

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.

PC5502Z2

Installation Manual



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, barbecues, 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.

Table of Contents

Section 1: Introduction	1
1.1 Before You Begin	1
1.2 Installation Overview	1
1.3 Specifications	1
Section 2: Installing the PC5502Z2	2
2.1 Unpacking	2
2.2 Mounting	2
2.3 Wiring	3
2.4 Applying Power	3
2.5 Testing the System and PC5502Z2 Keypads	3
Section 3: Enrolling the PC5502Z2	4
Section 4: Programming	5
4.1 How to Program the PC5502Z2	5
4.2 Setting up PC5502Z2 Zones and Zone Options	6
4.3 Programming Zone Bypass Options	8
4.4 Programming Entry and Exit Times	9
4.5 Programming Quick Arm and Quick Exit Options	9
4.6 Programming Function Keys	10
4.7 Programming the Master Code	11
4.8 Setting Up the PC5502Z2 to Sound Alarms Locally	12
4.9 Setting Up Door Chime Options	12
4.10 Programming Keypad Blanking Options	13
4.11 Resetting the PC5502Z2 to Factory Default Programming ..	13
Section 5: Setting Up Panel Keypad Zones	14
5.1 Assigning the PC5502Z2 to a Keypad Zone	14
5.2 Programming Zone Definitions in the Panel	15
Section 6: Programming Worksheets	16

Limited Warranty

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

International Warranty

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

Warranty Procedure

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

Conditions to Void Warranty

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

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

Digital Security Controls Ltd.'s liability for failure to repair the product under this warranty after a reasonable number of attempts will be limited to a replacement of the product, as the exclusive rem-

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

Disclaimer of Warranties

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

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

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

Installer's Lockout

Any products returned to DSC which have the Installer's Lockout option enabled and exhibit no other problems will be subject to a service charge.

Out of Warranty Repairs

Digital Security Controls Ltd. 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 Ltd. must first obtain an authorization number. Digital Security Controls Ltd. will not accept any shipment whatsoever for which prior authorization has not been obtained.

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

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

Section 1: Introduction

The PC5502Z2 is a 2-zone keypad that allows you to install up to seven 2-zone partitions on one control panel. The PC5502Z2 is compatible with the following control panels:

- PC580/585 v2.3 and higher
- PC1555/1565 v2.3 and higher
- PC5008 v2.3 and higher
- PC5010 v2.0 and higher
- PC5015 v2.2 and higher

1.1 Before You Begin

This manual describes how to install, program and maintain PC5502Z2 keypads. Before you install PC5502Z2 keypads, you should have completed the following steps in your system installation:

1. Review your system's Installation Manual, and read this manual.
2. Plan the installation and wiring of the security system (see your system Installation Manual)
3. Install the control panel as described in the Installation Manual.
4. Install and enroll one system keypad (PC5508Z, PC5516Z, PC5532Z, or LCD5500Z) to use for programming the main control panel and for monitoring the status of the entire system. Mount the system keypad in an area accessible only by personnel authorized for security system access (e.g. a building supervisor). (See your system's *Installation Manual* for instructions.)

NOTE: *PC5502Z2 keypads will be "busy" whenever someone enters a [*][1-8] function on the system keypad.*

1.2 Installation Overview

To install and set up the PC5502Z2 keypads, follow these steps:

1. Mount and wire the PC5502Z2 (see *Section 2*)
2. Enroll the PC5502Z2 with the control panel (see *Section 3*)
3. Complete PC5502Z2 programming at the PC5502Z2 keypad (see *Section 4*)
4. Complete the control panel programming at the system keypad (see *Section 5*)

1.3 Specifications

- Connects to control panel via 4-wire Keybus
- Two keypad zone inputs (zone loop response time 500ms)
- Current draw: 17mA (standby), 25mA (max.)
- Five programmable function keys
- Ready (green), Armed (red) and System (yellow) status lights

Section 2: Installing the PC5502Z2

This section describes how to mount, wire, and apply power to the PC5502Z2 keypad.

2.1 Unpacking

The PC5502Z2 package includes the following parts:

- One PC5502Z2 keypad
- Four mounting screws
- One keypad inner door label
- One set of Fire, Auxiliary and Panic key labels

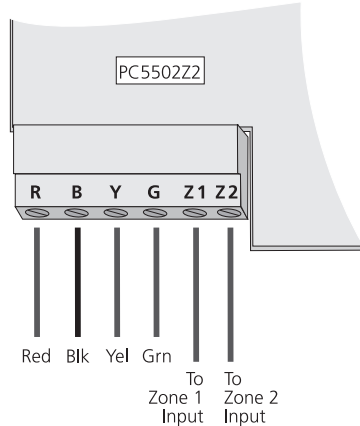
2.2 Mounting

You should mount the keypad where it is accessible to designated points of entry and exit. Once you have selected a dry and secure location, perform the following steps to mount the keypad:

1. Remove the keypad backplate by loosening the screw located at the base of the unit.
2. Secure the keypad backplate to the wall in the desired location. Use the screws provided.
3. Before attaching the keypad to its backplate, complete the keypad wiring as described in the next section.

2.3 Wiring

1. Before beginning to wire the unit, ensure that all power (AC transformer and battery) is disconnected from the control panel.
2. Connect the four Keybus wires from the control panel (red, black, yellow and green) to the keypad terminals (R B Y G). See the diagram at right:
3. You can connect two devices - such as door contacts - to the Z1 and Z2 terminals of the PC5502Z2. To connect the zone, run one wire from the device to the Z terminal and the other wire from the device to the B (black) terminal. For powered devices, run the red wire to the R (positive) terminal and the black wire to the B (negative) terminal. When using end of line supervision, connect the zone according to one of the configurations outlined in your system's *Installation Manual*.



NOTE: The PC5502Z2 zones will follow the end-of-line supervision option selected for the main panel. Please refer to your panel's *Installation Manual* for more information.

2.4 Applying Power

Once you have completed all the wiring, apply power to the control panel:

1. Connect the battery leads to the battery
2. Connect the AC transformer.

For more information on control panel power specifications, see the control panel *Installation Manual*.

NOTE: Do not connect the power until all wiring is complete.

2.5 Testing the System and PC5502Z2 Keypads

You cannot perform a system test from the PC5502Z2 keypad. To conduct a system test at the system keypad, please refer to your system's *Installation Manual* and *Instruction Manual*.

Now that you have connected the PC5502Z2, you will need to enroll it with the control panel. Please see section 3 for instructions.

Section 3: Enrolling the PC5502Z2

Once you have completed all the keypad wiring, you will need to enter a 2-digit number that tells the main control panel the slot assignment of the keypad.

The slot assignment tells the panel which keypad slots are occupied. The panel can then generate a fault when a keypad supervisory signal is not present.

NOTE: *When the PC5502Z2 supervisory signal is lost, the system will not sound an audible tamper, or a zone expander supervisory alarm unless the main panel is armed.*

There are eight available slots for keypads. PC5502Z2 keypads are always assigned to slot 11 by default. You must assign each keypad to its own slot (11 to 18) for it to be properly supervised by the system.

NOTE: *PC5502Z2 keypads should only be enrolled on partition 1.*

To enroll the PC5502Z2:

1. At the PC5502Z2 keypad, enter [*][8][Installer's Code]
2. Press [00] for Slot Assignment
3. Enter a two digit number to specify the slot assignment (11-18).
4. Press the [#] key twice to exit programming.
5. After you have assigned slots to all the keypads, go to the system keypad. Perform a supervisory reset by entering section [902] in the main panel Installer's programming. The panel will now supervise all assigned keypads and enrolled modules on the system.

Now that you have enrolled the PC5502Z2 on the system, you will need to program it. Please see section 4 for instructions.

Section 4: Programming

Now that you have wired and enrolled the PC5502Z2, you may want to change some of the programming options. You can set these options individually at each PC5502Z2. This section describes how to:

- Set up PC5502Z2 zones and zone options
- Program entry and exit times
- Set up quick arm and quick exit options
- Set up PC5502Z2 function keys and their options
- Program a new Master code
- Set up a local PC5502Z2 alarm
- Set up door chime options
- Set up keypad blanking options
- Reset the PC5502Z2 to factory default programming

Programming the PC5502Z2 keypads is similar to control panel programming at a system keypad. Complete all PC5502Z2 programming at each PC5502Z2 keypad. To program the main control panel, you must use a system keypad (PC5508Z, PC5516Z, PC5532Z, or LCD5500Z), or DLS software. You cannot enter the programming sections for the main panel from PC5502Z2 keypads.

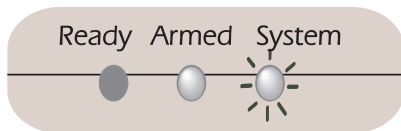
4.1 How to Program the PC5502Z2

This section describes how to program a PC5502Z2. It is a good idea to fill out the Programming Worksheets section before you program the PC5502Z2. For instructions on programming the main control panel from a system keypad, please refer to your system's *Installation Manual*.

The PC5502Z2 has its own Installer's programming sections. You cannot enter the main panel Installer's programming from the PC5502Z2 keypad.

To program the PC5502Z2:

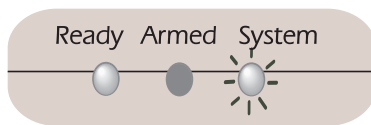
1. Enter [*][8][Installer's Code]. The default Installer's code is the same as that for the main control panel.



The keypad sounds 6 quick beeps, and the System light flashes to indicate that you are in programming mode.

The Armed light turns on to indicate that the panel is waiting for the two-digit programming section number.

2. Enter the two-digit section number corresponding to the section you wish to program.



The keypad sounds 4 quick beeps and the Armed light turns off.

The Ready light turns on to indicate that the PC5502Z2 is waiting for the information to be entered.

If the section number entered is invalid the keypad will sound a two second error tone.

3. Enter the information required to complete the section programming:

If you are programming a data entry section (for example section [25] Master code), enter the required number of decimal digits. When you have entered the maximum number of digits in the programming section the keypad sounds 4 quick beeps, the Ready light turns off, and the Armed light turns on.

If you are programming a toggle option section (an option you can turn on or off), press [1] to turn the option on or off. The "1" light will be on if the option is on, and off if the option is off. When the option is set correctly, press [#]. The keypad sounds 4 quick beeps, the Ready light turns off, and the Armed light turns on.

4. After you are finished programming a section, you can enter another 2-digit section number to program the next section.
5. When you are finished programming, press [#]. The keypad will exit Installer's programming.

NOTE: After you exit from Installer's programming, all bypassed zones will be cleared (unbypassed).

4.2 Setting up PC5502Z2 Zones and Zone Options

Each PC5502Z2 keypad can supervise two zones. By default, zone 1 is programmed as (01) Delay 1, and zone 2 is programmed as (02) Instant. If you need to change how the zones operate, you can select from these zone definitions:

(00) Null Zone: The zone is vacant. Program unused zones as null zones.

(01) Delay 1: This zone type is normally used for entry/exit doors. It can be violated during the exit delay time without causing an alarm. Once the exit delay has expired, opening the zone will start the entry delay timer. During the entry delay time, the keypad buzzer will sound steadily to advise the user that the system should be disarmed. If the panel is disarmed before the entry time expires, no alarm will be generated.

(02) Instant: This zone type will cause an instant alarm if it is violated when the panel is armed. Typically, this zone is used for windows, patio doors or other perimeter zones, and glass break detectors.

(03) Interior: This zone will not cause an alarm if violated during the entry delay. If the zone is violated before the entry delay has begun, it will cause an instant alarm. Typically, this zone is used for interior protection devices, such as motion detectors.

(04) Stay/Away: This zone type works similarly to the Interior zone type, except that it will be automatically bypassed under the following conditions:

- When the panel is armed in the Stay Mode. (See “Programming Function Keys” on page 10.)
- When the panel is armed without entry delay (using [*][9]).
- When the panel is armed with an access code and a Delay type zone is NOT tripped during the exit delay.

The automatic bypass prevents the user from having to manually bypass interior type zones when stay arming. This zone is typically used for interior protection devices, such as motion detectors.

(05) 24 Hour Burglary: If this zone is violated when the system is either armed or disarmed, the PC5502Z2 will immediately sound an alarm. If the Local Alarm Timer is programmed, the PC5502Z2 will wait the programmed amount of time, and then pass the alarm on to the main panel. The main panel will then immediately communicate the alarm to the central station. The bell will sound until the Bell Cutoff time expires, or until a code is entered on the system keypad.

To change the zone definitions:

1. At the PC5502Z2 keypad, enter [*][8][Installer's Code]
2. Enter [10] to change the zone definitions.
3. Enter a two-digit zone definition number from the list below for zone 1. The keypad sounds 3 quick beeps.
Enter a two-digit zone definition number for zone 2. The keypad sounds 4 quick beeps.

Enter:	To select this zone definition:
00	Zone not used
01	Delay 1
02	Instant
03	Interior
04	Stay/Away
05	24 Hour Burglary

4. If you want, you can now enter another programming section; or to exit programming, press [#].

Programing zone options

In addition to the zone definitions described above, the PC5502Z2 has additional zone options that define how the zones work. You can program the following options at each PC5502Z2 keypad.

To access any option:

1. At the PC5502Z2 keypad, enter [*][8][Installer's Code]
2. Enter the 2-digit section number of the option you want to change (see options listed below).
3. To turn the option on or off, press [1].
4. When the option is set correctly, press [#].
5. If you want, you can now enter another programming section; or to exit programming, press [#].

[34] Interior zones force arm

This option is on by default. When this option is turned on, the PC5502Z2 can be armed when interior zones (zone types 03 and 04) are open. If an interior zone is open, when a user arms their area, the PC5502Z2 will ignore the zone and arm itself. The zone will become armed when it is closed (or restored).

[35] Delay zones force arm

This option is off by default. When this option is turned on, the PC5502Z2 can be armed when delay zones (zone type 01) are open. If a delay zone is open, when a user arms their area, the PC5502Z2 will ignore the zone and arm itself. The zone will become armed when it is closed (or restored)

[36] Stay/Away zones interior (option on) or delay (option off)

This option is on (interior) by default. When this option is turned on, zones programmed as type (04) will work as described in the Stay/Away zone description (page 6). When this option is turned off (delay), zones programmed as type (04) will operate similarly to Interior Stay/Away zones, except that they will always provide an entry delay. Typically, this zone is used for interior protection devices, such as motion detectors. This zone option helps to prevent false alarms, since it always provides an entry delay time for the user to turn off the panel.

4.3 Programming Zone Bypass Options

You can program the PC5502Z2 so that users will be able to bypass zones 1 and 2. Users can use the zone bypassing function when access is needed to part of the protected area while the system is armed, or if zones are temporarily out of service. Bypassed zones will not cause an alarm.

By default, the options to allow bypassing of zones 1 and 2 are turned on. To turn off user bypassing:

1. At the PC5502Z2 keypad, enter [*][8][Installer's Code]
2. Enter programming section [38] for zone 1, or [39] for zone 2.
3. To turn zone bypassing on or off, press [1].
4. When the option is set correctly, press [#].
5. If you want, you can now enter another programming section; or to exit programming, press [#].

Zone bypassing requires code

You can also program the PC5502Z2 so that a user will need to enter an access code in order to bypass zones. This option is off by default. To turn this option on:

1. At the PC5502Z2 keypad, enter [*][8][Installer's Code]
2. Enter programming section [40].
3. To turn the option on or off, press [1].
4. When the option is set correctly, press [#].
5. If you want, you can now enter another programming section; or to exit programming, press [#].

4.4 Programming Entry and Exit Times

Each PC5502Z2 has one exit delay timer and one entry delay timer. You can change the entry and exit times for each PC5502Z2:

1. Enter Installer's Programming by pressing [*][8][Installer's Code]
2. Enter [20].
3. Enter 3 digits (001 - 255 seconds) for the entry time. The keypad sounds 3 quick beeps.
4. Enter 3 digits (001 - 255 seconds) for the exit time. The keypad sounds 4 quick beeps.
5. If you want, you can now program another section. To exit programming, press [#].

4.5 Programming Quick Arm and Quick Exit Options

You can program the following options at each PC5502Z2 keypad. To access any option:

1. At the PC5502Z2 keypad, enter [*][8][Installer's Code]
2. Enter section [30] or [31].
3. To turn the option on or off, press [1].
4. When the option is set correctly, press [#].
5. If you want, you can now enter another programming section; or to exit programming, press [#].

[30] Quick Arm

This option is on by default. If the Quick Arm option is turned on, users can arm the PC5502Z2 without an access code by entering [*][0] or by pressing the Stay or Away function key. If the Quick Arm option is turned off, users will need to enter an access code after pressing a function key.

[31] Quick Exit

NOTE: *This feature must be turned off for UL installations.*

This option is off by default. If the Quick Exit option is turned on, a user will be able to leave the premises through a Delay zone when the PC5502Z2 is armed, without having

to disarm and re-arm the system. This option must be turned on before the Quick Exit function key will work.

A user can activate the quick exit by pressing [*][0], or (if programmed) the Quick Exit function key. When quick exit is activated, the panel will provide a two minute window for the user to exit the premises. During this time, the panel will ignore only one activation of a Delay zone. When the Delay zone is secured, the panel will end the two minute quick exit delay.

If a second Delay zone is tripped, or if the zone is not restored after two minutes, the panel will begin the entry delay timer.

NOTE: *If the Exit Delay is in progress, performing a Quick Exit will not extend the Exit Delay.*

4.6 Programming Function Keys

By default, the 5 function keys on the keypad are programmed as Stay Arm (01), Away Arm (02), Chime (04), Sensor Reset (09) and Quick Exit (10). To use a function, press and hold the appropriate key for two seconds. Users may also need to enter an access code after pressing the function key, depending on the programming in sections [45] - [49] (see below).

You can change the function of each function key on every keypad.

To change the function keys, enter the following at the PC5502Z2 keypad:

1. Enter Installer's Programming by pressing [*][8][Installer's Code]
2. Enter [01] to [05] to change the programming for function keys 1 to 5 (i.e. enter [01] to change function key 1, [02] to change function key 2).
3. Enter a two digit number from the list below to select the function you want the key to perform:

Enter:	For this function:
00	Key Not Used
01	Stay Arm
02	Away Arm
03	[*][9] No Entry Arm
04	[*][4] Chime On / Off
05	[*][1] Bypass Mode
06	[*][3] Alarm Memory
07	[*][5] User Programming
08	Command Output 1 [*][7][1]
09	Command Output 2/Sensor Reset [*][7][2]
10	[*][0] Quick Exit
11	Command Output 3 [*][7][3]
12	Command Output 4 [*][7][4]

4. Repeat steps 2 to 3 for each key you want to program.
5. If you want, you can now enter another programming section; or to exit programming, press [#].

Programming if access code required for function keys

If you turn on any of the following options, users will have to enter an access code after pressing a function key before the system will perform the function. You can turn on the access code requirement for each function key on each PC5502Z2.

NOTE: *If you turn on the main panel Function Key Requires Code option (i.e. if you disable the Quick Arming option), users will always have to enter their code when using a function key. If you turn on **both** the main panel and PC5502Z2 Function Key Requires Code options, users will have to enter their code twice when using a function key.*

To program the access code requirement for the function keys:

1. At the PC5502Z2, enter Installer's Programming by pressing [*][8][Installer's Code]
2. Enter one of the following sections to turn on the access code requirement for a particular function key:
 - [45] for Function Key 1
 - [46] for Function Key 2
 - [47] for Function Key 3
 - [48] for Function Key 4
 - [49] for Function Key 5
3. Press [1] to turn the option on. Press [1] again to turn the option off.
4. When the option is set correctly, press [#].
5. If you want, you can now enter another programming section; or to exit programming, press [#].

4.7 Programming the Master Code

Each PC5502Z2 has two access codes: one Master code, and one regular access code programmed by the master user. Both access codes are 4 digits. Six digit access codes are not supported on the PC5502Z2. You can only program the Master code in Installer's programming. Master users can program both the Master code, and the regular access code in [*][5] programming.

To program the Master code:

1. Enter Installer's programming by pressing [*][8][Installer's Code]
2. Enter [25].
3. Enter 4 digits for the Master code.
4. If you want, you can now enter another programming section; or to exit programming, press [#].

4.8 Setting Up the PC5502Z2 to Sound Alarms Locally

You can set up the PC5502Z2 so that if an alarm occurs, the keypad will sound the alarm locally for a programmed amount of time before passing the alarm condition on to the main panel. If an alarm occurs on a PC5502Z2, the following will occur:

- PC5502Z2 will sound an alarm tone on the keypad buzzer and begin counting down the local alarm duration timer.
- If the alarm is false, a user can cancel the local alarm by entering their access code on the keypad.
- Once the local alarm duration timer countdown ends, the PC5502Z2 will cause an alarm condition on its corresponding keypad zone on the main panel. This panel keypad zone will be instantly violated and then restored.
- The main panel will then sound a general alarm, and (if programmed) transmit the alarm information to the central station. When the main panel bell is sounding, the PC5502Z2 cannot be armed.

You can program the amount of time the alarm will sound locally in [50] Local Alarm Duration Timer. Program an amount of time from 001 to 255 seconds. If you program 000 seconds, the PC5502Z2 will not sound a local alarm, and will pass alarm information on to the panel immediately.

To program the Local Alarm Duration Timer:

1. At the PC5502Z2 keypad, enter [*][8][Installer's Code]
2. Enter [50].
3. Enter a 3-digit number for the number of seconds.
4. If you want, you can now enter another programming section; or to exit programming, press [#].

4.9 Setting Up Door Chime Options

You can set up each PC5502Z2 zone to activate the door chime feature. By default, the door chime feature is turned on for both zones. Users will also be able to turn the door chime feature on and off using [*][4], however sections [41] and/or [42] must be turned on first.

To turn off the door chime for a zone:

1. At the PC5502Z2 keypad, enter [*][8][Installer's Code]
2. Enter [41] for zone 1, or [42] for zone 2.
3. To turn the door chime on or off for the zone, press [1].
4. When the option is set correctly, press [#].
5. If you want, you can now enter another programming section; or to exit programming, press [#].

4.10 Programming Keypad Blanking Options

NOTE: If you program Keypad Blanking at the PC5502Z2 keypad, you should disable the Keypad Blanking option in the main panel.

NOTE: Do not turn on the “Code Required to Remove Keypad Blanking” option on the main panel, if users will need to activate command outputs from the PC5502Z2 keypad. The option will interfere with the ability of users to activate the command outputs.

You can program the following options at each PC5502Z2 keypad. To access any option:

1. At the PC5502Z2 keypad, enter [*][8][Installer's Code]
2. Enter section [32] or [33].
3. To turn the option on or off, press [1].
4. When the option is set correctly, press [#].
5. If you want, you can now enter another programming section; or to exit programming, press [#].

[32] Keypad Blanking

This option is off by default. If the Keypad Blanking option is turned on, the PC5502Z2 will turn off all keypad lights when no keys are pressed for 30 seconds. The keys, however, will remain backlit. The PC5502Z2 will turn the lights back on if entry delay begins or an audible alarm occurs. The lights will also come on if a key is pressed.

[33] Keypad Blanking Requires Code for Removal

This option is set to off by default. If this option is on, the PC5502Z2 will not turn the keypad lights back on until a valid access code is entered.

4.11 Resetting the PC5502Z2 to Factory Default Programming

NOTE: To reset the PC5502Z2 to factory default settings, there must be no alarms in memory.

To reset the PC5502Z2 programming:

1. At the PC5502Z2 keypad, enter [*][8][Installer's Code]
2. Enter section [99].
The PC5502Z2 programming is reset to the factory default settings.

Section 5: Setting Up Panel Keypad Zones

Now that you have programmed the PC5502Z2, you will also need to program the panel to monitor the PC5502Z2 keypad zones.

NOTE: *PC5502Z2 keypads will be “busy” (the System light will turn on) whenever someone enters a [*][1-8] function on the system keypad.*

5.1 Assigning the PC5502Z2 to a Keypad Zone

Each PC5502Z2 occupies one keypad zone on the main control panel. For proper operation, you must assign each PC5502Z2 to a panel zone number.

Before you can do this, you must have enrolled all installed PC5502Z2 keypads into individual slots. (See “Enrolling the PC5502Z2” on page 4.)

To assign the PC5502Z2 to a keypad zone:

1. At the system keypad (*not the PC5502Z2 keypad*), enter Installer's programming ([*][8][Installer's code]).
2. Enter programming section [020] to assign the zones.
3. There are eight data entry sections, one for each keypad slot. For each slot with a PC5502Z2 keypad, enter a 2-digit zone number. For example, to assign a PC5502Z2 to zone 3, enter [03].

To skip a data entry section, press both  keys (LED keypad), or scroll using the [>] key (LCD keypad).

4. To exit, press [#]. Record your programming choices in the Programming Worksheets.

NOTE: *Keypad zones 1-8 will replace zone terminals Z1-Z8 on the control panel.*

5.2 Programming Zone Definitions in the Panel

In addition to programming the zone definitions in each PC5502Z2 keypad, you must also program a zone definition in the main control panel so that the system can effectively monitor each PC5502Z2.


1. At the system keypad (*not the PC5502Z2 keypad*), enter Installer's programming ([*][8][Installer's code]).
2. Enter one of programming sections [001] - [004], depending on the zone number of the PC5502Z2 keypad:

Enter section: For system zones:

[001]	01 - 08
[002]	09 - 16
[003]	17 - 24
[004]	25 - 32

3. In each zone programming section there are eight data entry sections, one for each system zone. For each PC5502Z2 zone, enter a 2-digit zone definition. We recommend that you program each PC5502Z2 keypad zone as a 24 Hour Burglary zone (11). This will ensure that alarm information from the PC5502Z2 keypad will cause an instant system alarm.

To skip a data entry section, press both  keys (LED keypad), or scroll using the [>] key (LCD keypad).

For example, to program system zone 03 in section [001], press [>] or both  keys to skip the first two data entry sections. Enter the zone definition in the next section. To exit, press [#].

NOTE: If you program 24-hour Supervisory Buzzer zones, then when the supervisory buzzer sounds users will not be able to arm the PC5502Z2 until a valid access code is entered on the system keypad.

4. When you are finished programming system zone definitions, press [#] to exit. Record your programming choices in the Programming Worksheets.

Section 6: Programming Worksheets

Record all PC5502Z2 programming information on these worksheets. Record all main control panel programming information in the *Programming Worksheets* that came with your system.

For the Record

Customer: _____

Address: _____

Telephone: _____ Installation Date: _____

PC5502Z2 Location: _____

PC5502Z2 Keypad Programming

[00] Keypad Enrollment (Section 3: "Enrolling the PC5502Z2" on page 4)

Valid entries are 11-18; i.e. enter [11] for slot 1, [12] for slot 2, etc. Default = 11

NOTE: PC5502Z2 keypads should only be enrolled on partition 1.

Slot: _____

[01]-[05] Function Key Assignments (4.6 "Programming Function Keys" on page 10)

	Function Key 1	Function Key 2	Function Key 3	Function Key 4	Function Key 5
Defaults:	01	02	04	09	10
	_____	_____	_____	_____	_____

Function Key Options:

Enter:	For this function:
00	Key Not Used
01	Stay Arm
02	Away Arm
03	[*][9] No Entry Arm
04	[*][4] Chime On / Off
05	[*][1] Bypass Mode
06	[*][3] Alarm Memory
07	[*][5] User Programming
08	Command Output 1 [*][7][1]
09	Command Output 2 [*][7][2]
10	[*][0] Quick Exit
11	Command Output 3 [*][7][3]**
12	Command Output 4 [*][7][4]**

** Available on PC5008, PC5010 and PC5015 control panels only.

[10] Zone Definitions (4.2 "Setting up PC5502Z2 Zones and Zone Options" on page 6)

Valid entries: 00 - 04

Zone 1

Zone 2

Default = 01

Default = 02

Enter:	To select this zone definition:
00	Zone not used
01	Delay 1
02	Instant
03	Interior
04	Stay/Away
05	24 Hour Burglary

[20] Entry and Exit Times (4.4 "Programming Entry and Exit Times" on page 9)

Valid entries: 001 - 255 seconds

Entry Time

Exit Time

Default = 030

Default = 120

[25] Master Code (4.7 "Programming the Master Code" on page 11)

Default = 1234

PC5502Z2 Programming Options

Enter the 2-digit section number, then press [1] to turn each option on or off.

Section No.	Option Name	On/Off	Default	Section	Page #
[30]	Quick Arm	<input type="checkbox"/>	ON	4.5	9
[31]	Quick Exit	<input type="checkbox"/>	OFF	4.5	9
[32]	Keypad Blanking	<input type="checkbox"/>	OFF	4.8	12
[33]	Keypad Blanking Requires Code	<input type="checkbox"/>	OFF	4.8	12
[34]	Interior Zones Force Arm	<input type="checkbox"/>	ON	4.2	6
[35]	Delay Zones Force Arm	<input type="checkbox"/>	OFF	4.2	6
[36]	Stay/Away Zones Interior/Delay	<input type="checkbox"/>	ON	4.2	6
[38]	Zone 1 Bypassable	<input type="checkbox"/>	ON	4.3	8
[39]	Zone 2 Bypassable	<input type="checkbox"/>	ON	4.3	8
[40]	Zone Bypassing Requires Code	<input type="checkbox"/>	OFF	4.3	8
[41]	Zone 1 Door Chime	<input type="checkbox"/>	ON	4.9	12
[42]	Zone 2 Door Chime	<input type="checkbox"/>	ON	4.9	12
[45]	Function Key 1 Requires Code	<input type="checkbox"/>	OFF	4.6	10
[46]	Function Key 2 Requires Code	<input type="checkbox"/>	OFF	4.6	10
[47]	Function Key 3 Requires Code	<input type="checkbox"/>	OFF	4.6	10
[48]	Function Key 4 Requires Code	<input type="checkbox"/>	OFF	4.6	10
[49]	Function Key 5 Requires Code	<input type="checkbox"/>	OFF	4.6	10

[50] Local Alarm Duration Timer

(4.8 "Setting Up the PC5502Z2 to Sound Alarms Locally" on page 12)

Valid entries: 001 - 255 seconds

Default = 120 **Duration Timer:**

[99] Reset PC5502Z2 to Factory Default Programming

NOTE: To reset the PC5502Z2 to factory default settings, there must be no alarms in memory.

PC5502Z2 Keypad Zone Assignment

(5.1 "Assigning the PC5502Z2 to a Keypad Zone" on page 14)

Program the keypad zone assignment in the main panel Installer's programming at the system keypad. Refer to your system's Installation Manual for instructions.

Keypad Zone Assignment:

PC5502Z2 Keypad Zone Definition

(5.2 "Programming Zone Definitions in the Panel" on page 15)

Program the keypad zone definition in the main panel Installer's programming at the system keypad. Refer to your system's Installation Manual for instructions.

Keypad Zone Definition:

FCC COMPLIANCE STATEMENT

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

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This Class [B] digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe [B] est conforme à la norme NMB-003 du Canada.



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