing the Away button before the exit delay expires. The exit delay time can be changed by your installer.

Arming from an LCD Keypad:

Enter Code to

Arm System

One of the following messages may appear when you attempt to arm your system:

Secure System Before Arming () One or more zones are not secured. To secure the system, close all doors and windows and cease all motion in areas covered by motion detectors.

> Use the arrow (< >) keys to verify that the system is clear of troubles and that no zones are bypassed unintentionally (see "Viewing Trouble Conditions" and "Zone Bypassing" on page 11).

Secure System or Enter Code If you see this message, your installer has set up your system so that it may be armed with one or more designated zones open. Ask your installer for more details.

Enter Code to Arm System The system is in the Ready state and may be fully armed. To arm the system, enter your access code.

Once the correct access code has been entered, the display will be:

4	with a trouble present, your security protection is reduced.		
* WARNING * Bypass Active	If this message appears, be aware of which zones are bypassed and why (see "Zone Bypassing" on page 10). NOTE: If you arm the system with a zone bypassed or		
Enter Code to Disarm System	This message will be displayed once the exit delay expires and the system is fully armed.		
Exit Delay in Progress	The panel will provide an exit delay period, also indicated by keypad beeps, for you to exit the premises without causing an alarm. You can restart the exit delay once by pressing the Away button before the exit delay expires. Exit through the door indicated by your installer as the Exit/Entry door.		

Alternate Arming Methods

Away Arming

Arming the system in the Away mode will have all interior zones and perimeter zones active. If motion is detected in the interior zones, or if one of the perimeter zones is violated, the alarm sequence will begin.

To arm in the Away mode, enter your access code and exit the premises through a designated Exit/ Entry door. The system will recognise that occupants have left the premises. Once the exit delay expires, the system will be fully armed.

You can restart the exit delay once by pressing the Away button before the exit delay expires.

Audible Exit Fault

In an attempt to reduce false alarms, the Audible Exit Fault will to notify you of an improper exit when arming the system in the Away mode. If you do not exit the premises during the exit delay period, or if you do not securely close the Exit/Entry door, the system will notify you that it was improperly armed. It will do this in two ways: the keypad will emit one continuous beep, and the bell or siren will sound. If this occurs, you must re-enter the premises, enter your access code to disarm the system, and then follow the arming procedure again, making sure to exit the premises properly. Your installer will inform you if the Audible Exit Fault feature has been enabled on your system.

Stay Arming

This feature, if enabled by your installer, will allow you to arm the perimeter zones while leaving the interior zones inactive so that you can remain on the premises while the system is armed. When you enter your security code to arm the system, or press the "Stay" button on the keypad, and *do not* exit the premises through a designated Exit/Entry door, the system will arm in the Stay mode, automatically bypassing the interior zones.

The interior zones can be reactivated at any time by entering [+][1] at any keypad. If you reactivate the interior zones, do not go into areas covered by motion detectors. To access areas protected by motion sensors, you must enter your security code and disarm the system.

Arming Without Entry Delay

If you wish to arm your system without the entry delay, enter [*][9] then your access code. The Armed light will flash as a reminder that the system is armed and has no entry delay. An entry through any zone programmed as a delay zone will create an instant alarm.

Quick Arm

When the Quick Arm feature is enabled, you may arm the system by simply pressing $[\star][0]$ instead of your access code. Please note that pressing $[\star][0]$ will only allow you to arm the system; to disarm, you must enter a valid access code. Your installer will inform you if the Quick Arm feature has been enabled on your system.

Quick Exit

When the Quick Exit feature is enabled, pressing $[\star][0]$, or the "Exit" button on the keypad, while the system is armed will provide a two-minute window for you to exit the premises. **During this time, you may only open and close the designated Entry/Exit door once.** Once the door is closed, the panel will end the two-minute quick exit delay. If the door is opened again, or if the door is not closed after two minutes, or if another zone is opened, the panel will begin the entry delay. Your installer will inform you if the Quick Exit feature has been enabled on your system.

Disarming the System

Disarming from an LED Keypad:

Enter the premises through a designated Exit/Entry door. Entering by any other door will sound an immediate alarm. As soon as the Exit/Entry door is opened, the keypad will beep to indicate that the system should be disarmed. Go to the keypad and enter your access code. **If you made an error entering your code, re-enter the code correctly.** As soon as the correct code is entered, the Armed light will go out and the keypad will stop beeping.

The correct access code must be entered before the entry delay period expires. If a valid access code is not entered during this time, the system will go into alarm. Your installer can change the entry time delay.

If an alarm occurred while the system was armed, the Memory light and the zone light corresponding to the zone that caused the alarm will flash for 30 seconds. After the 30-second period, the Memory light and zone light will stop flashing and the panel will return to the Ready state. Pressing the [#] key during the 30 second period will cancel the alarm memory display. To view other alarms, press [*][3].

If a trouble was detected when the panel is disarmed, the Trouble light will turn ON (See "Viewing Trouble Conditions" on page 11 to determine the source of the trouble.) Please note that troubles will not display while the system is in the Alarm Memory Display mode.

Disarming from an LCD Keypad:

Upon entering through a designated Exit/Entry door, the keypad will beep and the entry delay will commence, reminding you to disarm the system. The keypad will display the following message...

Entry Active Enter Your Code Enter Your Code Enter were no alarms while the panel was armed, and there are no troubles, the display will read...

System Disarmed After about five seconds, the system will return to the Ready state and the display will read...

Enter Code to Arm System

Uiew Memory <>> If there was an alarm while the system was armed, this message will be displayed. "Zone of Alarm" Use the arrow (< >) keys to view which zones caused the alarm. If a zone is still in

alarm, the display will show the following message to indicate that a zone is open...

Before Arming<>> Enter Code to Arm System <>

Secure System

Upon disarming and if a trouble is present, this message will be displayed. Use the arrow (< >) keys to view which troubles are affecting the system (see "Viewing Trouble Conditions" on page 11).

NOTE: If you return and find that an alarm has occurred while you were away, it is possible that an intruder may still be on the premises. Go to a neighbour's house, and call the local police to investigate.

The alarm memory is cleared each time the panel is armed. Any alarms showing are alarms that occurred only during the last armed period.

If an Alarm Sounds

Fire Alarm

If your system has been installed with fire detectors and the alarm sounds in a pulsing mode, follow your emergency evacuation plan immediately (see "Fire Escape Planning" on page 15).

Intrusion Alarm

If an intrusion alarm sounds, indicated by a continuous Bell or Siren, the alarm may be silenced by entering your access code. If the alarm was unintentional, call local authorities immediately to avoid an unnecessary response.

You can determine the source of the alarm by following the instructions in the "Disarming" section (see page 6). Once the source of the alarm has been corrected, the panel can be restored to its original Armed state.

NOTE: A fire alarm has priority over a burglary type alarm.

Function Keys

The keypads have five function keys – marked Stay, Away, Chime, Reset and Exit – which allow easy single-button activation of the most commonly used features. *If your installer has enabled these keys*, you can execute their programmed function by pressing and holding the corresponding key for two seconds.

For information regarding the operation of the function keys, talk to your alarm installer.

Programming Security Codes

Programming codes from an LED Keypad:

The Master Code

To program the Master Code, enter $[\star]$ [5][current Master Code][40][new Master Code]. The Master Code must be four digits long, unless otherwise indicated by your installer. Enter digits 0 through 9 only. Press [#] to return to the Ready state.

NOTE: You must program all digits in each access code.

Be sure to record your new Master Code on the "System Information" page in this booklet. **NOTE: We** recommend that the factory default or obvious codes such as [1111] or [1234] not be used.

Additional Codes

Up to 32 additional access codes (01 through 32) may be programmed.

To program a new code:

Enter $[\star][5]$ [Master Code][code number 01 to 32][new access code]. The code number is a double digit from 01 to 32. Access codes must be four digits unless otherwise indicated by your installer. Enter digits 0 through 9 only. Press [#] to return to the Ready state.

If an access code already exists for the code number you have selected, it will be replaced by the new code. Be sure to record your new code(s) on the "System Information" page in this book.

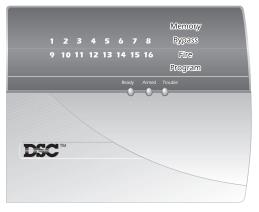
To erase a code:

Enter [*][5][Master Code][code number 01 to 32][*]. Press [#] to return to the Ready state. The Master code cannot be erased.

PC5508Z LED Keypad



PC5516(Z) LED Keypad



Memory Light

Upon disarming, if an alarm has occurred while the system was armed, the Memory light will turn ON (See "Disarming the System" on page 6).

Bypass Light

If the Bypass light is ON, one or more zones are bypassed (See "Zone Bypassing" on page 11).

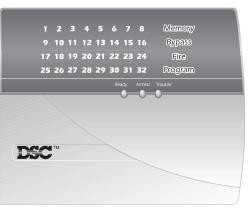
Fire Light

If the Fire light is ON, a fire alarm has occurred (See "Fire Alarm Operation" on page 14).

Program Light

The Program light will flash when you are programming access codes, or performing other programming functions. If someone is programming at another keypad, the Program light will turn ON to indicate that the system is busy.

PC5532(Z) LED Keypad



The **PC5516, PC5516Z, PC5532** and **PC5532Z** Keypads are available for applications with more than 8 zones. The functions explained in this manual are the same for all three LED keypad types.

LCD5500Z Keypad

Enter To Ar	Cod m Sy _{Ready}	e ster	П e	
4 5 6 7 8 9	Stay Away Chime Reset Exit		↓▲▲	
Message Display Security Press to select function. Press to Exit / Return. Indicates more information i available. Press either key t Press to advance display to next function or message. Press to see previous functii The set of the set o	s o view. the	TES	Refer te Manua	DESC M WEEKLY to Instruction al for testing instructions.

Display Lights (All Keypads)

Ready Light

If the Ready light is ON, the system is ready for arming. The system cannot be armed unless the Ready light is ON (see "Arming the System" on page 4).

Armed Light

If the Armed light is ON, the system has been armed successfully.

Trouble or System Light

If the Trouble light is ON, see "Viewing Trouble Conditions" on page 11.

The **Liquid Crystal Display** (LCD) displays prompts and system information on two 16 character lines.

If "< >" appears, more information can be accessed by using the arrow (< >) keys. Press [<] to see the previous function or item of information. Press [>] to advance the display to next function or item of information.

Press the keys on the number pad as prompted by the LCD display to view alarms or troubles, to arm and disarm the system and to bypass zones.

To exit a function and return to the Ready state, press [#].

To select a function press $[\star]$.

Emergency Keys (All Keypads)

Press both ***** Keys for two seconds to send a FIRE transmission.

Press both \triangle^* Keys for two seconds to send an AUXILIARY transmission.

Press both ***** Keys for two seconds to send a PANIC transmission.

* IMPORTANT NOTE (All Keypads): The Fire, Auxiliary and Panic keys will NOT function unless programmed by the installer. If these keys are in service and the installer has enabled audible feedback, holding down the key for two seconds will cause the keypad sounder to beep indicating that the input has been accepted and transmission is underway.

Important Note: Test system weekly and have any system trouble conditions corrected by your alarm installer.

Programming codes from an LCD Keypad: Master Code

Press the $[\star]$ key to enter the function list. Scroll (< >) to...

Press (*) for <> Access Codes	Press [5] or [★]. The display will read
Enter Master Access Code	Enter your current Master Code. The display will read
	"40P" represents the Master Code. Press the [*] key to indicate that you wish to program the Master Code. The display will read
Enter New Code 1234 〈〉	Enter the new Master Code. The Master Code must be four digits long, unless otherwise indicated by your installer. Enter digits 0 through 9 only. Once the new code is entered, the keypad will beep 3 times and the display will read
(*) to Edit <> User Code 40P	Press [#] to exit the code programming function.

Be sure to record your new Master Code on the "System Information" page in this booklet. **NOTE: We recommend that the factory default Master Code [1234] not be used.**

Additional Access Codes

To erase, add or change a user code, press [*] to enter the function list. Use the arrow (< >) keys to scroll to the following message...

Press (*) for <> Access Codes	Press [*]. Display will read
Enter Master Access Code	Enter the Master Code. Display will read
[*] to Edit <> User Code 01P	Use the scroll keys (< >) to find the access code – indicated by "02P" to "32P" – you wish to add, change or delete. Press the [*] key to select the code you wish to change. The display will read
Enter New Code 1234 <>	To add or change a code, enter the new code. Access codes must be four digits unless otherwise indicated by your installer. Enter digits 0 through 9 only. To delete an access code, enter $[\star]$. Once the 4-digit code or $[\star]$ has been entered, the keypad sounder will beep 3 times and the display will read
[*] to Edit <> User Code 01P	The "P" means the code has been programmed. If there is no "P" then that code is deleted. Press [#] to exit the code programming function. The Master code cannot be erased.

Remember to record your new code(s) on the "System Information" page in this booklet.

Access Code Attributes

Additional programmable attributes, such as zone bypassing capability, can be activated or deactivated for each access code. For more information regarding access code attributes, please contact your installer.

Zone Bypassing

The zone bypassing function is used when access is needed to part of the protected area while the system is armed. Zones that are temporarily out of service due to damaged wiring or contacts may be bypassed to allow system arming until repairs can be made.

Bypassed zones will not cause an alarm. Zones cannot be bypassed once the system is armed. Bypassed zones are automatically cancelled each time the system is disarmed and must be reapplied before the next arming.

NOTE: For security reasons, your installer may program the system to prevent you from bypassing certain zones.

Bypassing zones reduces your security protection. If you are bypassing a zone due to damaged wiring or contacts, please call a service technician immediately so that the problem can be resolved and your system returned to proper working order.

Make sure that no zones are unintentionally bypassed when arming your system.

To bypass zones from an LED keypad:

Start with the system in the Ready state. Enter $[\star][1][Zone(s)$ to be bypassed].

Enter the zone(s) as a 2-digit number from 01 to 08. As each zone is bypassed, the corresponding zone light will turn ON. If a zone is bypassed by mistake, enter that zone number again; the zone light will turn OFF, indicating that the zone is not bypassed. Press [#] to return to the Ready state.

To bypass zones from an LCD keypad:

To bypass a zone, the system must be in the Ready state. The display will read...

Enter Code to Arm System	Press the [+] key to enter the function menu. The display will read
Press (*) for<> Zone Bypass	Press the $[\star]$ key to enter the zone bypassing mode. The display will read
Zone Search <> "Zone Name"	Use the arrow (< >) keys to find the zone to be bypassed and press the $[*]$ key to select it. The display will read
Zone Search 〈〉 "Zone Name" B	"B" will appear on the display to show that the zone is bypassed. To unbypass a zone, enter the zone number; the "B" will disappear from the display to show that the zone is no longer bypassed.
Zone Search <> "Zone Name" 0	This display will be shown if a zone was open when you entered the bypassing command. The open zone will be represented by "O". If you bypass the open zone, a "B" will replace the "O".

To exit the bypassing mode and return to the Ready state, press the [#] key.

Viewing Trouble Conditions

The control panel continuously monitors a number of possible trouble conditions. If one of these trouble conditions occur, the keypad will beep twice every 10 seconds until you press any key on the keypad.

NOTE: A TROUBLE condition reduces the security your system is designed to provide. Call your installing company for service.

To view troubles from an LED Keypad:

A trouble will be indicated by the Trouble light, which will remain ON until the trouble condition is cleared. If you cannot determine the cause of the trouble condition, contact your installer for assistance.

To view the type of trouble condition, press $[\star][2]$. One or more zone lights will turn ON, indicating the various trouble conditions:

ZONE LIGHT TYPE OF TROUBLE

- 1 Service required. Call your installation company for service.
- 2 Indicates the loss of AC power. When this trouble occurs, the Trouble light will turn ON but keypad buzzer will not sound.
- 3 Telephone line trouble.
- 4 The panel has failed to communicate with the central station.
- 5Zone fault. Press [5] and the zone light(s) corresponding to the faulted zones will turn ON.
- 6Zone tamper. Press [6] and the zone light(s) corresponding to the tampered zones will turn ON.
- 7 Low zone battery. This trouble is generated when a wireless device exhibits a low battery condition.

Press [7] one, two, or three times to view which devices are experiencing battery failure. The following will occur:

Keypad beeps: Keypad displays:

	Press [7]	1	Zones with low batteries (LED keypad - zone lights 1 to 8)
	Press [7] again	2	Handheld keypads with low batteries (LED keypad - zone lights 1 to 4)
	Press [7] again	3	Wireless keys with low batteries (LED keypad - zone lights 1 to 8). To view the battery conditions of wireless keys 9 through 16, you must be at an LCD keypad.
R	Loss of time	on evetam	clock. To set the system time, follow the instructions in

 Loss of time on system clock. To set the system time, follow the instructions in "Setting System Date and Time" on page 12.

To view troubles from an LCD Keypad:

From the Ready state, use the arrow (< >) keys to scroll to the following message.

System Trouble Press [*] [2] key to view the trouble. The message will read...

Use the arrow (< >) keys to view which troubles are present on the system. Once you "Trouble "have scrolled through the list of troubles, press the [#] key to exit the Trouble Viewing mode and return to the Ready state.

Setting the System Date and Time

To set the system time, enter [*] [6] followed by the Master Code. Press [1]. The keypad will now accept 10 consecutive digits:

- Enter the Time in Hours and Minutes using the 24-Hour format (00:00 to 23:59).
- Enter the Date in Months, Days and Years (MM DD YY).

NOTE: If you have an LCD keypad, your installer may have programmed your system to display the time and date while the keypad is idle. If this is the case, you may have to press the [#] key to clear the date and time before entering an access code to arm the system, or before performing any other keypad function.

Testing Your System

Alarm Test

The Alarm Test provides two-second tests of the keypad sounder and bell or siren. Begin with the panel in the Ready state.

From an LED keypad, Enter [*][6][Master Code][4] then press [#] to return to the Ready state.

From an LCD keypad, press [*] to enter the function list. Use the arrow (< >) keys to scroll to find "User Functions" and press [*] to select. Enter your Master Code and scroll to find the following message...

 $_{\rm Select \ Option} \Leftrightarrow$ Press $[\star]$ to perform an Alarm Test. The keypad will display the following message... System Test

System Test Press [#] to return to the Ready state. In Progress

Full System Test

We recommend that you test your system weekly. Should the system fail to function properly, call your installation company immediately for service.

NOTE: Perform system tests during off-peak hours, such as early morning or late evening.

- 1. Inform the monitoring station that you are testing your system.
- 2. Begin with the system in the Ready state.
- 3. Perform a Bell/Battery test by pressing [★][6][Master Code][4]. The bell and keypad buzzer will sound for two seconds and all keypad lights will turn ON. Press [#] to exit.
- 4. Activate each sensor in turn (e.g. open a door/window or walk in motion detector areas). From an LED keypad, observe the zone light turn ON when the zone is activated. The zone light will turn OFF when the system restores to normal (i.e. door or window closed).

From an LCD keypad, the following message will be displayed when each zone is activated...

Secure System Use the arrow (< >) keys to view which zone is open. This message will disappear Before $\text{Arming} \Leftrightarrow$ when the zone is restored.

5. If the panel has any fire zones, activation will cause the alarm signal to sound in a pulsed mode.

CAUTION: Do not use an open flame or burning materials to test a smoke or heat detector. Contact your installer for information on safe methods of testing detectors.

6. When testing is complete, call and advise the monitoring station. Should the system fail to function properly, contact your installer.

NOTE: Some features described above will not be functional unless enabled by your installer. Please ensure that your installer has advised you which features are functional on your system.

Door Chime Feature

The door chime feature is used to provide a tone from the keypad each time a door or window is opened or closed. Your installer will program which doors and windows will activate the door chime.

To activate the door chime from an LED Keypad:

Enter $[\star]$ [4] to turn the door chime feature ON and OFF. When the command is entered, the keypad buzzer will beep 3 times if the door chime feature is enabled and will sound one long beep if it is disabled.

To activate the door chime from an LCD Keypad:

Press [★] to enter the function list, then scroll to find...

 $\begin{array}{|c|c|c|} \hline Press (*) & For(*) \\ \hline Door & Chime \end{array} \begin{array}{|c|} Press [\texttt{+}] & or [\texttt{4}] & to enable & or disable & the Door & Chime & feature. \\ \hline Press (*) & For(*) \\ \hline Ready & state. \end{array}$

Fire Alarm Operation

Alarm

During a fire alarm, the bell or siren will pulse ON and OFF. The transmission of the alarm to the monitoring station is delayed for 30 seconds. If the alarm is not cleared within the 30-second delay, it will be transmitted to the monitoring station.

Silence

To silence the bell or siren, press the [#] key. If the alarm is silenced and the smoke detector is not reset, the alarm will resound after 90 seconds.

Resetting Smoke Detectors

Once the smoke detector is reset, if it still detects smoke, the alarm sequence will resound as described above. If there is no smoke, the system will return to normal.

To reset smoke detectors from an LED Keypad:

Press [★][7][2].

To reset smoke detectors from an LCD Keypad:

Press [★] to enter the function list. Scroll to find:

Press (*) For <> Press [*] to select the output control. The display will read...

Select Output \Leftrightarrow Command Output #1 Use the arrow (< >) keys to find the following message and press the [*] key to select...

```
Select Output <>
Command Output #2
```

NOTE: If you suspect that a fire alarm has transmitted and that there is no fire condition, call the monitoring station to avoid an unnecessary response. If a fire condition is apparent, follow your evacuation plan immediately. If the alarm sounds at night, evacuate immediately.

NOTE: The description above may not be applicable depending on how your installer has programmed the fire alarm operations on your system. Ask your installer for more information regarding your system's operation.

Household Fire Safety Audit

Most fires occur in the home. To minimize this danger, we recommend that a household fire safety audit is conducted and a fire escape plan is developed.

- 1. Are all electrical appliances and outlets in a safe condition? Check for frayed cords, overloaded lighting circuits, etc. If you are uncertain about the condition of your electrical appliances or household service, have a professional evaluate these units.
- 2. Are all flammable liquids stored safely in closed containers in a well-ventilated cool area? Cleaning with flammable liquids should be avoided.
- 3. Are fire hazardous materials (matches) well out of reach of children?
- 4. Are furnaces and wood burning appliances properly installed, clean and in good working order? Have a professional evaluate these appliances.

Fire Escape Planning

There is often very little time between the detection of a fire and the time it becomes deadly. It is thus very important that a family escape plan be developed and rehearsed.

- 1. Every family member should participate in developing the escape plan.
- 2. Study the possible escape routes from each location within the house. Since many fires occur at night, special attention should be given to the escape routes from sleeping quarters.
- 3. Escape from a bedroom must be possible without opening the interior door.

Consider the following when making your escape plans:

- Make sure that all perimeter doors and windows are easily opened. Ensure that they are not painted shut, and that their locking mechanisms operate smoothly.
- If opening or using the exit is too difficult for children, the elderly or handicapped, plans for rescue should be developed. This includes making sure that those who are to perform the rescue can promptly hear the fire warning signal.
- If the exit is above the ground level, an approved fire ladder or rope should be provided as well as training in its use.
- Exits on the ground level should be kept clear. Be sure to remove snow from exterior patio doors in winter; outdoor furniture or equipment should not block exits.
- Each person should know of a predetermined assembly point where everyone could be accounted for i.e.: across the street or at a neighbour's house. Once everyone is out of the building, call the Fire Department.
- A good plan emphasizes quick escape. Do not investigate or attempt to fight the fire, and do not gather belongings or pets as this wastes valuable time. Once outside, do not re-enter the house. Wait for the fire department.
- Write the fire escape plan down and rehearse it frequently so that should an emergency arise, everyone will know what to do. Revise the plan as conditions change, such as the number of people in the home, or if there are changes to the building's construction.
- Make sure your fire warning system is operational by conducting weekly tests (see "Testing Your System" on page 13). If you are unsure about system operation, contact your installing dealer.
- We recommend that you contact your local fire department and request further information on fire safety and escape planning. If available, have your local fire prevention officer conduct an inhouse fire safety inspection.

Maintenance

With normal use, the system requires minimum maintenance. The following points should be observed.

- 1. Do not wash the security station with a wet cloth. Light dusting with a slightly moistened cloth should remove normal accumulations of dust.
- 2. The battery/bell test is designed to determine battery condition. We recommended, however, that the stand-by batteries be replaced every three years.
- 3. For other system devices such as smoke detectors, passive infrared, ultrasonic or microwave motion detectors or glassbreak detectors, consult the respective manufacturer's literature for testing and maintenance.

FCC COMPLIANCE STATEMENT

CAUTION: Changes or modifications not expressly approved by Digital Security Controls Ltd. could void your authority to use this equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Re-orient the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

 Consult the dealer or an experienced radio/television technician for help. The user may find the following booklet prepared by the FCC useful: "How to Identify and Resolve Radio/Television Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington D.C. 20402, Stock # 004-000-00345-4.

IMPORTANT INFORMATION

This equipment complies with Part 68 of the FCC Rules. On the side of this equipment is a label that contains, among other information, the FCC registration number of this equipment.

NOTIFICATION TO TELEPHONE COMPANY The customer shall notify the telephone company of the particular line to which the connection will be made, and provide the FCC registration number and the ringer equivalence of the protective circuit.

FCC Registration Number:	F53CAN-32028-AL-E
Facility Interface Code:	02LS2
Ringer Equivalence Number:	0.1B
Service Order Code:	9.0F
USOC Jack:	RJ31X

TELEPHONE CONNECTION REQUIREMENTS Except for the telephone company provided ringers, all connections to the telephone network shall be

made through standard plugs and telephone company provided jacks, or equivalent, in such a manner as to allow for easy, immediate disconnection of the terminal equipment. Standard jacks shall be so arranged that, if the plug connected thereto is withdrawn, no interference to the operation of the equipment at the customer's premises which remains connected to the telephone network shall occur by reason of such withdrawal.

INCIDENCE OF HARM Should terminal equipment or protective circuitry cause harm to the telephone network, the telephone company shall, where practicable, notify the customer that temporary disconnection of service may be required; however, where prior notice is not practicable, the telephone company may temporarily discontinue service if such action is deemed reasonable in the circumstances. In the case of such temporary discontinuance, the telephone company shall promptly notify the customer and will be given the opportunity to correct the situation.

ADDITIONAL TELEPHONE COMPANY INFORMATION The security control panel must be properly connected to the telephone line with a USOC RJ-31X telephone jack.

The FCC prohibits customer-provided terminal equipment be connected to party lines or to be used in conjunction with coin telephone service. Interconnect rules may vary from state to state.

CHANGES IN TELEPHONE COMPANY EQUIPMENT OR FACILITIES The telephone company may make changes in its communications facilities, equipment, operations or procedures, where such actions are reasonably required and proper in its business. Should any such changes render the customer's terminal equipment incompatible with the telephone company facilities the customer shall be given adequate notice to the effect modifications to maintain uninterrupted service.

RINGER EQUIVALENCE NUMBER (REN) The REN is useful to determine the quantity of devices that you may connect to your telephone line and still have all of those devices ring when your telephone number is called. In most, but not all areas, the sum of the RENs of all devices connected to one line should not exceed five (5.0). To be certain of the number of devices that you may connect to your line, you may want to contact your local telephone company.

EQUIPMENT MAINTENANCE FACILITY If you experience trouble with this telephone equipment, please contact the facility indicated below for information on obtaining service or repairs. The telephone company may ask that you disconnect this equipment from the network until the problem has been corrected or until you are sure that the equipment is not malfunctioning. Digital Security Controls Ltd. 160 Washburn St., Lockport, NY 14094

LIMITED WARRANTY

Digital Security Controls Ltd. warrants the original purchaser that for a period of twelve months from the date of purchase, the product shall be free of defects in materials and workmanship under normal use. During the warranty period, Digital Security Controls Ltd. shall, at its option, repair or replace any defective product upon return of the product to its factory, at no charge for labour and materials. Any replacement and/or repaired parts are warranted for the remainder of the original warranty or ninety (90) days, whichever is longer. The original owner must promptly notify Digital Security Controls Ltd. in writing that there is defect in material or workmanship, such written notice to be received in all events prior to expiration of the warranty period.

International Warranty

The warranty for international customers is the same as for any customer within Canada and the United States, with the exception that Digital Security Controls Ltd. shall not be responsible for any customs fees, taxes, or VAT that may be due.

Warranty Procedure

To obtain service under this warranty, please return the item(s) in question to the point of purchase. All authorized distributors and dealers have a warranty program. Anyone returning goods to Digital Security Controls Ltd. must first obtain an authorization number. Digital Security Controls Ltd. will not accept any shipment whatsoever for which prior authorization has not been obtained.

Conditions to Void Warranty

This warranty applies only to defects in parts and workmanship relating to normal use. It does not cover:

- · damage incurred in shipping or handling;
- damage caused by disaster such as fire, flood, wind, earthquake or lightning;
- damage due to causes beyond the control of Digital Security Controls Ltd. such as excessive voltage, mechanical shock or water damage;
- damage caused by unauthorized attachment, alterations, modifications or foreign objects;
- damage caused by peripherals (unless such peripherals were supplied by Digital Security Controls Ltd.);
- defects caused by failure to provide a suitable installation environment for the products;
- damage caused by use of the products for purposes other than those for which it was designed;
- damage from improper maintenance;
- damage arising out of any other abuse, mishandling or improper application of the products.

Digital Security Controls Ltd.'s liability for failure to repair the product under this warranty after a reasonable number of attempts will be limited to a replacement of the product, as the exclusive remedy for breach of warranty. Under no circumstances shall Digital Security Controls Ltd. be liable for any special, incidental, or consequential damages based upon breach of warranty, breach of contract, negligence, strict liability, or any other legal theory. Such damages include, but are not limited to, loss of profits, loss of the product or any associated equipment, cost of capital, cost of substitute or replacement equipment, facilities or services, down time, purchaser's time, the claims of third parties, including customers, and injury to property.

Disclaimer of Warranties

This warranty contains the entire warranty and shall be in lieu of any and all other warranties, whether expressed or implied (including all implied warranties of merchantability or fitness for a particular purpose) And of all other obligations or liabilities on the part of Digital Security Controls Ltd. Digital Security Controls Ltd. neither assumes nor authorizes any other person purporting to act on its behalf to modify or to change this warranty, nor to assume for it any other warranty or liability concerning this product.

This disclaimer of warranties and limited warranty are governed by the laws of the province of Ontario, Canada.

WARNING: Digital Security Controls Ltd. recommends that the entire system be completely tested on a regular basis. However, despite frequent testing, and due to, but not limited to, criminal tampering or electrical disruption, it is possible for this product to fail to perform as expected.

Out of Warranty Repairs

Digital Security Controls Ltd. will at its option repair or replace outof-warranty products which are returned to its factory according to the following conditions. Anyone returning goods to Digital Security Controls Ltd. must first obtain an authorization number. Digital Security Controls Ltd. will not accept any shipment whatsoever for which prior authorization has not been obtained.

Products which Digital Security Controls Ltd. determines to be repairable will be repaired and returned. A set fee which Digital Security Controls Ltd. has predetermined and which may be revised from time to time, will be charged for each unit repaired.

Products which Digital Security Controls Ltd. determines not to be repairable will be replaced by the nearest equivalent product available at that time. The current market price of the replacement product will be charged for each replacement unit.



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