

WARNING: 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.

PC1616/PC1832/PC1864 User Manual

DSC®
PowerSeries™

S E C U R I T Y S Y S T E M

FCC COMPLIANCE STATEMENT

CAUTION: Changes or modifications not expressly approved by Digital Security Controls 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.

The keypads represented in this manual can be used with the following Control Units: PC580, PC1555MX, PC1616, PC1832, PC1864, PC5010, PC5015 or the PC5020.

IMPORTANT INFORMATION

This equipment complies with Part 68 of the FCC Rules and, if the product was approved July 23, 2001 or later, the requirements adopted by the ACTA. On the side of this equipment is a label that contains, among other information, a product identifier. If requested, this number must be provided to the Telephone Company.

PC1616 Product Identifier	US: F53AL01BPC1614
PC1832 Product Identifier	US: F53AL01BPC1832
PC1864 Product Identifier	US: F53AL01BPC1864
PC580 Product identifier	F53CAN-32394-AL-E; REN=0.0B
PC1555MX Product identifier	F53CAN-32028-AL-E; REN=0.1B
PC5010 FCC Registration#	F53CAN-22839-AL-E; REN=0.1B
PC5015 FCC Registration#	F53CAN-32104-AL-E; REN=0.6B
PC5020 FCC Registration#	F53CAN-34330-AL-E; REN=0.1B

USOC Jack: RJ-31X

Telephone Connection Requirements

A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. See installation instructions for details.

Ringer Equivalence Number (REN)

The REN is used to determine the number of devices that may be connected to a telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas, the sum of RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local Telephone Company. For products approved after July 23, 2001, the REN for this product is part of the product identifier that has the format US: AAAEQ##TXXXX. The digits represented by ## are the REN without a decimal point (e.g., 03 is a REN of 0.3). For earlier products, the REN is separately shown on the label.

Incidence of Harm

If this equipment (PC580, PC1555MX, PC1616, PC1832, PC1864, PC5010, PC5015, or PC5020) causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice is not practical, the Telephone Company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

This product is in conformity with EMC Directive 89/336/EEC based on results using harmonized standards in accordance with article 10(5), R&TTE Directive 1999/5/EC based on following Annex III of the directive and LVD Directive 73/23/EEC as amended by 93/68/EEC based on results using harmonized standards.

IC STATEMENT

This product meets the applicable Industry Canada technical specifications. The Ringer Equivalence Number is an indication of the maximum number of devices allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the RENs of all the devices does not exceed five. The Ringer Equivalence Number (REN) for PC580, PC1555MX, PC1616, PC1832, PC1864, PC5010, PC5015 and the PC5020 is 0.1.

Changes in Telephone Company Equipment or Facilities

The Telephone Company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens the Telephone Company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.

Equipment Maintenance Facility

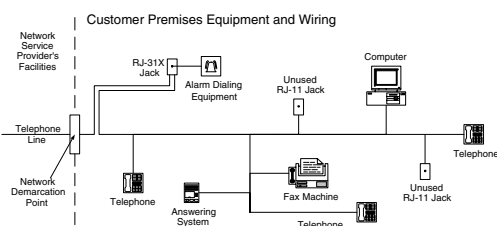
If trouble is experienced with this equipment (PC580, PC1555MX, PC1616, PC1832, PC1864, PC5010, PC5015 or the PC5020), for repair or warranty information, contact the facility indicated below. If the equipment is causing harm to the telephone network, the Telephone Company may request that you disconnect the equipment until the problem is solved. This equipment is of a type that is not intended to be repaired by the end user.

DSC c/o APL Logistics 757 Douglas Hill Rd, Lithia Springs, GA 30122

Additional Information

Connection to party line service is subject to state tariffs. Contact the state public utility commission, public service commission or corporation commission for information.

Alarm dialing equipment must be able to seize the telephone line and place a call in an emergency situation. It must be able to do this even if other equipment (telephone, answering system, computer modem, etc.) already has the telephone line in use. To do so, alarm dialing equipment must be connected to a properly installed RJ-31X jack that is electrically in series with and ahead of all other equipment attached to the same telephone line. Proper installation is depicted in the figure below. If you have any questions concerning these instructions, you should consult your telephone company or a qualified installer about installing the RJ-31X jack and alarm dialing equipment for you.



DSC erklærer herved at denne komponenten overholder alle vigtige krav samt andre bestemmelser givet i direktiv 1999/5/EC.

Por este meio, a DSC, declara que este equipamento está em conformidade com os requisitos essenciais e outras determinações relevantes da Directiva 1999/5/EC.

DSC bekräftar härmed att denna apparat uppfyller de väsentliga kraven och andra relevanta bestämmelser i Direktivet 1999/5/EC.

Con la presente la Digital Security Controls dichiara che questo prodotto è conforme ai requisiti essenziali ed altre disposizioni rilevanti relative alla Direttiva 1999/05/CE.

Por la presente, DSC declara que este equipo está en conformidad con los requisitos esenciales y otros requisitos relevantes de la Directiva 1999/5/EC.

Hierdurch erklärt DSC, daß dieses Gerät den erforderlichen Bedingungen und Voraussetzungen der Richtlinie 1999/5/EC entspricht.

Αίσ των αυτών, η DSC, δηλώνει ότι αυτή η συσκευή είναι σύμφωνη με τις ουσιαστικές απαιτήσεις και με άλλες της άλλες σχετικές αναφορές της Οδηγίας 1999/5/EC.

Hierbij verklaart DSC dat dit toestel in overeenstemming is met de eisen en bepalingen van richtlijn 1999/5/EC.

Par la présente, DSC déclare que cet article est conforme aux exigences essentielles et autres relevantes stipulations de la directive 1999/5/EC.

DSC vakuuttaa laitteiden täyttävän direktiivin 1999/5/EC olennaiset vaatimukset.

Hereby, DSC, declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

The complete R & TTE Declaration of Conformity can be found at www.dsc.com/intl/rtdirect.htm.



This product meets the requirements of Class II, Grade 2 equipment as per EN 50131-1:2004 Standard. This product is suitable for use in systems with the following notification options:

- A (use of two warning devices and internal dialer required),
- B (self powered warning device and internal dialer required),
- D (use of DSC model T-Link TL250 encrypted Ethernet communicator required).

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada. L'indice d'équivalence de la sonnerie (IES) assigné à chaque dispositif terminal indique le nombre maximal de terminaux qui peuvent être raccordés à une interface téléphonique. La terminaison d'une interface peut consister en une combinaison quelconque de dispositifs, à la seule condition que la somme d'indices d'équivalence de la sonnerie de tous les dispositifs n'excède pas 5. L'indice d'équivalence de la sonnerie (IES) du PC580, PC1555MX, PC1616, PC1832, PC1864, PC5010, PC5015 e PC5020 est de 0.1.

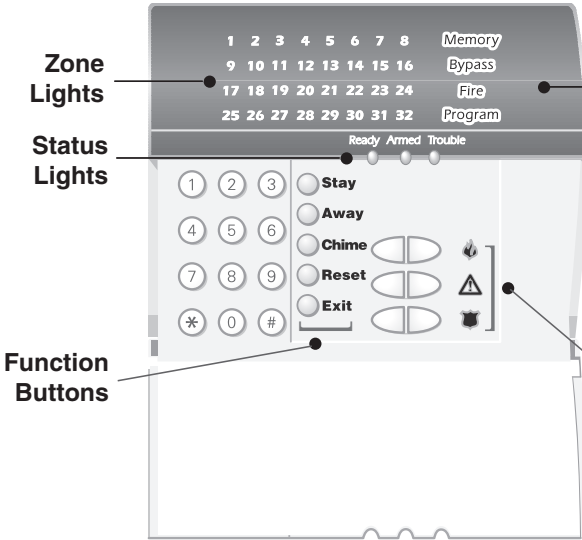
Table of Contents

PowerSeries System Keypads	1
PC5532Z	1
.....	2
Keypad Display Symbols	3
Reference Sheets	4
Access Codes	4
System Information	4
Sensor / Zone Information	5
About Your Security System	6
Fire Detection	6
Testing	6
Monitoring	6
Maintenance	6
General System Operation	6
PK5500 Language Selection	7
Arming & Disarming the System	7
Arming (Turning On/Setting)	7
Away Arming (Turned On/Set)	7
Quick Exit	7
Bell/Siren Sounds After Away Arming	7
Disarming (Turning Off /Unsetting)	8
Stay Arming (Partially Turning On / Part Setting)	8
Re-activate bypassed zones	8
Silent Exit Delay	8
Remote Arming and Disarming	8
Emergency Keys	8
When Alarm Sounds	9
Intrusion (Burglar) Alarm Continuous Siren	9
Fire Alarm Pulsed Siren	9
Time & Date Programming	9
Bypassing Zones	9
Trouble Conditions	11
Trouble Menu Acknowledgement	11
Alarm Memory	11
Door Chime (Entry/Exit Beeps)	11
Access Code Programming	11
Access Codes	12
User Code Attributes	12
Bell Squawk Attribute	13
Partition Assignment Mask	13

Erasing an Access Code	13
User Function Commands	13
Changing LCD Display Brightness/Contrast.	15
Changing the Buzzer Level	15
Label Programming	15
Viewing the Event Buffer from an LCD Keypad	16
PK5500 Global Status Screen	16
Sensor Reset	16
Testing Your System	17
Testing Your Keypad Sounder and Siren	17
Testing Your Entire System	17
Walk Test Mode	17
Allowing Computer Access To Your System	17
Guidelines for Locating Smoke Detectors	18
Household Fire Safety Audit	19
Fire Escape Planning	19

PowerSeries System Keypads

PC5532Z



Function
Lights

PC5508Z

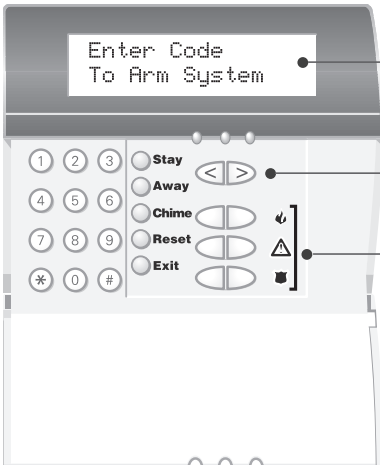
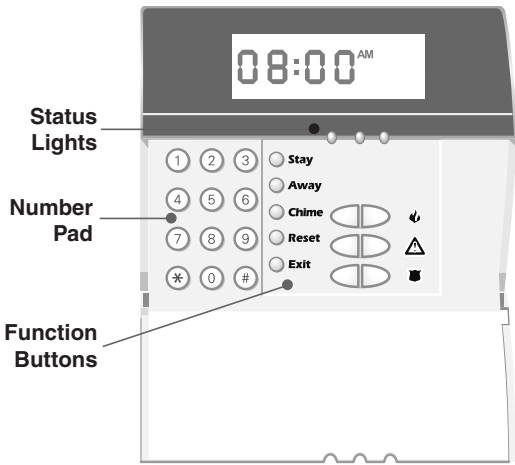
PC5516Z

Emergency
Keys

Your installer may have installed one of these LED keypads if you have 16 or fewer zones on your system. These keypads operate in the same way as the PC5532 keypad.

LCD5501Z

LCD5500Z

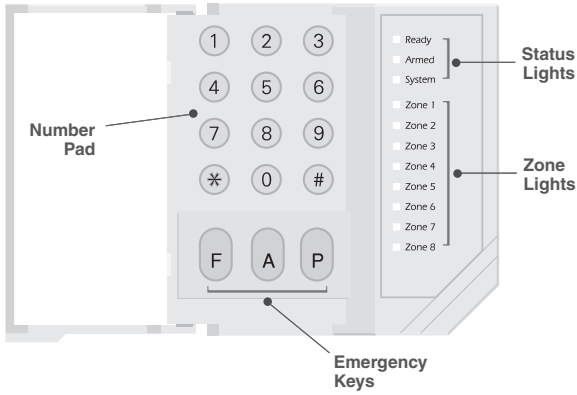


Liquid
Crystal
Display (LCD)

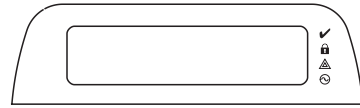
Arrow
(Scroll)
Keys

Emergency
Keys

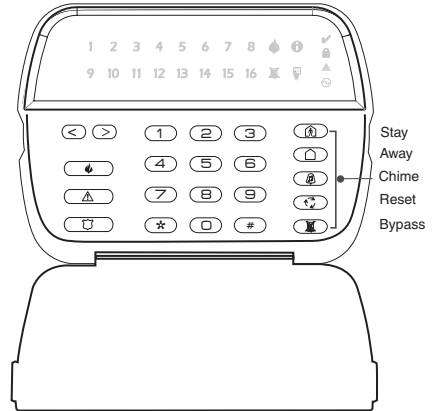
PC1555RKZ



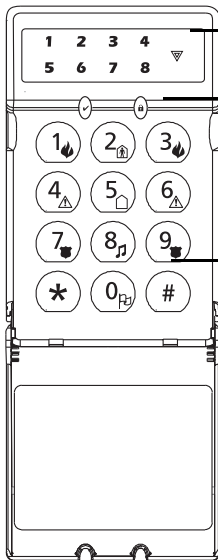
PK5500/PK5501



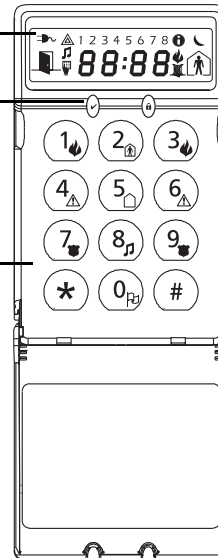
PK5508/PK5516 (shown)



LED5511



LCD5511



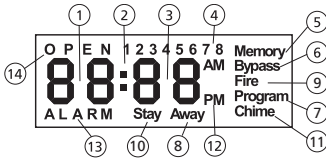
Display

System
Lights

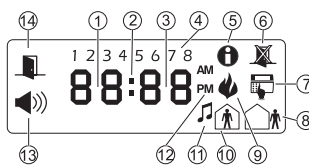
Number
Pad

Keypad Display Symbols

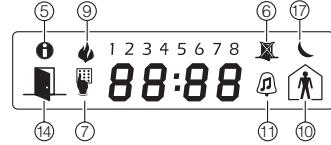
LCD5501 Fixed Message



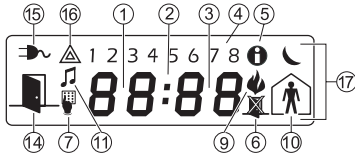
LCD5501 ICON



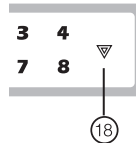
PK5501



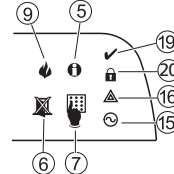
LCD5511



LED5511



PK5508/PK5516



- 1 **Clock Digits 1, 2** – These two 7 segment clock digits indicate the hour digits when the local clock is active, and identify the zone when the OPEN or ALARM icons are active. These two digits scroll one zone per second from the lowest zone number to the highest when scrolling through zones.
- 2 **: (Colon)** – This icon is the hours/minutes divider and will flash once a second when the local clock is active.
- 3 **Clock Digits 3, 4** – These two 7 segment displays are the minute digits when the local clock is active.
- 4 **1 to 8** – These numbers identify troubles when [*][2] is pressed.
- 5 **Memory** – Indicates that there are alarms in memory.
- 6 **Bypass** – Indicates that there are zones automatically or manually bypassed.
- 7 **Program** – indicates that the system is in Installer's Programming, or the keypad is busy.
- 8 **Away** – Indicates that the panel is armed in the Away Mode. It will turn on at the beginning of the Exit Delay.
- 9 **Fire** – Indicates that there are fire alarms in memory.
- 10 **Stay** – Indicates that the panel is armed in the Stay Mode. It will turn on at the beginning of the Exit Delay.
- 11 **Chime** – This icon turns on when the Chime function key is pressed to enable Door Chime on the system. It will turn off when the chime function key is pressed again to disable Door Chime.
- 12 **AM, PM** – This icon indicates that the local clock is displaying 12 Hr. time. These icons will not be on if the system is programmed for 24 Hr. time.
- 13 **ALARM** – This icon is used with clock digits 1 and 2 to indicate zones in alarm on the system. When a zone is in alarm, the ALARM icon will turn on, and 7 segment displays 1 and 2 will scroll through the zones in alarm.
- 14 **OPEN** – This icon is used with clock digits 1 and 2 to indicate violated zones (not alarm) on the system. When zones are opened, the OPEN icon will turn on, and 7 segment displays 1 and 2 will scroll through the violated zones.
- 15 **AC** – Indicates that AC is present at the main panel.
- 16 **System Trouble** – Indicates that a system trouble is active.
- 17 **Night** – Indicates that the panel is armed in the Night Mode.
- 18 **System** - Indicates one or more of the following:
 - Memory** – Indicates that there are alarms in memory.
 - Bypass** – Indicates that there are zones automatically or manually bypassed.
 - System Trouble** – This icon is displayed when a system trouble is active.
- 19 **Ready Light (green)** – If the Ready light is on, the system is ready for arming.
- 20 **Armed Light (red)** – If the Armed light is on, the system has been armed successfully.

Reference Sheets

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

Access Codes

Master Code [40] : _____

Code	Access Code	Code	Access Code	Code	Access Code	Code	Access Code
01		10		19		28	
02		11		20		29	
03		12		21		30	
04		13		22		31	
05		14		23		32	
06		15		24		33 (Duress)	
07		16		25		34 (Duress)	
08		17		26			
09		18		27			

System Information

Enabled?



[F] FIRE



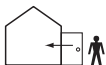
[A] AUXILIARY



[P] PANIC



The Exit Delay Time is _____ seconds.



The Entry Delay Time is _____ seconds.

For Service

Central Station Information:

Account#: _____ Telephone#: _____

Installer Information :

Company: _____ Telephone#: _____



If you suspect a false alarm signal has been sent to the central monitoring station, call the station to avoid an unnecessary response.

Sensor / Zone Information

Sensor	Protected Area	Sensor Type	Sensor	Protected Area	Sensor Type
01			33		
02			34		
03			35		
04			36		
05			37		
06			38		
07			39		
08			40		
09			41		
10			42		
11			43		
12			44		
13			45		
14			46		
15			47		
16			48		
17			49		
18			50		
19			51		
20			52		
21			53		
22			54		
23			55		
24			56		
25			57		
26			58		
27			59		
28			60		
29			61		
30			62		
31			63		
32			64		

About Your Security System

Your DSC Security System 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.

NOTE: The PowerSeries security system includes specific false alarm reduction features and is classified with ANSI /SIA CP-01-2000. To comply with this specification, your installation must have a minimum of two keypads. Please consult your installer for further information regarding the false alarm reduction features built into your system as all are not covered in this manual.

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 NFPA 72 (N.F.P.A., Batterymarch Park, Quincy 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 becomes functional.

Testing

To insure that your system continues to function as intended, you must test your system weekly. Please refer to the "Testing your System" section in this manual. If your system does not function properly, call your installing company for service.

Monitoring

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

NOTE: The monitoring function must be enabled by the installer before it becomes functional.

SIA NOTE: There is a communicator delay of 30 seconds in this control panel. It can be removed, or it can be increased up to 45 seconds, at the option of the end-user by consulting with the installer.

Maintenance

With normal use, the system requires minimum maintenance. Note the following points:

- Do not wash the security equipment with a wet cloth. Light dusting with a slightly moistened cloth should remove normal accumulations of dust.
- Use the system test described in "Testing Your System" to check the battery condition. We recommend, however, that the standby batteries be replaced every 3-5 years.
- For other system devices such as smoke detectors, passive infrared, ultrasonic or microwave motion detectors or glassbreak detectors, consult the manufacturer's literature for testing and maintenance instructions.

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 standby battery.

NOTE: Only the installer or service professional should 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 zones of area protection and each of these zones 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 a LED keypad or by written messages on the LCD keypad.

Additional features of the PC1616/PC1832/PC1864 Security System are an Automatic Inhibit (Swinger Shutdown) for Alarm, Tamper and Trouble signals after 3 occurrences in a given set period (see Section 5.6 Option [377] in the Installation Manual). There is also a Programmable Keypad Lockout option (see Section 5.3 Option [012] in the Installation Manual).

IMPORTANT NOTICE

A security system cannot prevent emergencies. It is only intended to alert you and – if included – your central 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.

PK5500 Language Selection

Your keypad may have the capability to display messages in different languages.

1. Press and hold both   keys simultaneously.
2. Using the   keys, scroll through the available languages.
3. Press  to select your desired language.

Arming & Disarming the System

Arming (Turning On/Setting)

Close all sensors (i.e. stop motion and close doors). The Ready () indicator should be on.

To arm, press and hold the **Away** key for 2 seconds and/or enter your Access Code, or press   to Quick Arm. During the setting state (exit delay active) the Armed () and Ready () indicators will turn on, and the keypad will sound one beep per second. You now have ____ seconds to leave the premises (please check with your installer to have this time programmed). To cancel the arming sequence, enter your access code.

Away Arming (Turned On/Set)

When the exit delay is completed, the alarm system is armed/set and this is indicated on the keypad as follows: the Ready () indicator will turn off, the Armed indicator will remain on and the keypad will stop sounding.

Quick Exit

If the system is armed and you need to exit, use the Quick Exit function to avoid disarming and rearming the system. Press and hold the **Exit** key for 2 seconds or press  . You now have 2 minutes to leave the premises through your exit door. When the door is closed again, the remaining exit time is cancelled.

Bell/Siren Sounds After Away Arming

Audible Exit Fault

In an attempt to reduce false alarms, the Audible Exit Fault is designed to notify you of an improper exit when arming the system in the Away mode. In the event that you fail to exit the premises during the allotted exit delay period, or if you do not securely close the Exit/Entry door, the system will notify you that it was improperly armed in two ways: the keypad will emit one continuous beep and the bell or siren will sound.

Your installer will tell you if this feature has been enabled on your system. If this occurs:

1. Re-enter the premises.
2. Enter your [access code] to disarm the system. You must do this before the entry delay timer expires.
3. Follow the Away arming procedure again, making sure to close the entry/exit door properly. (See "Away Arming (Turned On/Set)".)

Arming Error

An error tone will sound if the system is unable to arm. This will happen if the system is not ready to arm (i.e. sensors are open), or if an incorrect user code has been entered. If this happens, ensure all sensors are secure, press **(#)** and try again.

Disarming (Turning Off /Unsetting)

Enter your access code to disarm anytime the system is armed (i.e. Armed (**A**) indicator is on). The keypad will beep if you walk through the entry door. Enter your code within _____ seconds to avoid an alarm condition (please check with your installer to have this time programmed).

Disarming Error

If your code is invalid, the system will not disarm and a 2-second error tone will sound. If this happens, press **(#)** and try again.

Stay Arming (Partially Turning On / Part Setting)

Stay arming will bypass the interior protection (i.e. motion sensors) and arm the perimeter of the system (i.e. doors and windows). Close all sensors (i.e. stop motion and close doors). The Ready (**✓**) indicator should be on. Ask your alarm company if this function is available on your system.

Press and hold the **Stay** key for 2 seconds and/or enter your Access Code and do not leave the premises (*if your installer has programmed this button*). During the setting state (exit delay active), the Armed (**A**) and Ready (**✓**) indicators will turn on, and the keypad will sound one beep every three seconds.

When the exit delay is completed, the alarm system is armed/set and this is indicated on the keypad as follows: the Ready (**✓**) indicator will turn off, the Armed (**A**) indicator will remain on and the keypad will stop sounding.

The Armed (**A**) indicator and Bypass or System indicator will turn on. The system will automatically bypass certain interior sensors (i.e. motion sensors).

NOTE: For SIA FAR listed panels, the Stay Arming Exit Delay will be twice as long as the Away Arming Exit Delay.

Re-activate bypassed zones

To fully arm the system when it has been armed in Stay mode:

Press **(*)1** at any keypad. The interior zones are now armed.

NOTE: When the interior zones have been re-activated, you will not be able to enter areas protected by motion detectors, or open doors and windows. To access these areas, enter your [access code] and disarm the system.

Silent Exit Delay

If the system is armed using the **STAY** button (Programmable Function Key) or using the "No Entry" Arming method (**(*)9**[access code]), the audible progress annunciation (keypad buzzer) will be silenced and the exit time will be doubled for that exit period only.

Remote Arming and Disarming

The system can be armed and/or disarmed using the remote control device (wireless key) model DSC WS4939. When arming the system by using the Arm button on the wireless key, the system will acknowledge the command by sounding a single bell squawk and when disarming using the Disarm button on the wireless key the system will acknowledge the command by sounding two bell squawks that can be heard from the exterior of the premises.

Emergency Keys

Press the **(F)**, **(A)** or **(P)** key for 2 seconds to generate a Fire, Auxiliary or Panic alarm. The keypad sounder will beep indicating that the alarm input has been accepted and transmission to the central station is underway. Ask your alarm company if the emergency keys are available on your system.

NOTE: The Fire keys can be disabled by the installer.

LED5511/LCD5511 Keypad

Press and hold both keys simultaneously for 2 seconds to send the following messages:

1 3 Fire Message, **4 6 Auxiliary Message,** **7 9 Panic Message.**

When Alarm Sounds

The system can generate 2 different alarm sounds:

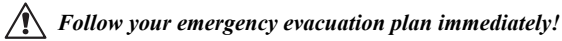
Continuous Siren = Intrusion (Burglary Alarm)

Temporal / Pulsed Siren = Fire Alarm

Intrusion (Burglar) Alarm Continuous Siren

- ❗ If you are unsure of the source of the alarm approach with caution ! If the alarm was accidental, enter your Access Code to silence the alarm. Call your central station to avoid a dispatch.

Fire Alarm Pulsed Siren



If the fire alarm was accidental (i.e. burned toast, bathroom steam, etc.), enter your Access Code to silence the alarm. Call your central station to avoid a dispatch. Ask your alarm company if your system has been equipped with fire detection.

To reset the detectors, see the Sensor Reset section.

Time & Date Programming

Press , plus your Master Access Code or press the time programming function key (programmed by your installer).

Press to select Time and Date.

When using the LCD5500, use the scroll keys to find the menu option and press to select.

Enter the time in 24-hr format (HH:MM), followed by the date (MM:DD:YY). Press to exit programming.

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 can press the key to clear the date and time display.

Bypassing Zones

Use the zone bypassing feature when you need access to a protected area while the system is armed, or when a zone is temporarily out of service, but you need to arm the system. Bypassed zones will not be able to sound an alarm. Bypassing zones reduces the level of security. If you are bypassing a zone because it is not working, call a service technician immediately so that the problem can be resolved and your system returned to proper working order. Ensure that no zones are unintentionally bypassed when arming your system.

Zones cannot be bypassed once the system is armed. Bypassed zones are automatically cancelled each time the system is disarmed and must be bypassed again, if required, before the next arming.

NOTE: For security reasons, your installer has programmed the system to prevent you from bypassing certain zones (e.g., smoke detectors).

Bypassing Zones with an LCD5500Z keypad

Start with disarming the system.

1. Press to enter the function menu. The keypad will display "Press * for < > Zone Bypass".
2. Press or , then your [access code] (if required). The keypad will display "Zone Search < > Zone Name".
3. Enter the two-digit number of the zone(s) to be bypassed (01-64).

You can also use the keys to find the zone to be bypassed, and then press to select the zone.

The keypad will display "Zone Search < > Zone Name?". "B" will appear on the display to show that the zone is bypassed. If a zone is open (e.g., door with door contact is open), the keypad will display "Zone Search < > Zone Name" O". If you bypass the open zone, a "B" will replace the "O".

4. To unbyypass a zone, enter the two-digit number of the zone(s) to be bypassed (01-64). You can also use the   keys to find the zone, and then press  to select the zone. The "B" will disappear from the display to show that the zone is no longer bypassed.
5. To exit bypassing mode and return to the Ready state, press .

Bypassing Zones with a PC55XXZ or LCD5501Z keypad

Start with disarming the system

1. Press  , then your [access code] (if required).
2. Enter the two-digit number of the zone(s) to be bypassed (01-64). On PC55XXZ keypads, the zone light will turn on to indicate that the zone is bypassed.
3. To unbyypass a zone, enter the two-digit number of the zone (01-64). On PC55XXZ keypads, the zone light will turn off to indicate that the zone is not bypassed.
4. To exit bypassing mode and return to the Ready state, press .

Activating All Bypassed Zones

To activate all bypassed zones:

1. Press  , then your [access code] (if necessary).
2. Press  .
3. To exit bypassing mode and return to the Ready state, press .

Recalling Bypassed Zones

To recall the last set of bypassed zones:

1. Press  , then your [access code] (if necessary).
2. Press  .
3. To exit bypassing mode and return to the Ready state, press .

Bypass Groups

A Bypass Group is a selection of zones programmed into the system. If you bypass a group of zones on a regular basis, you can program them into the Bypass Group, so that you do not have to bypass each zone individually every time. One Bypass Group can be programmed on each partition.

To program a Bypass Group:

1. Press  , then your [access code] (if necessary).
2. Enter the two-digit numbers (01-64) of the zones to be included in the Bypass Group. On LCD5500Z keypads, you can also use the   keys to find the zone to be included in the bypass group, and then press  to select the zone.
3. To save the selected zone into the group, press  .
4. To exit bypassing mode and return to the Ready state, press .

To select a Bypass Group when arming the system:

1. Press  , then your [access code] (if necessary).
2. Press  . The next time the system is armed, the zones in this group will be bypassed.
3. To exit bypassing mode and return to the Ready state, press .

NOTE: Bypass Groups are only recalled if the system is armed/disarmed after programming the bypass group.

NOTE: This feature is not to be used in UL Listed installations.

Trouble Conditions

When a trouble condition is detected, the Trouble (▲) or System indicator will turn on, and the keypad will beep every 10 seconds. Press the (#) key to silence the beeps. Press (*)(2) to view the trouble condition. The Trouble (▲) or System indicator will flash. The corresponding trouble will be represented by numbers 1-8.

LED/ DIGIT	Trouble Condition	Comments	Action
1	Service Required		Call for service
2	Loss of AC Power	If the building and/or neighbourhood has lost electrical power, the system will continue to operate on battery for several hours.	Call for service
3	Telephone Line Fault	The system has detected that the telephone line is cut.	Call for service
4	Failure to Communicate	The system attempted to communicate with the monitoring station, but failed. This may be due to Trouble 3.	Call for service
5	Sensor (or Zone) Fault	The system is experiencing difficulties with one or more sensors on the system.	Call for service
6	Sensor (or Zone) Tamper	The system has detected a tamper condition with one or more sensors on the system.	Call for service
7	Sensor (or Zone) Low Battery	If the system has been equipped with wireless sensors, one or more has reported a low battery condition.	Call for service
8	Loss of Time & Date	If complete power was lost (AC and Battery), the time and date will need to be re-programmed.	Re-program Time & Date (page 9)

Trouble Menu Acknowledgement

If the Arming Inhibit for All Troubles features is enabled, Trouble Menu Acknowledgement may be used. To use this feature while in the Trouble Menu ((*)(2)), press (9) to acknowledge and override the existing troubles, so the system can be armed. An override event will also be generated and logged, thus identifying the user. To override open zones, use the Zone Bypass feature ((*)(1)).

Alarm Memory

When an alarm occurs, the Memory or System indicator (and Fire indicator, if applicable) will turn on.

To view which sensor(s) generated the alarm, press (*)(3). The Memory or System indicator and corresponding sensor number will flash (i.e. sensor 3).

For the LCD5500 keypad use the (◀▶) scroll keys to view the sensors in alarm memory.

Press (#) to exit. To clear the memory, arm and disarm the system.

If an alarm sounded while armed, the keypad will automatically go to alarm memory when you disarm the system. In this instance, you should approach with caution, as the intruder may still be within the building/premises.

Door Chime (Entry/Exit Beeps)

To turn the door chime function on or off, press and hold the **Chime** key for 2 seconds or press (*)(4).

Access Code Programming

In addition to the Master Access Code, you can program up to 32 additional User Access codes. Press (*)(5), plus your Master Access Code. The Program or System indicator will begin to flash, and the Armed (▲) indicator will turn on.

Enter the 2-digit number to be programmed (i.e. 06 for user access code 6; enter 40 for the Master Access Code).

When using the LCD5500, use the (◀▶) keys to find the specific code and press (*) to select. Enter the new 4-digit access code, or press (*) to erase it. When programming is complete, enter another 2-digit code to program or press (#) to exit.

For systems using multiple partitions/areas, access codes can be assigned to specific or multiple partitions/areas. Please contact your alarm company for details.

The minimum number of variations of access codes (key) is 27027 when 37, 6-digit user codes are used. For SIA Installations, duplicate or duress codes derived from user codes +/- 1 digit are not allowed.

The access codes have programmable attributes which allow zone bypassing, remote access using the ESCORT5580TC or one-time use activation.

Access Codes

[*][5][Master Code] (when disarmed)

The [*][5] User's Programming command is used to program additional access codes.

User Codes (Access Codes 1-32)

Master Code (Access Code 40) - The Master Code can only be changed by the Installer, if programmed.

Supervisor Codes (Access Codes 41 & 42) - These codes are always valid when entering the (*)(5) User Code Programming section. However, these codes can only program additional codes which have equal or lesser attributes. Once programmed, the Supervisor Codes receive the Master Code's attributes. These attributes are changeable.

Duress Codes (Access Codes 33 & 34) - Duress codes 33 and 34 are standard User Codes that will transmit the Duress Reporting Code whenever the code is entered to perform any function on the system.

NOTE: Duress codes are not valid when entering [*][5], [*][6] or [*][8] sections.

NOTE: No codes can be programmed as a duplicate of another code.

NOTE: Duress codes cannot be programmed as a duplicate or as a "Code + 1".

User Code Attributes

1. The default attributes of a new code will be the attributes of the code used to enter (*)(5) whether it is a new code or an existing code being programmed.
2. System Master (Code 40) has Partition Access for all partitions, as well as Attributes 3-4 ON by default.

NOTE: These attributes are not changeable.

Inherent Attributes (all codes except installer and maintenance)

Arm / Disarm - Any Access Code with Partition Access enabled will be valid for arming and disarming that partition.

Command Outputs ([*][7][1], [*][7][2], [*][7][3], and [*][7][4]) - If these outputs require Access Code entry, any Access Code with Partition Access will be valid for performing the [*][7][1-4][Access Code] functions on that partition.

Programmable Attributes ([*][5][Master/Supervisor Code][9][Code])

1. For Future Use
2. For Future Use
3. Zone Bypassing Enabled
4. ESCORT Access
5. Downlook Remote Trigger to Phone Number 1
6. Downlook Remote Trigger to Phone Number 2
7. Bell Squawk upon Arming/Disarming
8. One Time Use Code

NOTE: Attributes 5 and 6 cannot be enabled on the same access code.

Bell Squawk Attribute

This attribute is used to determine whether an access code should generate an arming/disarming Bell Squawk upon entry of the code for Away arming. The Wireless Keys with access codes associated with them may generate Arming/Disarming Bell squawks. If desired, this option may be used with codes that are manually entered. Please contact your installer to have this programmed.

NOTE: *The Master Code cannot use the Bell Squawk attribute, but is required to enable it for other codes.*

NOTE: *This feature cannot prevent the Arm/Disarming squawks from being generated if an access code assigned to a WLS Key is manually entered at a keypad.*

Partition Assignment Mask

In order to accommodate Access Code Partition Assignment for the multiple partitions found on this product the user must enter [*][5][Master Code][8][Code number to be change] (ex. [*][5][1234][8][Code 03]. Under this section, each bit represents the corresponding partition's access (i.e. Bit 4 represents Partition 4 access).

The Master Code has access to all partitions, and cannot be modified.

Partition Assignment Mask ([][5][Master/Supervisor Code][8][Code])*

1. Partition One Access
2. Partition Two Access
3. Partition Three Access
4. Partition Four Access
5. Partition Five Access
6. Partition Six Access
7. Partition Seven Access
8. Partition Eight Access

Notes on Access Codes and Programming

1. There will still be 37 codes if option selected for 6-digit access codes.
 - [*][5][MASTER CODE] [01 to 32, 33, 34, 40, 41, 42] to program access codes
 - [*][5][MASTER CODE][8] enters the Partition Assignment Mode [01 to 32, 33, 34, 41, 42] to edit access code partition assignments
 - [*][5][MASTER CODE][9] Enters the Attribute Mode [01 to 32, 33, 34, 41, 42] to edit access code Attributes.
2. The Master Code's attributes cannot be changed.
3. When a new code is programmed in (*)(5) it will be checked against all other codes in the system. If a duplicate code is found, an error tone is given and the code is returned to what it was before it was changed. This applies to both 4 and 6-digit codes.

Erasing an Access Code

To erase a code, select the code and enter (*) as the first digit. If (*) is entered, the system will delete the code immediately and the user will be returned to select another code.

User Function Commands

First disarm the system then enter (*)(6) [Master Code]

The (*)(6) command is used to gain access to the following list of Master functions of the system.

[1] Time and Date

Enter 4 digits for 24 Hour System Time (HH-MM). Valid entries are 00-23 for the hour and 00-59 for minutes.

Enter 6 digits for the Month, Day and Year (MM-DD-YY)

[2] Auto-arm Control

Pressing [2] while in the User Function menu will enable (3 beeps) or disable (one long beep) the Auto-arm feature, by partition. With this feature enabled, the panel will automatically arm in the Away mode (Stay Away zones active) at the same time each day. The auto-arm time is programmed with the [*][6][Master Code][3] command.

[3] Auto-arm Time

The system can be programmed to arm at a programmed time each day, per partition.

Upon entry of this section, enter 4 digits for the 24-hour Auto-arm time for each day of the week.

At the selected auto-arm time, the keypad buzzers will sound for a programmed amount of time (programmable by the installer only) to warn that an auto-arm is in progress. The bell can also be programmed to squawk once every 10 seconds during this warning period. When the warning period is complete, the system will arm with no exit delay and in the Away Mode.

Auto-arming can be cancelled or postponed by entering a valid access code only, during the programmed warning period. Auto-arming will be attempted at the same time the next day. When the auto-arming process is cancelled or postponed, the Auto-arm Cancellation Reporting Code will be transmitted (if programmed).

If arming is inhibited by one of the following, the Auto-arm Cancellation transmission will be communicated.

- AC / DC Inhibit Arm
- Latching System Tamper
- Zone Expander Supervisory Fault

[4] System Test

The system's Bell Output (2s), Keypad Lights and Communicator are tested. This test will also measure the panel's standby battery.

[5] Enable DLS / Allow System Service

If enabled, the installer will be able to access Installer Programming by DLS. In case of DLS access this provides a window where rings will be detected by the panel. The DLS window will remain open for 6hrs, during which time the installer will be able to enter DLS an unlimited number of times. After the 6-hr window has expired, Installer's Programming will be unavailable again until the window is re-opened.

[6] User Call-up

If enabled by the Installer, the panel will make 1 attempt to call the downloading computer. The downloading computer must be waiting for the panel to call before downloading can be performed.

[7] Music Input On/Off

If enabled on the PC5936 Audio Interface Module, the user can turn Background Music on or off.

[8] User Walk Test (For Europe only)

This test allows the user to verify operation of system detectors and notifies the central station that a Walk Test is in progress.

Note: Fire zones, the 'F' key, and 2-wire Smoke detectors are excluded from this test. Violation of these zones will cause the system to exit the walk test then generate and transmit alarm condition to the central station.

1. Press [*][6][8] to enable Walk Test. The system will notify the Central Station that a walk test has begun.
2. Violate all each detector (zone) in sequence. A squawk will occur at the keypad and the violation will be recorded in the Event Buffer.
3. Restore zones. Press [*][6][8] to end the Walk Test. The system will notify the Central Station that the walk test has been terminated.

Note: If a zone is not violated within 15 minutes of activating the Walk Test, the system will automatically exit the Walk Test and resume normal operation.

Changing Brightness/Contrast

When this option is selected, the keypad will allow you to scroll through 10 different brightness/contrast levels.

1. Press *******6** [Master code].
2. Use the **<****|****>** keys to scroll to either Brightness Control or Contrast Control.
3. Press ***** to select the setting you want to adjust.
4. a) 'Brightness Control': There are multiple backlighting levels. Use the **<****|****>** keys to scroll to the desired level.
b) 'Contrast Control': There are 10 different display contrast levels. Use the **<****|****>** keys to scroll to the desired contrast level.
5. To exit, press **#**.

PK5501/PK5508/PK5516 keypads

When this option is selected, the keypad will allow you to scroll through 4 different backlighting levels. A level of 0 disables the backlighting.

1. Press *******6** [Master Code].
2. Use the **>** key to move through the 4 different backlighting levels.
3. The level is automatically saved when you press **#** to exit.

Changing the Buzzer Level

When this option is selected, the keypad will allow you to scroll through 21 different buzzer levels. A level of 00 disables the buzzer.

1. Press *******6** [Master Code].
2. Use the **<****|****>** keys to scroll to Buzzer Control.
3. There are 21 different levels, use the **<****|****>** keys to scroll to the desired level.

PK5501, PK5508, PK5516 keypads:

1. Press *******6** [Master Code].
2. Use the **<****|** key to move through the 21 different buzzer levels.
3. The level is automatically saved when you press **#** to exit.

Label Programming

PK5500/LCD keypad

When this option is selected, the keypad will allow you to program labels representing zones, partitions, and command outputs. Also, special labels can be added to show when the system fails to arm or when you disarm after an alarm has occurred.

1. Press *******6** [Master Code].
2. Use the **<****|****>** keys to scroll to Edit Labels.
3. Use the **<****|****>** keys to select the label type you want to edit.
4. Use the **<****|****>** keys to select the individual label you want to edit.
5. Use the arrow keys (**<****|****>**) to move the underline bar underneath the letter to be changed.
6. Press the number keys [1] to [9] corresponding to the letter you require. The first time you press the number the first letter will appear. Pressing the number key again will display the next letter.

Refer to the following chart:

[1] - A, B, C, 1	[6] - P, Q, R, 6
[2] - D, E, F, 2	[7] - S, T, U, 7
[3] - G, H, I, 3	[8] - V, W, X, 8
[4] - J, K, L, 4	[9] - Y, Z, 9, 0
[5] - M, N, O, 5	[0] - Space

7. When the required letter or number is displayed use the arrow keys (◀▶) to scroll to the next letter.
8. When you are finished programming the Zone Label, press the (*) key, scroll to "Save," then press (*).
9. Continue from Step 2 until all Labels are programmed.

Viewing the Event Buffer from an LCD Keypad

The event buffer will show you a list of the last 500 events that have occurred on your system. You must use an LCD keypad to view the event buffer.

1. Press (*) (6) [Master Code].
2. To select Event Buffer viewing, press (*).
3. The keypad will display the event number, partition or area, and the time and date. Press (*) to switch between this information and the event details.
4. Use the (◀▶) keys to scroll through the events in the buffer.
5. To exit event buffer viewing, press (#).

PK5500 Global Status Screen

When the keypad is loaned to global mode (pressing and holding the (#) key), you will see a Global Partition Status screen. This shows basic status for up to 8 partitions, depending on the configuration of your system. The screen looks similar to the example shown below.

```
1 2 3 4 5 6 7 8
A R ! N - - - -
```

Each partition is identified by a number. Below each number is the current status of that partition.

A - Partition is Armed

N - Partition is Not Ready to Arm

R - Partition is Ready to Arm

! - Partition is in Alarm

- - Partition is Not Enabled

Sensor Reset

Certain sensors, after having detected an alarm condition, require a **Reset** to exit the alarm condition (i.e. glass break sensors, smoke detectors, etc.). Ask your alarm company if this function is required on your system.

To reset the detectors, press and hold the **Reset** key for 2 seconds or press (*) (7) (2).

If a sensor fails to reset, it may still be detecting an alarm condition. If the sensor reset is successful, the alarm is cancelled. If unsuccessful, the alarm will reactivate or continue.

Testing Your System

NOTE: *If you are going to perform a System Test, call your Monitoring Station to inform them when you begin and also when you end the test.*

Testing Your Keypad Sounder and Siren

The System Test provides several system tests, and a two-second check of the keypad sounder and bell or siren.

1. Press [Master Code] .
2. The following will occur:
 - The system activates all keypad sounders and bells or sirens for two seconds. All keypad lights turn ON.
 - LCD5500Z keypads will light all pixels
 - The Ready, Armed, and Trouble LED's will flash for the duration of the test
3. To exit the function menu, press .

Testing Your Entire System

All smoke detectors in this installation must be tested by your smoke detector installer or dealer once a year to ensure they are functioning correctly. It is the user's responsibility to test the system weekly (excluding smoke detectors). Ensure you follow all the steps in the 'Testing Your System' section above.

NOTE: *Should the system fail to function properly, call your installation company for service immediately.*

1. Prior to testing, ensure that the system is disarmed and the Ready light is on.
2. Press and close all zones to return the system to the Ready state.
3. Perform a System Test by following the steps in the previous section.
4. To test the zones, activate each detector in turn (e.g., open each door/window or walk in motion detector areas).

PK55xx/LCD5500Z keypads will display the following message when each zone (detector) is activated:

"Secure System Before Arming < >", "Secure System or Enter Code" or "Secure or Arm System". Use the

keys to view which zones are open. The message will disappear when the zones are closed.

On an LCD5501Z keypad, the display says "Open" when any zone (detector) is activated. To see which zones are open, press . The keypad will scroll the numbers of all open zones.

On a PC55XXZ keypad, the zone light turns ON when the zone (detector) is activated. The zone light turns OFF when the zone is closed (e.g., door or window closed).

NOTE: *Some features described above will not be functional unless enabled by your installer. Ask your installer which features are functional on your system.*

Walk Test Mode

The installer can initiate a Walk Test mode for the system. While in Walk Test mode, The Ready, Armed, and Trouble LED's will flash to indicate that Walk Test is active. When the system automatically terminates the Walk Test modes, it will annunciate with an audible warning (5 beeps every 10 seconds), beginning five minutes prior to the termination of the test.

Allowing Computer Access To Your System

From time to time, your installer may need to send information to or retrieve information from your security system. Your installer will do this by having a computer call your system over the telephone line. You may need to prepare your system to receive this 'downloading' call. To do this:

1. Press [Master code] at any keypad. This allows downloading for a limited period of time. During this time, the system will answer incoming downloading calls.

For more information on this feature, please ask your installer.

Guidelines for Locating Smoke Detectors

Research has shown that all hostile fires in homes generate smoke to a greater or lesser extent. Experiments with typical fires in homes indicate that detectable quantities of smoke precede detectable levels of heat in most cases. For these reasons, smoke alarms should be installed outside of each sleeping area and on each storey of the home.

The following information is for general guidance only and it is recommended that local fire codes and regulations be consulted when locating and installing smoke alarms.

It is recommended that additional smoke alarms beyond those required for minimum protection be installed. Additional areas that should be protected include: the basement; bedrooms, especially where smokers sleep; dining rooms; furnace and utility rooms; and any hallways not protected by the required units.

On smooth ceilings, detectors may be spaced 9.1 m (30 feet) apart as a guide. Other spacing may be required depending on ceiling height, air movement, the presence of joists, uninsulated ceilings, etc. Consult National Fire Alarm Code NFPA 72, CAN/ULC-S553-M86 or other appropriate national standards for installation recommendations.

- Do not locate smoke detectors at the top of peaked or gabled ceilings; the dead air space in these locations may prevent the unit from detecting smoke.
- Avoid areas with turbulent air flow, such as near doors, fans or windows. Rapid air movement around the detector may prevent smoke from entering the unit.
- Do not locate detectors in areas of high humidity.
- Do not locate detectors in areas where the temperature rises above 38°C (100°F) or falls below 5°C (41°F).
- Smoke detectors should always be installed in accordance with NFPA 72, the National Fire Alarm Code. Smoke detectors should always be located in accordance with:

'Smoke detectors shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms and on each additional storey of the family living unit, including basements and excluding crawl spaces and unfinished attics. In new construction, a smoke detector also shall be installed in each sleeping room'.

'Split level arrangement: Smoke detectors are required where shown. Smoke detectors are optional where a door is not provided between living room and recreation room'.

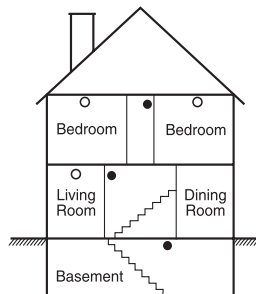
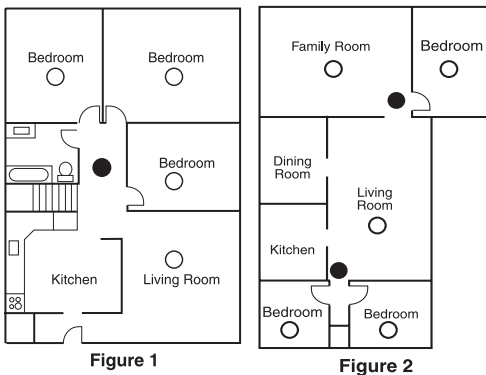
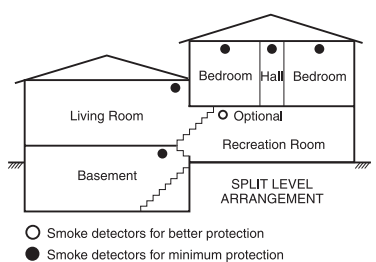


Figure 3



- Smoke detectors for better protection
- Smoke detectors for minimum protection

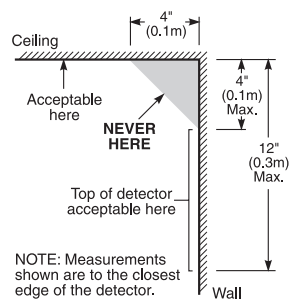


Figure 4

Household Fire Safety Audit

Read this section carefully for important information about fire safety.

Most fires occur in the home. To minimize this danger, we recommend that a household fire safety audit be conducted and a fire escape plan be 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 border 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 can be accounted for (e.g., across the street or at a neighbor'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. 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 in-house fire safety inspection.

New Zealand Telecom Network

The following is a list of warnings applicable when this equipment is connected to the New Zealand Telecom Network :

General Warning

The grant of a Telepermit for any item of terminal equipment indicates only that Telecom has accepted that the item complies with minimum conditions for connection to its network. It indicates no endorsement of the product by Telecom, nor does it provide any sort of warranty. Above all, it provides no assurance that any item will work correctly in all respects with another item of Telepermitted equipment of a different make or model, nor does it imply that any product is compatible with all of Telecom's network services.

Reverse Numbering (decadic signalling)

Decadic signalling should not be used as it is being progressively phased out of the network. DTMF dialling is 100% available and it should always be used..

Line Grabbing Equipment

This equipment is set up to carry out test calls at pre-determined times. Such test calls will interrupt any other calls that may be set up on the line at the same time. The timing set for such test calls should be discussed with the installer.

The timing set for test calls from this equipment may be subject to 'drift'. If this proves to be inconvenient and your calls are interrupted, then the problem of timing should be discussed with the equipment installer. The matter should NOT be reported as a fault to Telecom Faults Service.

D.C. Line Feed to Other Devices

During dialling, this device unit does not provide DC voltage to the series port connection and this may cause loss of memory functions for the terminal devices (local telephone) connected to T-1, R-1.

General Operation (Ringer Sensitivity and Loading)

This device only responds to Distinctive Alert cadences DA1 and DA2.

Limited Warranty

Digital Security Controls 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 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 purchaser must promptly notify Digital Security Controls 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. There is absolutely no warranty on software and all software products are sold as a user license under the terms of the software license agreement included with the product. The Customer assumes all responsibility for the proper selection, installation, operation and maintenance of any products purchased from DSC. Custom products are only warranted to the extent that they do not function upon delivery. In such cases, DSC can replace or credit at its option.

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 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 must first obtain an authorization number. Digital Security Controls 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 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);
- 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.

Items Not Covered by Warranty

In addition to the items which void the Warranty, the following items shall not be covered by Warranty: (i) freight cost to the repair centre; (ii) products which are not identified with DSC's product label and lot number or serial

number; (iii) products disassembled or repaired in such a manner as to adversely affect performance or prevent adequate inspection or testing to verify any warranty claim. Access cards or tags returned for replacement under warranty will be credited or replaced at DSC's option. Products not covered by this warranty, or otherwise out of warranty due to age, misuse, or damage shall be evaluated, and a repair estimate shall be provided. No repair work will be performed until a valid purchase order is received from the Customer and a Return Merchandise Authorisation number (RMA) is issued by DSC's Customer Service.

Digital Security Controls'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 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. The laws of some jurisdictions limit or do not allow the disclaimer of consequential damages. If the laws of such a jurisdiction apply to any claim by or against DSC, the limitations and disclaimers contained here shall be to the greatest extent permitted by law. Some states do not allow the exclusion or limitation of incidental or consequential damages, so that the above may not apply to you.

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. Digital Security Controls neither assumes responsibility for 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 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 will at its option repair or replace out-of-warranty products which are returned to its factory according to the following conditions. Anyone returning goods to Digital Security Controls must first obtain an authorization number. Digital Security Controls will not accept any shipment whatsoever for which prior authorization has not been obtained. Products which Digital Security Controls determines to be repairable will be repaired and returned. A set fee which Digital Security Controls has predetermined and which may be revised from time to time, will be charged for each unit repaired.

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



©2005 Digital Security Controls
Toronto, Canada • www.dsc.com
Printed in Canada



29007165R001