INSTRUCTION MANUAL

PRINTED IN CANADA
COPYRIGHT 1992 DIGITAL SECURITY CONTROLS LTD.
1645 FLINT ROAD, DOWNSVIEW, ONTARIO, CANADA M3J 2J6

29000009 R3
OCT 22 1993

DSC Security Products

PC1000

Canadian Department of Communications Notice

NOTICE: The Canadian Department of Communications label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational and safety requirements. The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. In some cases, the company's inside wiring associated with a single line individual service may be extended by means of certified connector assembly (telephone extension cord). The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

User should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

CAUTION: Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

The *Load Number* (LN) assigned to each terminal device denotes the percentage of the total load to be connected to a telephone loop which is used by the device, to prevent overloading. The termination on a loop may consist of any combination of devices subject only to the requirement that the total of the Load Numbers of all the devices does not exceed 100.

The Load Number of this unit is 2.

SYSTEM REFERENCE

ZONE	PROTECTED AREA	ZONE TYPE
1		
2		
3		
4		
AUX		

KEYPAD ZONE [1], [3] _____

KEYPAD ZONE [4], [6] _____

KEYPAD ZONE [*], [#] _____

MASTER CODE NUMBER [1]: _____

PROGRAMMED ACCESS CODE NUMBERS:

[2] _____ [3] _____ [4] _____

SYSTEM ENTRY TIME _____ SECONDS

SYSTEM EXIT TIME _____ SECONDS

MONITORING STATION INFORMATION:

ACCOUNT #: _____ Phone: _____

FOR SERVICE:

CALL: _____ Phone: _____

NOTES:

INTRODUCTION

Congratulations on your purchase of the DSC PC1000 Burglar Alarm Control System. This equipment has been designed to give you the greatest possible flexibility and convenience in the use of your security system. This booklet is intended to serve as a handy reference and should be kept in a secure place.

Your DSC PC1000 Security System is made up of a control panel, one or more keypads, and various detectors and sensors. The control panel will be mounted out of the way in a utility room or basement. The metal cabinet contains the system electronics, fuses and stand-by battery. There is normally no reason for anyone but the installer to have access to the control panel. The keypad(s) have display lights and command entry keys. The keypad is used to send commands to the system and to display the current system status. Keypads are mounted in convenient areas close to the exit-entry doors. The security system has up to four zones or areas of protection. Each zone used will have connected to it various sensors, such as door or window contacts, motion detectors, glassbreak detectors and vibration or shock sensors. When a sensor is in alarm, a keypad light will be on to indicate which zone is in alarm. The "Ready" light on the keypad will come ON when all the detectors are closed. The "Ready" light indicates the system is ready to arm.

IMPORTANT NOTICE

Digital Security Controls Ltd. recommends that you read this manual carefully and become familiar with the operation of your security system. Check with the installer to see which commands listed in this manual apply to your particular security system. Fill out the system reference sheet and store this booklet in a secure place for future reference. It is important to test your system every week. To do this, first inform the monitoring station that you are testing your system. Then, with the system disarmed, activate all detection sensors one at a time and observe the zone light come on at the keypad as each sensor is activated. Perform a bell test by using the [*],[4] command. The PC1000 can be programmed at the time of installation to automatically perform a test transmission to the monitoring station on a regular basis. If the system has not been programmed for this automatic test, call the monitoring station for instructions on how to perform a test transmission. Don't forget to inform the monitoring station when you have finished your test.

Check to see if the "System" light is on when arming the system. The "System" light will be on if a zone is bypassed, an alarm has occurred, or if there is a system trouble condition. See the Trouble Display section in this manual for a description of the different trouble conditions. Contact your installer for assistance if the trouble condition cannot be located and corrected.

IMPORTANT NOTE

Remember that no security system can prevent emergencies. It is only intended to alert you in case of an emergency and should not take the place of prudent security practices or life and property insurance.

MASTER CODE

The 4 digit Master Code is used for arming and disarming the system, for programming additional access codes, and for changing other features. The Master Code will be supplied to you by your installer. All keypad entries are made by pressing one key at a time, with the exception of keypad zone activation.

ARMING

They "System" light is a warning light. Determine why the "System" light is ON before arming the system. See the System Display Light section in this manual.

To arm the system, first close all protected doors and windows and stop movement in areas covered by motion detectors. Check to see that the "Ready" light is ON (all zones are closed). The system cannot be armed unless the "Ready" light is ON. Enter a [4 digit access code]. As each digit is entered, the keypad sounder will beep. Once the correct access code is entered, the "Armed" light will come ON and the keypad sounder will beep quickly. If the access code was entered incorrectly or the "Ready" light was not ON, the keypad sounder will beep steadily for 2 seconds. When the correct code is entered and the system is armed, exit through the door indicated by your installer as the exit-entry door. At the end of the allowed exit time, all lights on the keypad will go OFF except for the "Armed" light.

DISARMING

Enter the premises only through the door indicated by your installer as the entry door. The keypad sounder will be ON. Go to the keypad and enter the [4 digit access code]. If an error is made entering the code, press the [#] key and enter the code again. Do not repeatedly enter the access code without first pressing the [#] key. Once the correct access code is entered, the "Armed" light will go OFF and the keypad sounder will stop. The correct access code must be entered before the allowed entry time expires.

If an alarm occurred while the panel was armed, the "System" light and the light for the zone which caused the alarm will start to flash and will continue flashing for 2 minutes. To stop the flashing display, press the [3] key and the system will return to the Ready state.

If you return home and find 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 and if your system is monitored, call the monitoring station. They will advise what action has been taken as a result of the alarm and whether the premises are safe to enter. If your system is not monitored, call the local police to investigate.

SYSTEM DISPLAY LIGHT

The "System" light is a warning indicator for any of the following conditions. It indicates there is a bypassed zone; there is system trouble; or that an alarm has occurred since the last time the system was armed. When the "System" light is ON, press [*] [1] to check for a bypassed zone. Press [*] [2] to check for system trouble. Press [*] [3] to see if there was an alarm during the last armed period. See Zone Bypassing, Trouble Display and the Alarm Memory sections in this booklet.

ZONE BYPASSING

Bypassed zones do not cause an alarm. Use zone bypassing when access is needed to part of the protected area. Also, damaged wiring or contacts on a zone may be temporarily bypassed until repairs can be made so that the panel can be armed.

To bypass zones, enter [*],[1] and the zone number(s) to be bypassed (i.e. [1] for zone 1, [2] for zone 2). To remove all bypasses, enter [*],[1],[0]. The zone lights which are ON indicate bypassed zones. Press [#] to return to Ready.

When the system is installed, the ability to bypass certain zones may be eliminated for security reasons. In this case, the zone lights for those zones will not come on in response to the bypass command.

The "System" light is ON as long as at least ONE zone is bypassed. Do not unintentionally bypass zones when arming. Programmed zone bypasses are automatically cancelled each time the panel is disarmed and must be re-applied before the next arming.

TROUBLE DISPLAY

The control panel continuously monitors a number of possible trouble conditions. If one of these conditions occurs, the keypad sounder will beep and the keypad "System" indicator will come ON. Press the [*] then [2] keys to display the type of trouble. The zone lights indicate the type of trouble condition.

ZONE LIGHT	TROUBLE
1	Low Stand-by Battery
2	AC Power Failure (see note below)
3	Zone 4 Emergency Circuit Trouble
4	Unsuccessful Communication Attempt with Monitoring Station

Press the [#] key to return to Ready.

NOTE: The keypad buzzer will not sound for AC failure until there is also a low battery condition. The "System" light will come ON as soon as AC fails and will remain on until AC restores.

ALARM MEMORY DISPLAY

If an alarm occurred during the last armed period, the "System" light will be ON.

Press the [*] then [3] keys to display the zone(s) which caused the alarm.

Press [#] to return to Ready.

ALARM TEST

Press [*] then [4] for a 2 second test of the keypad lights, keypad sounder and the bell/siren alarm.

PROGRAMMING ADDITIONAL ACCESS CODES

Programming additional access codes can only be done with the Master Code.

To program a new access code, enter [*], [5] and [Master Code]. Zone light 1 will be ON to indicate that the Master Code is already programmed. If other codes are programmed, the respective zone lights will be on (i.e. zone light 2 will be ON to indicate that a second code has been programmed).

Press any key from [2] to [4] to select which of the 3 additional codes is to be programmed. The zone light will flash to indicate which code is being programmed.

Now enter a [4 digit access code]. Do not use the [*] or [#] keys as part of the code. The system will acknowledge the new code by beeping several times. The zone light will stop flashing and remain ON to indicate a programmed code. After the new code has been entered, enter a number from [2] to [4] to program another code, or press [#] to return to Ready.

If [****] instead of a [4 digit code] is entered, any previously programmed code in this location will be eliminated. The zone light will go OFF after [****] is entered to indicate that there is no longer a code programmed in this location.

Note that during code programming, the zone light is ON steadily for codes which have already been programmed. Note that the Master Code is always indicated by the zone 1 light. To program a new Master Code, enter [*], [5], [CURRENT Master Code], [1], [NEW Master Code]. Do not enter [*] or [#] as part of the new Master Code, and do not try to erase the Master Code by entering [****].

Summary: ***To program a new code:***
Enter [*], [5], [Master Code], [2 to 4], [4 digit code]
When code is programmed, press [#] to return to Ready.

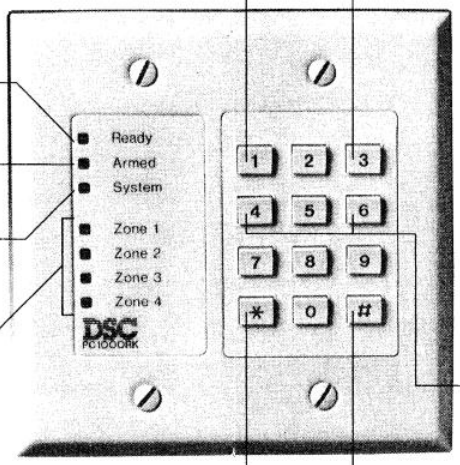
To eliminate an existing code:
Enter [*], [5], [Master Code], [2 to 4], [****]
When code is erased, press [#] to return to Ready.

QUICK-ARM FEATURE

When the Quick-Arm feature is enabled, the panel may be armed simply by entering [*], [0] instead of a 4 digit code. The [*], [0] command will not disarm the panel. This feature is useful when individuals are required to arm the system, but are not desired to be able to disarm it as well. In the home, this feature could be used for visitors, and in a commercial application, it could be used with junior employees and maintenance staff.

To activate the Quick-Arm feature, enter [*], [5], [Master Code], [5] (note that keys 1 to 4 are used to program codes). When the command is entered, the keypad will beep 3 times if the feature is being enabled and will beep once if the feature is being disabled.

Press [#] to return to Ready.



"Ready" light ON: system ready for arming.
"Ready" light OFF: open zone; zone must be closed or bypassed before arming.

"Armed" light will come ON indicating system is armed. To arm: ensure "Ready" light is on, then enter [4 digit access code].

"System" light ON indicates a bypassed zone, a system trouble or an alarm memory.

To bypass a zone: press [*] then [1] and then the zones you wish to bypass. Zone lights will be ON for bypassed zones.

To display system trouble conditions: press [*] then [2]. The source of the trouble will be indicated by a zone light coming ON:

- Zone 1: low battery
- Zone 2: AC power failure
- Zone 3: emergency circuit trouble
- Zone 4: communication failure

To display the zone that caused an alarm: press [*] then [3]. Zone light will come ON to indicate which zone caused an alarm. Press [#] to return to Ready.

"Zone" light(s) when ON in the normal operating mode indicate an open zone (e.g. an open door, window, etc.)

Press [1] and [3] at the same time in a fire situation.

ADDITIONAL ACCESS CODES are programmed by pressing [*] then [5] then entering the [Master Code]. "System" light will flash; select which code you want to program by pressing a single key [2] to [4]. Then enter the [4 digit access code]. Press [#] to return to Ready.

Press [4] and [6] at the same time to send an auxiliary alarm transmission.

Press [*] and [#] at the same time to summon police.

DOOR CHIME FEATURE

The door chime feature is used, while the panel is disarmed, to provide a tone from the keypad each time a door or window is opened or closed. The doors and windows which will provide this indication are programmed by your installer.

Enter [*] [5], [Master Code], [0] to turn the door chime feature ON and OFF. When the command is entered, the keypad will beep 3 times if the feature is being enabled and will sound one beep if the feature is being disabled.

SPECIAL FUNCTION COMMAND

The PC1000 can be programmed at the time of installation to operate other devices such as electric door strikes, door openers, electric lights, cameras, etc. by pressing [*] then [7] on the keypad. Your installer will instruct you on the use of this command.

AT-HOME ARMING COMMAND

Entering [*], [9] before the 4 digit arming code arms the panel with no entry delay on the entry zones, and bypasses the interior zones that have been programmed as "home-away" zones. This command is used to arm the system if someone is remaining on the premises.

KEYPAD ZONES

There are three zones which can be activated from the keypad. A fire alarm is activated by pressing the [1] and [3] keys at the same time. The fire alarm sounds the bell/siren in a pulsed mode. A transmission will be sent to the monitoring station ONLY if it has been programmed to do so by the installer.

The PC1000 can be programmed at the time of installation to send a transmission to the monitoring station by simultaneously pressing keys [4] and [6]. The installer will provide instructions on its use when required.

The Police (or Panic) alarm is activated by pressing the [*] and [#] keys at the same time. The panic alarm can be programmed to be audible or silent. There is no annunciation from the keypad. A transmission will be sent to the monitoring station ONLY if it has been programmed to do so by the installer.

AUTO-TEST TRANSMISSION

The PC1000 can be programmed at the time of installation to send a test code to the monitoring station at regular intervals. The frequency and time of the test transmission is set by the monitoring station and should not be changed without their knowledge.

FIRE LOOP OPERATION

ARMED MODE ("Armed" light ON)

1. On alarm the signal will pulse.
2. Enter access code to silence the signal and also disarm the panel.
3. Press [*] then [7] to reset the smoke detector(s) if the panel has been programmed to do so; "System" and "Ready" lights will come ON steadily.

DISARMED MODE ("Ready" light ON)

1. On alarm the signal will pulse; zone 4 and "System" lights ON steadily
2. Enter access code to silence signal.
3. Press [*] then [7] to reset the smoke detector(s) if the panel has been programmed to do so; "System" and "Ready" lights will come ON steadily.

FIRE LOOP TROUBLE

1. Open circuit on the fire loop (zone 4); "System" light ON steadily and keypad sounder beeps.
2. Press [#] to silence the trouble.
3. Press [*] then [2] to view the source of trouble; "System" and zone 3 lights flash to indicate a trouble on the fire loop (zone 4).
4. Press [#] to exit view-trouble mode; "Ready" and "System" lights will come ON steadily.
5. When the trouble condition is repaired, the "System" lights will go OFF leaving only the "Ready" light ON.

TESTING

IT IS RECOMMENDED THAT THE SYSTEM BE TESTED ON A WEEKLY BASIS

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

1. Inform the monitoring station that you are testing your system.
2. Disarm the system ("Ready" light should be ON).
3. Perform a battery/bell test by pressing [*] then [4]. The alarm will sound for about 2 seconds. If a trouble occurs after the test, press [*], [2] to view the trouble condition.
4. Activate each sensor in turn (e.g. open a door or window). Observe the zone light come ON as each sensor is activated. The zone light will go OFF as each sensor is restored to normal (door or window is closed).
5. Press the [1] and [3] keys at the same time. The signal will sound in a pulsed mode. Arm then disarm the panel to silence the signal.

Continued... ▶

TESTING *(Continued)*

6. If zone 4 is set as a Fire zone, activation will cause the signal to sound in a pulsed mode. ***CAUTION: Do not use open flame or burning materials to test a smoke detector.*** Contact your installer for information on safe methods to activate a smoke detector.
7. Should your system fail to operate properly, call your installer for service.
8. When testing is complete, call and advise the monitoring station.

MAINTENANCE

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

1. Do not wash the keypad with a wet cloth. Light dusting with a barely damp cloth should remove normal accumulations of dust.
2. The battery/bell test is designed to determine battery condition, however it is recommended that the stand-by battery 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.

FIRE SAFETY IN THE HOME

Most fires occur in the home and to minimize this danger it is recommended that a household fire safety audit be conducted and a family escape plan be developed.

HOUSEHOLD FIRE SAFETY AUDIT

1. Are all electrical appliances and outlets in a safe condition? Check for frayed cords, over-loaded lighting circuits, etc. If you are uncertain about the condition of your electrical appliances or household service, have a professional evaluation.
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 evaluation.

FAMILY 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 and since many fires occur at night, special attention should be given to the escape routes from sleeping quarters.

Continued... ▶

FAMILY ESCAPE PLANNING *(Continued)*

3. It is essential that escape from a bedroom be possible without opening the interior door. Consider the following when making your escape plans:
   - Make sure that doors and windows that open to the outside are easily opened. Ensure that they are are not painted shut, and that their locking mechanisms operate smoothly.
   - If opening the exit 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.
   - The family should have a predetermined assembly point where everyone can be accounted for; for example, across the street or at a neighbour's house.
   - Once everyone is out of the house, call the Fire Department.
   - A good plan emphasizes quick escape. Do not investigate first or attempt to fight the fire, and do not attempt to rescue belongings or pets as this takes up valuable time. Once outside, do not re-enter the house. Wait for the fire department.
   - Write the plan down and rehearse frequently, so that should an emergency arise, everyone will know what they are to do. Revise the plan as conditions change; for example, when there are more or fewer family members in the home, or if there are changes to the house.
   - Make sure your fire warning system is operational by conducting weekly tests as noted elsewhere in this manual. If you are unsure about system operation, contact your installing dealer.
   - It is recommended that you contact your local fire department and request further information on home fire safety and escape planning. If available, have your local fire prevention officer conduct an in-house fire safety inspection.

LIMITED WARRANTY

Digital Security Controls Ltd. warrants that for a period of twelve months from the date of purchase, the product shall be free from defects in materials and workmanship under normal use and that in fulfilment of any breech of such warranty, Digital Security Controls Ltd. shall, at its option, repair or replace the defective equipment upon return of the equipment to its repair depot. This warranty applies only to defects in parts and workmanship and not to damage incurred in shipping or handling, or damage due to causes beyond the control of Digital Security Controls Ltd., such as lightning, excessive voltage, mechanical shock, water damage, or damage arising out of abuse, alteration or improper application of the equipment.

The foregoing warranty shall apply only to the original buyer, and is and shall be in lieu of any and all other warranties, whether expressed or implied 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.

In no event shall Digital Security Controls Ltd. be liable for any direct or indirect or consequential damages, loss of anticipated profits, loss of time or any other losses incurred by the buyer in connection with the purchase, installation or operation or failure of this product.

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.

FCC COMPLIANCE

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

Upon request, 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: F534J3-19591-AL-R
Ringer Equivalence Number: 0.1B USOC Jack: RJ-31X

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. Ensure that plugs and jacks meet the dimension, tolerance and metallic plating requirements of 47 C.F.R. Part 68 Subpart F.

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. Inter-connect rules may vary from state to state.

Changes in Telephone Company Equipment of 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. Do not return equipment to this address without prior authorization. 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 Street
Lockport, NY 14094

Please note that this facility will only accept preauthorized shipments from DSC distributors. If you have problems with your system, contact your installer or service representative for assistance. ***Products received without an authorization number will not be accepted.***