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.

Installation Manual
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 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 system that is not maintained or that is not kept in proper working order may not perform as designed. An evaluation by the fire and/or police department is highly recommended if this service is available.

Crimal 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 uses replaceable batteries which 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 sensing device has a battery monitor to detect low battery conditions, it is the responsibility of the user to periodically check the battery condition to determine if the batteries need to be replaced, this monitor may fail to operate as expected. Regular testing and maintenance by a security professional are required to keep the system in good working order.

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 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. There are limitations of the equipment. 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 roof, 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.

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, ceiling, ceilings, or glass partitions. Class door and glass doors and windows may be equipped with internal or unintentional 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 awaken someone sleeping if there is an intervening wall or door. If warning devices are located on a different level of the residence or premises, then it is likely that the occupants will be alerted or awakened. Audible warning devices may be interfered with by other noise sources such as stereo, radios, television, 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, the telephone lines 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 people don't think about what could happen if 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.
PC585 Wiring Diagram

**WARNING**
High voltage, Disconnect AC power and telephone lines prior to servicing.

Battery capacity for standby is at least 24 hours. Example: DSC model BD7-12

---

**IMPORTANT**
Please see the PC585 Installation Manual, section 2.10, for important information.

---

**GROUND CONNECTION**
Wire to main power and make sure ground connector is protected. Not to be grounded water pipes, etc.

---

**PGM CONNECTIONS**

**LED INDICATOR**

**RELAY OUTPUT**

**PGM2 ONLY INPUTS**

---

**TYPICAL ZONE CIRCUITS**

**END OF LINE RESISTORS: 5600Ω**

---

**4-WIRE SMOKE DETECTORS**

Smoke Detector must be bridging type (such as DSC M240 series).
The PGM Output must be programmed for sensor reset (Section 2.09).

---

**RESISTOR IDENTIFICATIONS**

---

**WARNING:** Not to be removed by anyone except occupant.

---

This device complies with Parts 15 and 68 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Reg.No. R186290X-0000-ALC, REN = 6.19 Plug Type: NUX
INDUSTRY CANADA, REN = 6.1 MADE IN CANADA

---

**IMPORTANT:**
The equipment ALARM CONTROLLER P585 is designed to be used within an environment that provides the pollution degree max 2 and overvoltage category B - NONHazardous LOCATIONS, Indoor only. The equipment is FIXED and PERMANENTLY CONNECTED and is designed to be installed by SERVICE PERSONNEL, or equivalent. ONLY, (e.g. persons having appropriate technical training and experience necessary to be aware of hazards to which they are exposed in performing that task).

1. The connection to the mains supply must be made as per the local authorities' rules and regulations. (In the UK, as per B.5.6075.1), An appropriate disconnect device must be provided as part of the building installation, Where it is not possible to rely on the identification of the NEUTRAL, in the AC MAINS SUPPLY, the disconnecting device must disconnect both poles simultaneously (LINE and NEUTRAL).

2. If during the installation a knockout is removed, it is the installer's responsibility to ensure that the same degree of protection for the cabinet is provided by the use of buildings, fillings, etc.

3. The cabinet must be secured to the building structure before operation.

4. Internal wiring must be routed in a manner that prevents: - excessive strain on wire and on terminal connections; - loosening of terminal connections; - damage of conductor insulation.

5. Regarding the power supply: It must be PERMANENTLY CONNECTED. In E.U. countries, it must meet the applicable requirements of the Low Voltage Directive and protected, as per EN60950 requirements. In all other countries, it must be of an approved type acceptable to the local authorities.

6. The ground connection must be as shown above, or equivalent.

7. It is the end-user and/or installer's responsibility to ensure that the disposal of the used batteries is made according to the waste recovery and recycling regulations applicable to the intended market.
1.1 Specifications

**Downloading Software Support**
- PC585 v2.2C uses DLS-3 v1.3 and up.

**Flexible Zone Configuration**
- 4 fully programmable zones; system expandable to eight zones using keypad zone inputs and wireless zones
- 38 access codes: one master code, one guard code, two duress codes, two supervision codes and 32 general access codes
- 29 zone types; 8 programmable zone attributes
- Normally closed, single EOL and double EOL zone wiring
- Eight wireless zones available using the PC5132 Wireless Receiver

**Audible Alarm Output**
- 700mA Supervised Bell Output (current limited at 3 amps), 12Vdc
- Steady or Pulsed Output

**EEPROM Memory**
- Does not lose programming or system status on complete AC and Battery failure

**Programmable Outputs**
- Two programmable voltage outputs; 21 programmable options
- PGM1 = 300mA; PGM2 = 50mA

**Powerful 1.5 Amp Regulated Power Supply**
- 550 mA Auxiliary Supply, 12 Vdc
- Positive Temperature Coefficient (PTC) components replace fuses
- Supervision for loss of AC power, low battery

**Power Requirements**
- Transformer = 16.0 VAC, 40VA
- Battery = 12 volt 4 Ah minimum rechargeable sealed lead acid battery

**Remote Keypad Specifications**
- Keypads available:
  - PC1555RKZ 8-zone LED keypad with zone input
  - PC550222 2-zone LED keypad with two zone inputs
  - PC5508Z 8-zone LED keypad with zone input
  - LCD5500Z programmable message LCD with zone input
  - LCD5501Z fixed message LCD keypad with zone input
- All keypads have five programmable function keys
- Connect up to eight keypads
- 4-wire (Quad) connection to Keybus
- Built in piezoelectric buzzer

**Digital Communicator Specifications**
- Supports major communication formats including SIA and Contact ID
- Residential Dial format
- Event-initiated personal paging
- Three programmable telephone numbers
- Supports GSM1000 cellular communication
- Two account numbers
- DTMF dialing
- DPDT line seizure
- R-button feature
- Split reporting of selected transmissions to each telephone number

**System Supervision Features**
- The PC585 continuously monitors a number of possible trouble conditions including:
  - AC power failure  AUX Power Supply Trouble
  - Fault by zone  Loss of internal clock
  - Tamper by zone  Bell output trouble
  - Fire trouble  Telephone line trouble
  - Failure to communicate  Low battery condition (panel)
  - Low battery by device (wireless)
  - Module fault (supervisory or tamper)

**False Alarm Prevention Features**
- Audible Exit Delay  Quick Exit
- Urgency on Entry Delay  Cross Zone Burglary Alarm
- Communication Delay  Rotating Keypress Buffer

**Additional Features**
- Auto-arm at specified time
- Keypad-activated alarm output and communicator test
- All modules connect to the system via a four wire Keybus up to 1000/305m from main panel
- An event buffer which records the past 128 events with both the time and date at which they occurred; buffer can be printed using PC5400 serial interface module, or viewed with the LCD5500Z keypad.
- Supports the addition of the PC5132 wireless receiver for integration of wireless devices
- Uploading and downloading capability
- Local downloading capability through the use of the PC-LINK adaptor
- Added Keypad fault protection: clock and data outputs have been programmed to withstand shorts to +12v to prevent control panel damage

1.2 Additional Devices

In addition to the information below, see the back cover for a DSC module compatibility table.

**PC5132 Wireless Receiver**
The PC5132 Wireless Receiver can be used to connect up to 8 wireless devices to the system. All devices are spread spectrum, 433MHz, fully supervised devices which use standard ‘AAA’ or ‘AA’ alkaline batteries.

Devices available are as follows:

- **WLS904/WLS904PL Wireless Motion Detector**
- **WLS925L Wireless Universal Transmitter**

Adds wireless door or window contacts to your system.
WLS906 Wireless Smoke Detector
WLS907 Wireless Slimline Universal Transmitter
A smaller wireless door or window contact.

WLS909/WLS919-433 Wireless Key
Adds a simple and mobile method of arming and disarming to the system, as well as one-button access to several programmable functions.

WLS912L-433 Glassbreak Detector

WLS914-433 Pet Immune Motion Detector (NA only)

PC5400 Printer Module
The PC5400 Printer Module allows the panel to print out all events that occur on the system to any serial printer. The printout will contain the time, date and the event that occurred.

GSM1000 Cellular Communicator
The GSM1000 Cellular Communicator can be used three different ways: as the sole communicator for the panel, as a backup for either or both telephone numbers or as a redundant backup to the land line communicator where the panel will call both the land line and via the GSM1000.

Cabinets
Several different cabinets are available for the PC585 modules. They are as follows:

PC5003C Cabinet
Main control cabinet for the PC585 main panel. Dimensions 288mm x 298mm x 78mm / 11.3” x 11.7” x 3” approximately.

PC500 Cabinet with Removable Door
Main control cabinet for the PC585 main panel. Dimensions 213mm x 235mm x 78mm / 8.4” x 9.25” x 3” approximately.

PC5004C Cabinet
Cabinet to house the PC5400 Printer Module. Dimensions 229mm x 178mm x 65mm / 9” x 7” x 2.6” approximately.

1.3 Out of the Box
Please verify that the following components are included in your system:

- one PC5003C main control cabinet
- one PC585 main control circuit board
- one PC1555RKZ keypad with zone input
- one Installation Manual with programming worksheets
- one Instruction Manual for the end user
- one hardware pack consisting of:
  - one mylar cabinet label
  - four plastic circuit board standoffs
  - eight 5600Ω (5.6K) resistors
  - one 2200Ω (2.2K) resistor
  - one 1000Ω (1K) resistor
  - ground connection assembly
  - one cabinet door plug
Section 2: Getting Started

The following sections provide a thorough description of how to wire and configure devices and zones.

2.1 Installation Steps

Read this section completely before you begin. Once you have an overall understanding of the installation process, carefully work through each step.

Step 1: Create a Layout

Draw a rough sketch of the building to get an idea of where all alarm detection devices, keypads and other modules are to be located.

Step 2: Mounting the Panel

Mount the panel in a dry area close to a power source and the incoming telephone line. Before attaching the cabinet to the wall, be sure to press the four circuit-board mounting studs into the cabinet from the back. After you have attached the cabinet to the wall, stick the provided DSC logo sticker on the front of the cabinet.

NOTE: You must complete all wiring before connecting the battery, or applying AC to the panel.

Step 3: Wiring the Keybus (Section 2.3)

Wire the Keybus to each of the modules following the guidelines provided in section 2.3 of this manual.

Step 4: Zone Wiring (Section 2.8)

You must power down the control panel to complete all zone wiring. Please refer to section 2.8 “Zone Wiring” when connecting zones using normally closed loops, single EOL resistors, double EOL resistors, Fire zones and Keystwitch Arming zones.

Step 5: Complete Wiring (Section 2.2)

Complete all other wiring including bells or sirens, telephone line connections, and ground connections following the guidelines provided in section 2.2.

Step 6: Power up the Control

Once all zone and Keybus wiring is complete, power up the control panel. First, connect the red battery lead to the positive battery terminal; connect the black lead to negative. Then, connect the AC.

NOTE: Connect the battery before connecting the AC. The panel will not power up on the battery connection alone.

Step 7: Keypad Assignment (Section 2.5)

In order for keypads to be properly supervised, each must be assigned to a different slot. Please follow the guidelines provided in Section 2.5 when assigning keypads.

Step 8: Supervision (Section 2.6)

The supervision of each module by the panel is automatically enabled upon power up. Please verify that all modules appear on the system according to the instructions in section 2.6.

Step 9: Programming the System (Sections 4 & 5)

Section 4 explains how to program the panel. Section 5 contains a complete description of the various programmable features, which options are available and how they function. Fill out the Programming Worksheets completely before attempting to program the system.

Step 10: Testing the System

Test the panel thoroughly to ensure that all features and functions are operating as programmed.

2.2 Terminal Descriptions

Battery Connection

A 12V 4Ah rechargeable battery is used as a backup source of power in the event of an AC power failure. The battery also provides additional current when the panel’s demands exceed the power output of the transformer, such as when the panel is in alarm.

NOTE: Do not connect the battery until all other wiring is complete. Connect the battery before connecting the AC.

Connect the RED battery lead to the positive battery terminal; connect the BLACK lead to negative.

The High Current / Standard Battery Charge option (section [701], option [7]) allows you to choose between a high current battery charge and the standard battery charge rate.

Enable the Automatic Battery Check option to have the panel perform a 10 second battery test upon disarming and at 1200h (noon).

NOTE: The panel will not perform the Automatic Battery Check if there is no AC present on the system.

AC Terminals – AC

The panel requires a 16VAC, 40VA transformer. Connect the transformer to an AC source and connect the transformer to these terminals.

The panel can be programmed to accept a power line frequency of either 50Hz AC or 60Hz AC in programming section [701], option [1].

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

Auxiliary Power Terminals – AUX+ and AUX-

These terminals provide up to 550 mA of additional current at 12 Vdc for devices requiring power. Connect the positive side of any device requiring power to the AUX+ terminal, the negative side to AUX- (ground). The AUX output is protected. This means that if too much current is drawn from these terminals (such as a wiring short), the panel will temporarily shut off the output until the problem is corrected.

Bell Output Terminals – BELL+ and BELL-

These terminals provide up to 700 mA of continuous current at 12 Vdc for powering bells, sirens, strobes or other warning-type equipment. Connect the positive side of any alarm warning device to BELL+, the negative side to BELL–. Please note that the Bell output is protected: if too much current is drawn from these terminals (such as a wiring short), the Bell PTC will open. Three amps can be drawn for short periods only.

The Bell output is supervised. If no alarm warning devices are in use, connect a 1000Ω resistor across BELL+ and BELL– to prevent the panel from displaying a trouble condition. For more information, please refer to section 3.4 "[*] Commands".
Keybus Terminals – AUX+, AUX-, YEL, GRN
The Keybus is used by the panel to communicate with modules and vice versa. Each module has four Keybus terminals that must be connected to the four Keybus terminals on the panel. For more information, see section 2.3 “Keybus Operation and Wiring”.

Programmable Output Terminals – PGM1 and PGM2
Each PGM output is designed so that when activated by the panel, the terminal will switch to ground. PGM1 can sink up to 300mA of current. Connect the positive side of the LED or buzzer to AUX+, the negative side to PGM1. If more than 300 mA of current are required, a relay must be used. Please study PGM wiring in the accompanying diagram. PGM2 operates similarly to PGM1. However, PGM2 can only sink up to 50mA of current. For a list of the programmable output options, see section 5.11 “PGM Output Options”.

Zone Input Terminals – Z1 to Z4
Each detection device must be connected to a zone on the control panel. We suggest that one detection device be connected to each zone; wiring multiple detection devices to a single zone, however, is possible. For zone wiring specifics, please see section 2.8 “Zone Wiring”.

Telephone Connection Terminals – TIP, RING, T-1, R-1
If a telephone line is required for central station communication or downloading, connect an RJ-31X telephone jack in the following manner:

Example of Keybus Wiring
NOTE: Module (A) is correctly wired within 1,000'/305m of wire from the panel. Module (B) is correctly wired within 1,000'/305m of wire from the panel. Module (C) is NOT wired correctly as it is further than 1,000'/305m from the panel, in wire distance.

2.4 Current Ratings – Modules and Accessories
In order for the PC585 system to operate properly, the power output capabilities of the main control and the expansion devices must not be exceeded. Use the data presented below to ensure that no part of the system is overloaded and cannot function properly.

PC585 (12 Vdc)
AUX+:........550mA: Subtract the listed rating for each keypad, expansion module and accessory connected to AUX+ or Keybus.
BELL:..........700mA continuous rating; 3.0A short term. Available only with standby battery connected.

PC585 Device Ratings (at 12 Vdc)
- LCD5500Z Keypad: 85mA
- PC1555RKZ Keypad: 85mA
- PC5508Z Keypad: 85mA
- PC5400 Serial Module: 65mA
- PC5132 Wireless Receiver: 125mA

Other Devices
Please read the manufacturer’s literature carefully to determine the maximum current requirements for each device—during activation or alarm—and include the proper values for loading calculations. Connected devices must not exceed system capabilities during any possible operational mode.

2.5 Keypad Assignment
There are eight available slots for keypads. LED keypads by default are always assigned to slot 1. LCD5500Z keypads are always assigned to slot 8. You will need to assign each keypad to its own slot (1 to 8). Keypad assignment is required, as it tells the panel which slots are occupied. The panel can then generate a fault when a keypad supervisory is not present.

NOTE: One LCD keypad must be assigned to slot 8 in order to upload keypad programming using DLS-1 software.
How to Assign Keypads
Do the following at each keypad installed on the system:
1. Enter [*][8][installer’s code] to go to installer programming
2. Enter [000] for Keypad Programming
3. Enter [0] for Slot Assignment
4. Enter a two digit number (11-18) to specify which supervisory slot the keypad will occupy.
5. Press [#] twice to exit installer programming.

After assigning all keypads, perform a supervisory reset by entering section [902] in installer’s programming. The panel will now supervise all assigned keypads and enrolled modules on the system.

How to Program Function Keys
By default, the 5 function keys on each LCD5500Z keypad are programmed as Stay Arm (03), Away Arm (04), Chime (06), Sensor Reset (14) and Quick Exit (16). By default, the first three function keys on each PC5508Z, PC5516Z, and PC5532Z keypad are programmed as Away Arm (04), Stay Arm (03), and Sensor Reset (14). The last two function keys are programmed as null keys (00). You can change the function of each key on every keypad:
1. Go to the keypad where you want to change the function key programming and enter Installer Programming.
4. Enter the 2 digit number, [00] to [17] to select the feature you want the function key to have. For a complete list of Function Key options see section 3.5 “Function Keys”.
5. Continue from step 3 until all function keys are programmed.
6. To exit Installer Programming, press [#] twice.

2.6 Supervision
By default, all modules are supervised upon installation. Supervision is enabled at all times so that the panel can indicate a trouble if a module is removed from the system.

To check which modules are currently connected and supervised, at an LCD keypad enter programming section [903] from installer’s programming. The keypad will allow you to scroll through the display of connected modules. A connected module which does not show as being present will appear as a trouble condition and the Trouble light on the keypad will turn ON. This condition may be due to one or more of the following reasons:

- the module is not connected to the Keybus
- there is a Keybus wiring problem
- the module is more than 1,000’/305m from the panel
- the module does not have enough power

For more information regarding module supervision troubles, please refer to “[*][2] Trouble Display”.

2.7 Removing Modules
The panel must be instructed to no longer supervise a module being removed from the system. To remove the module, disconnect it from the Keybus and reset the supervision field by entering [902] in the installer’s programming. The panel will be reset to recognize and supervise all existing modules on the system.

2.8 Zone Wiring
For a complete description of the operation of all zone types, please refer to section 5.2 “Zone Programming”.

There are several different ways in which zones may be wired, depending on which programming options have been selected. The panel can be programmed to supervise normally closed, End-of-Line, or Double End-of-Line loops. Please refer to the following diagrams to study each type of individually supervised zone wiring.

NOTE: Any zone programmed for Fire or 24-hr Supervisory must be wired with a single End of Line (EOL) resistor regardless of the type of zone wiring supervision selected for the panel (section [013]: [1] -[2]). See section 5.2 “Zone Programming”.

NOTE: If you change the zone supervision options from DEOL to EOL or from NC to DEOL (section [013], options [1] or [2]), you should power down the system completely, and then power it back up. If you do not, the zones may not work correctly.

Normally Closed (NC) Loops

To enable normally closed loops, programming section [013], option [1] must be ON.

NOTE: This option should only be selected if Normally Closed (NC) detection devices or contacts are being used.

Single End Of Line (EOL) Resistors (5600Ω)

To enable panel detection of single end of line resistors, programming section [013], options [1] and [2] must be OFF.

Double End of Line (DEOL) Resistors
Double End of Line resistors allow the panel to determine if the zone is in alarm, tampered or faulted.

To enable panel detection of double end of line resistors, programming section [013], option [1] must be OFF and option [2] must be ON.

With DEOL selected, if the system is disarmed, the keypad buzzers will activate when a fault or tamper occurs. Manually bypassed zones will not show alarm, fault, or tamper conditions.
Wire DEOL zones according to the following diagram:

```
- ANY Z TERMINAL
- ANY COM TERMINAL

DOUBLE EOL CIRCUIT
1 NORMALLY CLOSED CONTACT WITH 5600Ω END-OF-LINE RESISTORS
```

**NOTE:** Do not wire DEOL resistors on keypad zones. Do not use DEOL resistors for Fire zones or 24-hr Supervisory zones.

**NOTE:** The DEOL option can only be selected if Normally Closed (NC) detection devices or contacts are being used. Only one NC contact can be connected to each zone. Wiring multiple detection devices or contacts on a single loop is not allowed.

**NOTE:** If the DEOL supervision option is enabled:

**NOTE:** All hardwire zones on the main panel must be wired for Double EOL resistors, except for Fire and 24-hr Supervisory zones.

**NOTE:** Do not wire Fire zones to keypad zone terminals.

The following chart shows zone status under certain conditions:

<table>
<thead>
<tr>
<th>Loop Resistance</th>
<th>Loop Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>0Ω (shorted wire, loop shorted)</td>
<td>Fault</td>
</tr>
<tr>
<td>5600Ω (contact closed)</td>
<td>Secure</td>
</tr>
<tr>
<td>Infinite (broken wire, loop open)</td>
<td>Tamper</td>
</tr>
<tr>
<td>11200Ω (contact open)</td>
<td>Violated</td>
</tr>
</tbody>
</table>

2.10 GSM1000 Zone Wiring

**GSM1000 Support**

When using the GSM1000 cellular communicator, connect the GSM1000 to the main panel according to the following diagram:

**GSM1000 Supervision (24-hr Supervisory)**

When using the GSM1000 cellular communicator, any main board zone may be configured for GSM1000 Supervision. Program this zone as zone type [09], 24-hr Supervisory in section [001].

With a GSM1000 Supervisory zone, if the GSM1000 experiences a trouble, the zone will be violated, causing the panel to report the event to the central station. This type of zone always requires a single EOL resistor (5600Ω). Wire this zone according to the above diagram.

**NOTE:** When using the GSM1000, Busy Tone Detection must not be used.

2.11 Keypad Zones

Each “z” keypad on the system has a zone input to which a device - such as a door contact - can be connected. This eliminates the need to run wires back to the control panel for every device.

To install the keypad, open the keypad plastic by removing the screw at the bottom of the unit. Locate the five terminals on the keypad circuit board. Connect the four Keybus wires from the control panel: the red wire to R, the black to B, the yellow to Y and the green to G.

To connect the zone, run one wire to the Z terminal and the other to B. For powered devices, use red and black to supply power to the device. 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 section 2.8 “Zone Wiring”. End of line resistors must be placed on the device end of the loop, not at the keypad.

**NOTE:** Keypad zones do not support DEOL resistors.
Assigning Keypad Zones
When using keypad zone inputs, each input used must be assigned a zone number in Installer’s Programming.
First, ensure that you have enrolled all installed keypads into the desired slots. (See section 2.5 “Keypad Assignment”.)
Next, enter programming section [020] to assign the zones. There are eight programming locations in this section, one for each keypad slot. Enter a 2-digit zone number for each of the keypad zones. This number must be entered in the location corresponding to the keypad to which each zone is connected.
Example: The zone on an LCD5500Z keypad in slot 8 is to be assigned zone 3. In section [020], scroll to option [8] and enter (03).

NOTE: Keypad zones 1-4 will replace zone terminals Z1-Z4 on the control panel.

NOTE: Once the keypad zones are assigned, you must also program zone definitions and zone attributes (see also section 5.4 “Assigning Keypad Zones.”)

NOTE: Keypad zones cannot be used for 24-hr Supervisory.
Section 3: Keypad Commands

Use any system keypad to enter commands and/or program the PC585 security system. The LED keypad uses function and zone indicator lights to represent alarm functions and status. If you have a PC1555RKZ keypad, the System light acts as a Trouble, Memory, Program and Bypass indicator. Unlike other LED keypads, these conditions will only be represented by the System light.

The LCD keypad provides a written description on the liquid crystal display and uses function indicator lights to communicate alarm status to the user.

The PC585 Instruction Manual provides basic directions for arming and disarming the system, bypassing zones and performing user functions from the keypads. The following sections provide additional details on these functions.

### 3.1 Arming and Disarming

For a description of basic arming and disarming, please see the PC585 Instruction Manual. For other methods of arming, please refer to section 3.4 "[*] Commands" and section 3.5 "Function Keys".

**NOTE:** The Event Buffer will log “Armed In Stay Mode” or “Armed In Away Mode” whenever the system is armed.

### 3.2 Auto Bypass – StayArming

Stay arming allows the user to arm the system without leaving the premises. All zones programmed as stay/away will be bypassed when the user stays the system, so that the user does not have to bypass interior zones manually. (See section 5.2 “Zone Programming”)

When the system is armed using a valid access code, if any zones on the system have been programmed as stay/away zones, the Bypass light will turn ON. The panel will then monitor all zones programmed as Delay 1 and Delay 2 zones, such as designated entry/exit doors. If a delay zone is not violated by the end of the exit delay, the panel will bypass all stay/away zones. The Bypass light will remain on to inform the user that the interior zones have been automatically bypassed by the panel. If a delay zone is violated during the exit delay, the system will arm in Away mode and all stay/away zones will be active after the exit delay expires.

The user can arm the stay/away zones at any time by entering the [*][1] keypad command (see “[*][1] Bypassing and Activating Stay/Away Zones”).

Stay arming can also be initiated by pressing and holding the Stay function key for two seconds on the PC5508Z and LCD5500Z keypads, if programmed. For more information regarding Stay arming, please see section 3.5 “Function Keys”.

### 3.3 Automatic Arming

The system can be programmed to Auto-arm at a specific time every day if it is in the disarmed condition. In order for the Auto-arm function to work properly, you must program the correct Time of Day. For programming the clock and auto-arm times, see “[*][6] User Functions”.

When the system’s internal clock matches the Auto-arm Time, the panel will check the system status. If the system is armed, the panel will do nothing until the next day at the auto-arm time, when it will check the system again. If the system is disarmed at the auto-arm time, the panel will sound the buzzer of all keypads for five minutes. If the Bell Squawk During Auto Arm option is enabled (section 014, option [2]), the bell will squawk once every 10 seconds while the system is auto-arming.

Users can postpone auto-arming for two hours by entering a valid access code. If auto-arming is postponed, the system will log the number of the user who postponed the arming in the event buffer and, if programmed, transmit an Auto-arm Cancel/Postpone event.

After two hours, the system will attempt to auto-arm again. The system will continue to try to auto-arm two hours after each postponement until the panel is armed, either automatically or manually.

**NOTE:** If one of the following trouble events prevent the system from arming, the panel will transmit an Auto Arm Cancellation reporting code (if programmed): AC/DC Inhibit Arm, Latching System Tamper, Zone Expander Supervisory Fault

If no access code is entered during the five-minute warning period, the panel will auto-arm. If a zone is violated during auto-arming, the panel will transmit a Partial Closing Report code – if programmed – to indicate to the central station that the system is not secure. If the zone is restored, the panel will add the zone back into the system.

**NOTE:** Auto-arming can only be postponed by entering a valid access code at a system keypad.

### 3.4 [*] Commands

The [*] key commands provide an easy way for the user to access basic system programming – such as programming access codes or bypassing zones. The user can also use the [*] key commands to check on the system’s status, including viewing trouble conditions and displaying the event buffer on the LCD keypad.

The [*] key commands can be performed from both LCD and LED keypads. The LED keypad uses the zone indicator lights to display command information. The LCD display provides written information, guiding the user through each command. The commands in this section are explained as viewed from an LED keypad. When using an LCD keypad, use the arrow keys (< >) to scroll through information provided. Otherwise, the functions remain the same for both keypad types.

#### [*][1] Bypassing and Activating Stay/Away Zones

Use the [*][1] keypad command to bypass individual zones. A bypassed zone will not cause an alarm.

**NOTE:** Zones can only be bypassed when the system is not armed. If DEOL is used, manually bypassed zones will not show alarm, fault, or tamper conditions.

If the **Code Required for Bypass** option is enabled (section 015, option [5]), only access codes with the bypass attribute enabled will be able to bypass zones (see section 5.1 “Programming Security Codes”).

If the **Bypass Status Displayed While Armed** option is chosen, the Bypass (or System) light will be ON while the system is armed to indicate any bypassed zones (see section 5.17 “Arming/Disarming Options”).

**NOTE:** When you disarm the system, all manually-bypassed zones will be unbypassed.

#### Activate Stay/Away Zones

If the system is armed in stay mode, the [*][1] command can be used to activate the stay/away zones.
**[*][2] Trouble Display**
The panel constantly monitors itself for several different trouble conditions. If a trouble condition is present, the Trouble (or System) light will be on and the keypad will beep twice every 10 seconds. When the system is disarmed, users can silence the trouble beep for faults and tampers by entering an access code. For other troubles, users can silence the trouble beep by pressing any key at any system keypad.

If **Bell Squawk on Trouble** is enabled (section [014], option [5]), the bell will squawk every 10 seconds when a trouble condition is present.

If the **Troubles are Latching** option is enabled, when a trouble restores before a user has viewed it (via [*][2]), the Trouble (or System) LED will stay on (latch). Once a user has viewed the trouble, the LED will turn off (unless other troubles are present on the system).

**NOTE:** If the panel fails to communicate in Residential Dial mode, the FTC trouble will not latch.

---

**To view trouble conditions from an LED keypad:**
1. Press [*][2].
2. The keypad flashes the Trouble (or System) light. The zone indicator lights corresponding to the present trouble conditions are on.

---

**[*][3] Alarm Memory**
The Memory (or System) light will be on if any alarm occurred during the last armed period or – in the case of 24-hr zones – if an alarm occurred while the panel was disarmed.

To view alarm memory, press [*][3]. The keypad will flash the Memory (or System) light and the zone indicator lights corresponding to the alarm or tamper conditions which occurred during or since the last armed period. To clear the Memory (or System) light, arm and disarm the system.

---

**[*][4] Door Chime On/Off**
The door chime feature is used to sound a tone from the keypad whenever a zone programmed as a chime zone is activated (see section 5.3 “Zone Attributes”). If the door chime feature is enabled, the keypad will emit five short beeps whenever a chime zone is activated. Designated entry/exit doors

---

**Keypad Commands:**

<table>
<thead>
<tr>
<th>Light</th>
<th>Troubles</th>
</tr>
</thead>
</table>
| 1     | **Service Required:** Press [1] to determine the specific trouble. Lights 1 - 5 will light up to indicate the trouble:
|       | - Light [1] Low Battery: Main panel backup battery charge is low (below 11.5 volts under load). Trouble is restored when the battery charges over 12.5 volts.  |
|       | - Light [3] General System Trouble: The printer connected to the PCS400 Printer module has a fault and is off-line.  |
|       | - Light [5] General System Supervisory: The panel has lost communication with a module connected to the Keybus (see section 2.6 “Supervision”). The event buffer will log the event.  |
|       | **NOTE:** All tamper conditions must be physically restored before the trouble condition will clear.  |
|       | - Lights [6-8] – Not used  |
| 2     | **AC Failure:** AC power is no longer being supplied to the control panel. The Trouble (or System) light will flash if an AC Failure is present, if the Trouble Light Flashes if AC Fails option is programmed (section [016], option [2]). This trouble will not be displayed if the AC Trouble Displayed option is disabled (section [016], option [1]). If the AC Trouble Beeps option is off, keypads will not sound trouble beeps if an AC trouble occurs (section [018], option [5]). See section 5.8 “Communicator – Reporting Codes” for information on AC trouble reporting.  |
| 3     | **Telephone Line Monitoring Trouble (TLM):** There is a problem with the telephone line (See section 5.12 “Telephone Line Monitor (TLM)”):  |
| 4     | **Failure to Communicate (FTC):** The communicator failed to communicate with any of the programmed telephone numbers (see section 5.5 “Communicator – Dialing”).  |
| 5     | **Zone Fault (including Fire Zone):** A zone on the system is experiencing trouble, meaning that a zone could not provide an alarm to the panel if required to do so (e.g. a fire zone is open, or there is a short on a DEOL zone, or a supervisory fault on a wireless zone). When a fault trouble condition occurs, the keypad(s) on the system will start to beep. Press [5] while in Trouble mode to view the affected zones.  |
|       | **NOTE:** A Fire zone trouble will be generated and displayed in the armed state.  |
| 6     | **Zone Tamper:** A zone configured for Double End Of Line resistor supervision has a tamper condition, or the tamper switch is open on a wireless device. When a tamper condition occurs, the keypad(s) will start to beep. Press [6] while in the Trouble mode to view the affected zones. If a zone is tampered or faulted, it must be fully restored to clear the trouble.  |
|       | **NOTE:** By enabling Tamper/Faults Do Not Show as Open in section [013], option [4], Faults and Tamper will not be displayed on the keypad, and will be hidden from the end user. If the option is disabled, Faults and Tamper will be displayed on the keypad.  |
|       | **NOTE:** Once a zone is tampered or faulted, it must be completely restored before the trouble condition will clear.  |
| 7     | **Device Low Battery:** A wireless device has a low battery condition. Press [7] one, two, or three times to view which devices are experiencing battery failure. An LED keypad will indicate battery failure using zone lights 1 to 8. The following will occur:
|       | Keypad beeps: Keypad displays:
|       | - Press [7] again 2 Handheld keypads with low batteries (LED keypad - zone lights 1 to 4)  |
|       | - Press [7] again 3 Wireless keys with low batteries (LED keypad - zone lights 1 to 8)  |
|       | To view the battery conditions of wireless keys 9 through 16, you must use an LCD keypad.  |
| 8     | **Loss of System Time:** When the panel is powered up, the internal clock needs to be set to the correct time. This trouble is cleared when an attempt is made to reset the clock.  |

---

**To view trouble conditions from an LCD keypad:**

When using an LCD keypad, press [*][2]. The trouble conditions will be listed on the display. Use the arrow (< >) keys to scroll through the list of present trouble conditions.
are often defined as chime zones. The feature can be turned on or off while the system is armed or disarmed.

**[*][5]** Programming Access Codes

There are 37 access codes available to the user. They are:
- Access code (40) ...................... One master code
- Access codes (01)-(32) .......... 32 general access codes
- Access codes (33)-(34) .......... Two duress codes
- Access codes (41)-(42) .......... Two supervisor codes

All access codes have the ability to arm or disarm the system and can activate the PGM Outputs using the [*][7] commands. Access codes can be either four or six digits (see section 5.1 “Programming Security Codes”).

For a description of how to program access codes from LCD or LED keypads, see the PC585 Instruction Manual.

**Master Code – Access Code (40)**

By default, the Master Code is enabled to perform any keypad function. This code can be used to program all access codes. If the **Master Code Not Changeable** option is enabled (section [015], option [6]), the Master Code can only be changed by the Installer.

**General Access Codes – Access Codes (01) to (32)**

General access codes can arm and disarm the system. When the **Code Required for Bypassing** option is enabled, users will need to enter a valid access code when bypassing zones. Individual access codes can have the Zone Bypassing attribute disabled under Access Code Attribute programming.

For more information regarding access code options, please see section 5.1 “Programming Security Codes”.

**Duress Code – Access Code (33) and (34)**

Duress codes will send a duress reporting code to the central station when entered.

**NOTE:** If a duress code is programmed, when it is used, the panel will always send a reporting code to the central station, even if the attributes of the duress code are turned off.

**Supervisor Codes – Access Code (41) and (42)**

These codes can be used to program general access and duress codes. The two supervisor codes have master code attributes by default. These settings can be changed.

**Access Code Attributes**

There are three access code attributes which can be programmed for each code.

**NOTE:** Master code attributes cannot be changed.

To program attributes for a code:
1. Enter [*][5][Master Code][9]
2. Enter the code number [01-32,33,34,41,42].
3. Enter the attribute number to toggle the attribute on or off:
   - Attribute [2] .......... Not used
   - Attribute [3] .......... Zone bypassing enabled
   - Attribute [4] .......... Not used
   - Attributes [5-7] .......... Not used
   - Attribute [8] .......... One-time use code (access codes 01-16 only).

**NOTE:** You should have attribute [1] enabled for all access codes in use.

**One-time Use Codes**

If the panel is disarmed with a one-time use code, the code will be erased at the end of the exit delay the next time the panel is armed. The code will also be erased at the end of the Exit Delay when used to arm the panel.

If the panel is armed with a one-time use code, but another user enters a valid access code during the exit delay, the one-time use code will not be erased and can still be used to arm the panel one time.

**[*][6]** User Functions

This command can be used to program several different functions:

**To Program User Functions:**

1. Press [*][6][Master Code]. The Program (or System) light will flash.

- **[1] – Time and Date**
  - The time and date must be accurate for the auto-arm or test transmission functions to work properly and for the event buffer to time and date stamp all events.
  - Enter the time (hour and minute) using 24-hr format [HH MM] from 00:00 to 23:59.
  - Enter the date by month, day and year [MM DD YY].

- **[2] – Auto-arm Enable/Disable**
  - To enable or disable auto-arming, press [2]. The keypad will sound three short beeps when auto-arm is enabled and one long beep when disabled. For more information, see section 3.3 “Automatic Arming”.

- **[3] – Auto-arm Time**
  - The system can be programmed to arm automatically at a pre-set time. When programming the auto-arm time, enter the time (hour and minute) using 24-hr format [HH MM]. For more information, see section 3.3 “Automatic Arming”.

- **[4] – System Test**
  - When [4] is pressed the panel will test the bell output, keypad lights and the communicator for two seconds. The panel will also send a System Test Reporting code, if programmed (see section 5.8 “Communicator – Reporting Codes”).

- **[5] – Enable DLS (Downloading)**
  - When [5] is pressed, the panel will enable the downloading option for one or six hours depending on the option selected in programming section [702]: [7]. During this time, the panel will answer incoming downloading calls (see section 5.10 “Downloading Options”).

- **[6] – User Initiated Call-Up**
  - When [6] is pressed, the panel will initiate a call to the downloading computer.

**Additional Features Available from the LCD Keypad**

Additional features, including access to the event buffer, are available using the LCD keypad. Use the arrow keys (< >) to scroll through the [*][6][Master Code][9] menu and press the [*] key to select the following commands:

**Viewing the Event Buffer from an LCD Keypad**

Select “View Event Buffer” from the [*][6][Master Code][9] menu. The keypad will display the event, event number, time and date along with the zone number and access code, if applicable. Press [*] to toggle between this information and the event itself. Use the arrow keys (< >) to scroll through the events in the buffer. When you have finished viewing the event buffer, press [#] to exit.
**Keypad Commands: 3.5 Function Keys**

### 3.5 Function Keys

There are five function keys on each keypad. On LCD550Z keypads, the function keys are programmed by default as Stay, Away, Chime, Reset and Exit. On PC5508Z, PC5516Z, and PC5532Z keypads, three of the keys are programmed by default as Away, Stay, and Reset. The other two keys are not programmed with a function. Press and hold the appropriate key for two seconds to activate a function.

**NOTE:** On the PC1555RKZ keypad, use number keys 1 - 5 for the function keys.

#### “Stay” – (03) Stay Arm

The system will arm in the Stay mode (see section 3.2 “Auto Bypass – Stay Arming”). Enable the Quick Arm feature (programming section [015], option [4]) to have this key function without the need to enter an access code. If Quick Arm is not enabled, the user will have to enter an access code before the system will stay arm.

#### “Away” – (04) Away Arm

The system will arm in the Away mode (see section 3.2 “Auto Bypass – Stay Arming”). Enable the Quick Arm feature (programming section [015], option [4]) to have this key function without the need to enter an access code. If Quick Arm is not enabled, the user will have to enter an access code before the system will away arm.

#### “Chime” – (06) Door Chime On / Off

The Door Chime feature will turn ON or OFF (see “[*][4] Door Chime On/Off”).

#### “Reset” – (14) Sensor Reset or [*][7][2]

The panel will activate all PGM outputs programmed as option [03] Sensor Reset or [20] Command Output Option #2. (See “[*][7] Command Output Functions”).

#### “Exit” – (16) Activate Quick Exit

The panel will activate the Quick Exit feature (See section 3.4 “[*] Commands”).

### Additional Function Key Options

The programming of any function key on any keypad may be changed to one of the options listed below. (See section 2.5 “Keypad Assignment” for instructions on changing function key programming.) Each option is listed according to the programming code, followed by the corresponding [*] key command. For more information regarding each function, please refer to the appropriate part of section 3.4 “[*] Commands”.

**[00] Null Key:** The key is not used and will perform no function when pressed.

**[01]-[02] For Future Use**

**[03]** Stay Arm: As described above.

**[04]** Away Arm: As described above.

**[05]** [*][9] No-Entry Delay Arm: A valid access code must also be entered.

**[06]** [*][4] Door Chime On / Off

**[07]** [*][6]-----[4] System Test: A valid master code must also be entered.

**[08]** [*][1] Bypass Mode: A valid access code may need to be entered.

**[09]** [*][2] Trouble Display

**[10]** [*][3] Alarm Memory

**[11]** [*][5] Programming Access Codes: A valid master code must also be entered.

**[12]** [*][6] User Functions: A valid master code must also be entered.
Command Output Option #1: A valid access code may need to be entered.
Reset (Command Output Option #2): As described above.
For Future Use
Quick Exit
Reactivate Stay/Away Zones

3.6 Features Available for the LCD5500Z
These features are only available for LCD5500Z keypads with zone inputs:

**Automatic Scrolling of Alarms in Memory**
The LCD5500Z keypad allows automatic scrolling through alarms in memory while the keypad is idle. This feature, if enabled, will override the clock display. This option can be programmed in LCD programming section [66], option [4].

**24-hr Time Display Option**
Each LCD5500Z can be programmed to display time using a 24-hour clock, instead of a 12-hour, am/pm clock. Program this option in LCD programming section [66], option [3].

**Keypad Zones**
See section 2.11 “Keypad Zones”.

**Viewing Troubles While Armed**
See section "[*][2] Trouble Display" for information on how to view troubles.

**Backlighting Boost**
The LCD5500Z, PC1555RKZ and PC5508Z zone input keypads will provide extra number pad lighting when any key is pressed. The backlighting boost will last for an additional 30 seconds after the last keypress.
Section 4: How to Program

The following section of the manual describes the Installer’s Programming function and how to program the various sections.

**NOTE:** Read the following section of the manual very carefully before you begin programming. We also recommend filling out the Programming Worksheets section before you program the panel.

For your reference, the corresponding programming sections for the functions listed are highlighted in text boxes such as this one.

### 4.1 Installer’s Programming

Installer’s Programming is used to program all communicator and panel options. The Installer’s Code is [5555] by default but should be changed to prevent unauthorized access to programming.

**Installer’s Code: .......................... Section [006]**

#### From an LED Keypad:

1. Enter [*][8][Installer’s Code].
   - The Program light (or System light on the PC1555RKZ) will flash to indicate that you are in programming mode.
   - The Armed light will turn on to indicate that the panel is waiting for the three-digit programming section number.
2. Enter the three-digit section number corresponding to the section you wish to program.
   - The Armed light will turn off.
   - The Ready light will turn on to indicate that the panel is waiting for the information required to complete programming the selected section.
3. Enter the information required to complete section programming (i.e.: numbers, Hex data, or ON/OFF options).
   - **NOTE:** If the three-digit section number entered is invalid, or if the module which pertains to the section is not present, the keypad will sound a two second error tone.

#### From an LCD Keypad:

1. From any keypad, enter [*][8][Installer’s Code]. The Keypad will display ‘Enter Section’ followed by three dashes.
2. Enter the three-digit number corresponding to the programming section number you wish to program. The keypad will now display the information required to complete programming the selected section.
3. Enter the information required to complete section programming (i.e.: numbers, Hex data, or ON/OFF options).
   - **NOTE:** If Ready light is flashing, any number you enter will be programmed as the Hex equivalent.
   - If you enter information into a section and make a mistake, press the [#] key to exit the section and save the changes. The Ready light will begin to flash.

For your reference, the corresponding programming sections for the functions listed are highlighted in text boxes such as this one.

### 4.2 Programming Decimal Data

A set number of programming boxes are allotted for each section requiring decimal data (e.g.: codes, telephone numbers). If a digit is entered for each program box, the panel will automatically exit from the selected programming section. The Ready light will turn OFF and the Armed light will turn ON.

On the PC1555RKZ and PC5508Z keypads, you can also press the [#] key to exit a programming section without entering data for every box. This is handy if you only need to change digits in the first few programming boxes. All other digits in the programming section will remain unchanged.

#### 4.3 Programming Hex Data

On occasion, hexadecimal (Hex) digits may be required. To program a Hex digit press the [*] key. The panel will enter Hex programming and Ready light will begin to flash.

The following are the numbers which should be pressed to enter the appropriate Hex digit:

- 1 = A
- 2 = B
- 3 = C
- 4 = D
- 5 = E
- 6 = F

Once the correct Hex digit has been entered, the Ready light will continue to flash. If another Hex digit is required, press the corresponding number. If a decimal digit is required, press the [*] key again. The Ready light will turn on and the panel will return to regular decimal programming.

**Example:**

To enter ‘C1’ for a closing by user 1, you would enter:

`[*][3][1]`

- [*] to enter Hexadecimal mode (Ready light flashes)
- [3] to enter C
- [*] to return to decimal mode (Ready light is solid)
- [1] to enter digit 1

**NOTE:** If Ready light is flashing, any number you enter will be programmed as the Hex equivalent.

If you are using a pulse communications format, a decimal zero [0] does not transmit. Programming a zero [0] tells the panel not to send any pulses for that digit. Decimal zero [0] is a filler digit. To transmit a zero [0], it must be programmed as a Hexadecimal ‘A’.

**Example:**

For the three digit account number ‘403’, you would enter:

`[4], [*][1]`  
`[0]:`  
- [4] to enter the digit 4
- [*] to enter Hexadecimal mode (Ready light flashes)
- [1] to enter A
- [*] to return to decimal mode (Ready light is solid)
- [0] to enter digit 0 as a filler digit.

#### 4.4 Programming Toggle Option Sections

Some programming sections contain several toggle options. The panel will use zone lights 1 through 8 to indicate if the different options are enabled or disabled. Press the number corresponding to the option to turn it ON or OFF. Once all the toggle options have been selected correctly, press the [#] key to exit the section and save the changes. The Ready light will turn OFF and the Armed light will turn ON.

Refer the programming worksheets to determine what each option represents and whether the light should be ON or OFF for your application.
4.5 Viewing Programming

LED Keypads
Any programming section can be viewed from an LED keypad. When a programming section is entered, the keypad will immediately display the first digit of information programmed in that section.

The keypad displays the information using a binary format, according to the following chart:

<table>
<thead>
<tr>
<th>Value</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone 1</td>
<td></td>
<td></td>
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<tr>
<td>Zone 2</td>
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<tr>
<td>Zone 3</td>
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</tr>
<tr>
<td>Zone 4</td>
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</tr>
</tbody>
</table>

□ Zone Light OFF
■ Zone Light ON

Press any of the Emergency Keys (Fire, Auxiliary or Panic) to advance to the next digit. When all the digits in a section have been viewed, the panel will exit the section: the Ready Light will turn OFF and the Armed light will turn ON, waiting for the next three-digit programming section number to be entered. Press the [#] key to exit the section.

LCD Keypad
When a programming section is entered, the keypad will immediately display all the information programmed in that section. Use the arrow keys (< >) to scroll through the data being displayed. Scroll past the end of the data displayed or press the [#] key to exit the section.
Section 5: Program Descriptions

The following section explains the operation of all programmable features and options and provides a summary of all corresponding programming locations.

5.1 Programming Security Codes
There are three codes which can be programmed by the installer in the Installer’s Programming function: the Master code, the Installer’s code, and a Guard code. All other access codes can be programmed through the [*][5] command (see section 3.4 “[*] Commands”).

The master code can also be programmed by the user as access code (40). If the Master Code Not Changeable option is enabled, the system master code can only be changed by the installer.

The Guard Code can be used to arm the system, but can disarm the system only after an alarm or if a tamper, fault or trouble condition is present. The Guard code can also be used to bypass zones and activate command outputs ([*][7][1-4]).

NOTE: If the Guard Code is used, enable the Troubles are Latching option (section [018]: [1]).

General access codes can arm and disarm the system. When the Code Required for Bypassing option is enabled, users will need to enter a valid access code when bypassing zones. Individual access codes can have the Zone Bypassing attribute disabled under access code attribute programming (see section 3.4 “[*] Commands”).

If the 6-Digit User Access Codes option is enabled, all the access codes may be programmed with six digits instead of four, with the exception of the Panel ID code and the Downloading Access code.

6.0 Installer’s Code.......................... Section [006]
6.1 Master Code............................. Section [007]
6.2 Guard Code.............................. Section [008]
6.3 Master Code Not Changeable....... Section [015]: [6]
6.4 Code Required for Bypassing....... Section [015]: [5]
6.5 6-digit User Access Codes.......... Section [701]: [5]

5.2 Zone Programming
All eight zones are enabled by default. Unused zones should be disabled in programming section [202].

Section [001] will allow you to select how each of the zones you use will operate. Each zone requires a two-digit code to be programmed, which describes the zone definition. Select a definition from the list below.

In addition, each zone has eight different attributes which may be programmed in sections [101] to [108] (see section 5.3 “Zone Attributes”).

Zone Definitions

[00] Null Zone
The zone is vacant. Unused zones should be programmed as Null zones.

[01] Delay 1 Zone
This zone type, normally used for entry/exit doors, 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] Delay 2 Zone
The Delay 2 entry delay time can be set independently of Delay 1 in programming section [005] (System Times).

[03] Instant Zone
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.

[04] Interior Zone
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.

[05] Interior Stay/Away Zone
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 section 3.5 “Function Keys”).
- When the panel is armed without entry delay (see “[*][9] Arming Without Entry Delay”).
- 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 arming at home. This zone is typically used for interior protection devices, such as motion detectors.

[06] Delay Stay/Away Zone
This zone type will operate similarly to Interior Stay/Away zones, except that it will always provide an entry delay. Typically, this zone is used for interior protection devices, such as motion detectors. This zone option will help prevent false alarms since it always provides an entry delay time for the user to turn off the panel.

NOTE: Hardwire motion detectors covering entry/exit doors that are using wireless transmitters must be programmed as Delay Stay/Away. If not, the panel may see the motion detector violation before the entry/exit transmitter has time to transmit to the receiver, causing a false alarm.

[07] Delayed 24-hr Fire Zone

NOTE: Do not wire Fire zones on keypad zone terminals if the DEOL supervision option is enabled for the panel (section [013], option [2]).

When this zone is violated, the alarm output will be immediately activated (pre-alert) but the communicator will be delayed for 30 seconds. If the user presses any key on any keypad during this delay, the alarm output and the communicator will be delayed an additional 90 seconds, giving the user time to correct the problem. If the zone is still violated after the 90 second delay, the panel will sound the alarm output and delay the communicator for 30 seconds.

If the user does not press a key during the 30 second pre-alert, the alarm output will latch and the panel will communicate the alarm to the central station. The alarm will sound until
the Bell Cutoff time expires (Section [005] “System Times”), or until a code is entered (see Section 5.13 “Bell”).

NOTE: If a second Fire type zone is violated or if the Fire keys are pressed during the delay period, the panel will latch the alarm output and will immediately communicate the alarm.

A violated Fire zone will be displayed on all keypads and can be delayed at any keypad. Typically this zone is used for latching smoke detectors.

[08] Standard 24-hr Fire Zone
NOTE: Do not wire Fire zones on keypad zone terminals if the DEOL supervision option is enabled for the panel (section [013], option [2]).

When this zone is violated, the panel will immediately latch the alarm output and communicate to the central station. The alarm will sound until the Bell Cutoff time expires, or until a code is entered (see section 5.13 “Bell”).

A violated Fire zone will be displayed on all keypads. Typically this zone is used for pull stations.

[09] 24-hr Supervisory Zone
If this zone is violated when the system is either armed or disarmed, the panel will report to the central station, and will log the zone alarm to the Event Buffer. This zone gives a silent alarm by default.

NOTE: Do not wire 24-Hour Supervisory zones on keypad zone terminals.

[10] 24-hr Supervisory Buzzer Zone
If this zone is violated when the system is either armed or disarmed, the panel will immediately latch the keypad buzzer until a valid access code is entered and will immediately communicate to the central station.

[11] 24-hr Burglary Zone
If this zone is violated when the system is either armed or disarmed, the panel will immediately latch the alarm output and communicate to the central station. The alarm will sound until the Bell Cutoff time expires, or until a code is entered (see section 5.13 “Bell”).

[12] - [20]
The following zone definitions operate similar to the 24-hr Burglary except for the System Event output type and the SIA identifier:

[12] 24-hr Holdup Zone - This zone gives a silent alarm by default, however the keypad will still display the zone in alarm. To have a completely silent alarm with no local alarm annunciation, use PGM2 programmed as [23] Silent 24-hr output. See 5.11 “PGM Output Options”.

[13] 24-hr Gas Zone
[14] 24-hr Heat Zone
[15] 24-hr Medical Zone
[16] 24-hr Panic Zone
[17] 24-hr Non-Medical Emergency Zone
[18] 24-hr Sprinkler Zone
[19] 24-hr Water Flow Zone
[20] 24-hr Freezer Zone

[21] 24-hr Latching Tamper
If this zone is violated, the installer must enter Installer’s Programming before the system can be armed.

NOTE: Wireless zones should not be programmed as zone types [22] - [24].

[22] Momentary Keyswitch Arm Zone
Momentary violation of this zone will alternately arm/disarm the system. Tamps and faults will not arm/disarm the system, but only activate the appropriate trouble. When a user arms the system with a keyswitch, the system will arm in Away mode.

[23] Maintained Keyswitch Arm Zone
When this zone is violated, the system will arm. When this zone is secured, the system will disarm. Tamps and faults will not arm/disarm the system, but only activate the appropriate trouble. When a user arms the system with a keyswitch, the system will arm in Away mode.

[24] For Future Use

[25] Interior Delay Zone
This zone type is normally used with motion detectors and has a standard exit delay time.

If the panel is Away armed (a delay zone is violated during the exit delay, or the Away function key is used), the Interior Delay zone will work the same as the Interior zone [04].

If the panel is Stay armed (a delay zone is NOT violated during the exit delay, the Stay key is used, or ["]9[9] is used for arming), a violation of the zone will initiate Entry Delay 1.

[27] For Future Use

[28] 24-hr Bell/Buzzer Zone
This zone works like a 24-Hour Burglary zone (zone type [11]) while armed, and a 24-Hour Supervisory Buzzer zone (zone type [10]) while disarmed. When the panel is armed and this zone is violated, the bell sounds until the bell timeout timer expires. When the panel is disarmed and this zone is violated, the keypad buzzers sound until a user enters an access code.

[29] Instant Stay/Away Zone
This zone will be bypassed when the system is armed in Stay mode, but will act like an instant zone (i.e. no entry delay) when armed in Away mode.

[87] Delayed 24-hr Fire (Wireless)
This zone type operates the same as [07] Delayed 24-hr Fire Zone and must be used if the smoke detector is wireless.

[88] Standard 24-hr Fire (Wireless)
This zone type operates the same as [08] Standard 24-hr Fire Zone and must be used if the smoke detector is wireless.

5.3 Zone Attributes
NOTE: All zones, with the exception of 24-hr and Fire, will provide an exit delay.

NOTE: Do not change the attributes for Fire Zones from the default settings.

Additional zone attributes can be programmed to customize the operation of a zone for a specific application. The following attributes are programmable for each zone:

- Audible / Silent – This attribute determines whether or not the zone will activate the alarm output.
- Pulsed / Steady – This attribute determines whether the alarm output will be steady or will pulse on and off every second.
**Program Descriptions: 5.4 Assigning Keypad Zones**

- **Activate Chime** – This attribute determines whether or not the zone will activate the chime feature (see “[*] [4] Door Chime On/Off”).
- **Bypass Enable** – This attribute determines whether or not the zone can be manually bypassed (see “[*] [1] Bypassing and Activating Stay/Away Zones”).
- **Force Arm Enable** – This attribute determines whether or not the system can be armed while a zone is violated. At the end of the exit delay, if this type of zone is violated, it will be ignored by the panel. Once the zone is secured, it will be monitored by the system. This zone attribute, for example, will allow the user to arm the system with the garage door open. Later, when the door is closed, it will be armed along with the rest of the system. Do not program this attribute for 24-hr zones.
- **Swinger Shutdown Enable** – This attribute determines whether or not the panel will shut down the communicator and bell for a zone once its swinger limit has been reached (see section 5.19 “Swinger Shutdown”)
- **Transmission Delay Enable** – This attribute determines whether or not the panel will delay communicating the alarm reporting code for the programmed Transmission Delay Period (see section 5.15 “Transmission Delay”).
- **Wireless Zone** – This attribute determines which zones are to have wireless devices. This allows the panel to generate a low battery trouble and zone supervisorys for the wireless zones.

**NOTE:** Any zone with the wireless attribute enabled will not cause an alarm for a fault condition when armed (or any time for 24-hr zones).

---

### 5.4 Assigning Keypad Zones

“Z” keypads have zone inputs to which devices—such as door contacts—can be connected. (See section 2.11 “Keypad Zones” for wiring information.) Once the keypad zones are installed, assign the zone in programming section [020] Keypad Zone Assignments. Enter the 2 digit zone designated for each keypad from 01-08.

**Keypad Zone Assignments**

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### 5.5 Communicator – Dialing

If the Communicator Disable option is selected, the panel will not attempt to call central station. If communication is enabled, the panel will attempt to call central station when an event with a valid reporting code occurs (See section 5.8 “Communicator – Reporting Codes”).

**The Communicator Call Direction options** are used to select which telephone number the panel will dial when an event occurs.

- **DTMF Dialing** the panel will dial using DTMF (touch tone). c) the panel picks up the telephone line again and searches for a dial tone for 5 seconds
- **Maximum Dialing Attempts** determines the maximum number of attempts the panel will make to send a signal to the central station before indicating a Failure to Communicate (FTC) trouble condition. The maximum number of dialing attempts that can be programmed is 15.

The 3rd Telephone Number can be used to back up the 1st in the event of an FTC. (see section 5.7 “Communicator – Telephone Numbers”). If a later communication attempt is successful, the FTC reporting code(s) programmed in section [351] will be transmitted along with the unreported events from an earlier unsuccessful communication.

When Bell on FTC when Armed is enabled in programming section [702], option [8], an FTC during the armed period will sound an Audible Alarm for the length of Bell time-out or until the system is disarmed. If FTC Trouble Only when Armed is enabled, only the keypad buzzer will sound trouble beeps every 10 seconds until a key is pressed.

**Post Dial Wait for Handshake** determines the amount of time the panel will wait for a valid handshake from the receiver. If the panel does not hear the handshake it will consider the call a failed attempt, hang up and try again.

**NOTE:** Contact your local telephone company to confirm which settings should be used.

**Maximum Dialing Attempts** . . . . . . . . . . . Section [160]
**Post Dial Wait for Handshake** . . . . . . . . . . . Section [161]
**Communicator Call Direction Options** . . . Section [361]-[368]
**Communicator Enable/Disable** . . . . . . . . . . . Section [380]: [1]
**Delay Between Dialing Attempts** . . . . . . . . . . . Section [703]

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### 5.6 Communicator – Account Numbers

The account number is used by the central station to distinguish between panels. There are two account numbers programmable for the PC585.

**NOTE:** 6-digit account codes apply to the SIA and Pager formats only. All other formats only use the first four digits of the account code.

**First Account Code (6 digits).** . . . . . . . . . . . Section [310]
**Second Account Code (6 digits)** . . . . . . . . . . . Section [311]

---

### 5.7 Communicator – Telephone Numbers

The panel can use three different telephone numbers for communicating with the central station. The **First Telephone Number** is the primary number, the **Second Telephone Number** is the secondary number and the **Third Telephone Number** will back up the first telephone number if enabled.

**NOTE:** The Third Telephone Number will NOT back up the Second Telephone Number.

**NOTE:** If you enter a telephone number section (sections [301] - [303]) at an LED keypad, pressing [#] will delete the programmed telephone number and change all the digits to [F].

**NOTE:** To use the Third Telephone Number, you must enable it in section [380], option [5], and program it in section [303].

Telephone numbers can be up to 32 digits. This allows you to add special digits if required. To program the telephone number, enter the numbers 0 through 9 as required. The following is a list of programmable Hex digits and the functions they perform:

- **Hex (B) -** simulates the [*] key on a touch tone telephone
- **Hex (C) -** simulates the [#] key on a touch tone telephone
- **Hex (D) -** forces the panel to search for dial tone
- **Hex (E) -** forces the panel to pause for 2 seconds
- **Hex (F) -** marks the end of the telephone number

**NOTE:** The first digit of all telephone numbers must be the Hex digit ‘D’ for dial tone search, or two Hex ‘Es’ for a 4-second pause.

---
5.8 Communicator – Reporting Codes
The panel can be programmed to report events to the central station by sending the Reporting Code programmed for a particular event. Reporting codes can be one or two digits and can use Hex digits (A through F). For a complete description of reporting codes which can be programmed and lists of automatic Contact ID and SIA format codes, please see Appendix A.

NOTE: Do not use the digit C in a reporting code when using Pager Format. In most cases, the digit C will be interpreted as a [#] which will terminate the page before it has finished.

Cross Zone Police Reporting Code
The Cross Zone Police Code Alarm will be sent when two different alarms occur during any armed-to-armed period. When an alarm occurs while the panel is armed and a second alarm occurs on a different zone during the same armed period, or after the system is disarmed, this code will be sent. All zone types contribute to this alarm. The cross zone police code will be transmitted immediately unless either or both zones have the Transmission Delay attribute enabled. If so, the code will be delayed for the programmed transmission delay time.

Zone Restorals
If the Restoral on Bell Time-out option is selected, the panel will send the Zone Restoral Reporting Code for the zone if the bell cut-off time has expired and the zone is secured. If the zone is not secured when the bell cut-off time expires, the panel will send the restoral immediately once the zone is secured, or when the system is disarmed. If the Restoral on Bell Time-out option is not selected, the panel will immediately send the Zone Restoral Reporting Code when the zone is secured, regardless of whether or not the alarm output is active.

NOTE: 24-hr type zones will report the restoral immediately when the zone is secured.

Openings/Closings by Wireless Key
If you are using a PCS132 v3.0 or higher, wireless keys with access codes may be identified when they are used to arm or disarm the system; the panel will log and transmit opening or closing by access code (the same as if an access code had been used to arm/disarm the system). If wireless keys with no access code are used, the event will be logged and transmitted as special closing or opening by keyswitch.

The Function Keys Require Code option must be selected (section [015], option 4 OFF) in order for wireless keys to be identified for arming. Disarming will always be logged by access code, if one is programmed for the Key, regardless of this option.

Wireless Maintenance
The panel will transmit a Wireless Device Low Battery Alarm reporting code if a low battery condition is indicated by a detector. Transmission and logging to the event buffer of the trouble will be delayed by the number of days programed for Zone Low Battery Transmission Delay.

The Wireless Device Low Battery Restoral reporting code will be transmitted when the problem is corrected. The specific zone that caused the trouble will be recorded in the event buffer.

NOTE: The restoral will not be transmitted until all detectors indicate good battery conditions.

AC Failure Trouble Alarm Code
To prevent the panel from transmitting an AC Failure Trouble Alarm reporting code during short power outages, the panel will not send the signal unless AC power is lost for the amount of minutes programmed for the AC Failure Communication Delay. The AC Failure Trouble Restoral reporting code follows the AC failure communication delay as well.

NOTE: If AC Failure Communications Delay is programmed as “000,” then the AC failure transmission will be immediate.

Communicator – Reporting Formats
Each communication telephone number can be programmed to report using any one of five formats available. Two 20 BPS pulse formats and two 10bps formats are supported, in addition to Contact ID, SIA, Pager and Residential Dial formats. The Communicator Call Direction options can be used to disable the reporting of events such as Openings and Closings.

NOTE: Do not program the 2nd telephone number to use Contact ID or SIA reporting code formats (section [360]) if Automatic reporting codes are selected for either Contact ID or SIA (section [381]).

Communicator Format Options

The following is a description of each reporting format:

Contact ID
Contact ID is a specialized format that will communicate information using tones rather than pulses. This format allows more information to be sent faster than other formats. For example, in addition to reporting an alarm in zone one, the Contact ID format will also report the type of alarm, such as an Entry/Exit alarm.

If the Contact ID uses Programmed Reporting Codes option is enabled, a two digit number from Appendix A must be entered in programming sections [320] to [353] for each event to be transmitted. The two digit number determines the type of alarm. The panel will automatically generate all other information, including the zone number.

If the Contact ID uses Automatic Reporting Codes option is enabled, the panel will operate as follows:
1. If an event's reporting code is programmed as [00], the panel will not attempt to call the central station.
2. If the reporting code for an event is programmed as any-thing from [01] to [FF], the panel will automatically gener-
The communication format option for either telephone number can be programmed as Pager format. If an event occurs and the Communicator Call Direction options direct the call to a telephone number with the Pager Format selected, the panel will attempt to page.

When calling a pager, extra digits will be required in order for the format to function properly. The following is a list of Hex digits and the functions they perform:

- Hex [B] - simulates the [*] key on a touch tone telephone
- Hex [C] - simulates the [#] key on a touch tone telephone
- Hex [D] - forces the panel to search for dial tone
- Hex [E] - two second pause

Hex [F] - marks the end of the telephone number

The panel will attempt to call the pager once. Once the appropriate telephone number is dialed, the panel will send the account number and Reporting Code followed by the [#] key (Hex [C]).

The panel has no way of confirming if the pager was called successfully. A Failure To Communicate trouble will only be generated if the panel detects a busy tone on all dialing attempts, or if no dial tone is detected on all dialing attempts. The pager format will not cause any form of ringback.

NOTE: Do not use the digit C in a reporting code when using Pager Format. In most cases, the digit C will be interpreted as a [#] which will terminate the page before it has finished.

NOTE: The Pager Format cannot be used with the GSM1000 cellular communicator.

**Residential Dial Format**

The Residential Dial format allows the communication of events directly to a user over a telephone line. When an event occurs that the panel is programmed to communicate, the panel seizes the line and dials the programmed telephone number(s). The panel then emits a double beep on the line every 3 seconds. This indicates to the user receiving the call that the control panel is calling.

The user must acknowledge the call by pressing 1, 2, 4, 5, 7, 8, 0, *, or # from any touchtone telephone. The panel will wait for this acknowledgment for the duration of Post Dial Wait for Handshake timer.

Once the panel receives the handshake, it will emit an alarm tone over the telephone line for 20 seconds. If several alarms occur at the same time, only one call will be made to each telephone number the panel is programmed to call.

NOTE: The keys 3, 6 and 9 are not valid handshakes.

**5.6.1 Robofon Format**

When the PC5015 acts as a Robofon dialer, it can receive the following ASCII signals using ODD parity:

1. **HANDSHAKE**: 77 Hex, received as F7 hex
2. **ACK**: 06 Hex, received as 86 Hex
3. **NAK**: 15 Hex, received as 15 Hex

The data is received as 1000Hz tones at 20ms/bit. A “0” in the bit pattern represents tone on for 20ms, and a “1” in the bit pattern represents tone off for 20ms. The data bytes are transmitted least-significant-bit first.

The data is transmitted in the following format:

```
S D1 D2 D3 D4 D5 D6 D7 D8 EXT CHKSUM
```

Where:

S = 55 hex as start signal.
D1 = 30 hex, as the first digit of the account code.
D2 = 30 hex, as the second digit of the account code.
D3 - D6 = 3X hex, as the following four digits of the account codes, X = 0 - 9
D7 - D8 = 3X hex, as the two digits of the report codes, X = 0 - 9, A - F.
EXT = 03 hex, as the end of transmission signal.
CHKSUM = YY, it is the XOR of D1 through D8 and then XORed with the EXT.

The PC5015 will wait for the programmed "Wait for Handshake" for the initial handshake, it will wait 15 seconds for any subsequent handshake during the same phone call. When using the Robofon format, the Partition Identifiers (sections 310 and 311) will be 6 digit.

Post Dial Wait for Handshake Timer . . . . . . . . . . . . . . . . Section [161]

5.10 Downloading Options

Downloading

Downloading allows programming of the entire control panel via a computer, modem and telephone line. All functions and features, changes and status, such as trouble conditions and open zones can be viewed or programmed by downloading.

NOTE: When power is applied to the panel, a 6 hour downloading window can be enabled. This will allow you to perform downloading without having to do any keypad programming.

NOTE: When an event occurs that the system is programmed to communicate to the central station, the panel will disconnect from the downloading computer and report the event. This will happen for all events except test transmissions.

If the Answering Machine/Double Call option is enabled (or during the first 6 hours after power up) the panel will answer incoming calls for downloading provided the following conditions occur:
1. The panel hears one or two rings then misses a ring.
2. At this point the panel will start a timer.
3. If the panel hears another ring before the Answering Machine Double Call Timer expires it will answer on the first ring of the second call.

The panel will immediately go on line and begin the download process unless the Call Back option is enabled. If enabled, the panel and computer will both hang up. The panel will then call the Download Computer Telephone Number and wait for the computer to answer. Once the computer answers downloading will begin.

Installer Mode Option when enabled will allow the end user to open an installer window through [*][6] that will allow access to installer programming via either DLS or the keypad [*][8]. The window will be open for either 1 or 6 hours depending on the option selected in section [702], option 7.

If the User Initiated Call-Up option is enabled, the user can have the panel initiate a call to the downloading computer by pressing [*][6][Master Code][6].

The Download Access Code and Panel Identifier Code are for security and proper identification. Both the panel and the computer file should have the same information programmed before attempting to download.

The time to complete a successful download can be significantly reduced with the use of the PC-Link. This adaptor makes it possible to perform on-site downloading. To Initiate Local Downloading via the PC-Link, enter [#][8] [Installer's Code][499] [Installer's Code] [499]. All keypads will be busy for the duration of the PC-Link connection. The status LEDs will display the current system status on the keypad where the PC-Link was initiated. For more information on connecting the PC-Link, refer to your 'PC-Link Download Kit Instruction Sheet'.

Downloading can also be performed through the GSM/LINKS1000 cellular communicator if the telephone line is disconnected. If using the GSM/LINKS1000 with Call Back, you need to program the GSM/LINKS1000 Preamble with the downloading telephone number in order for the panel to call the computer correctly.

NOTE: When uploading labels from LCD keypads, the DLS software will receive the labels only from the LCD keypad assigned to slot 8. In addition, version 1.0 and version 2.0 LCD keypads are not compatible on the same system. For more information refer to the Download Manual included with the computer software.

NOTE: The most recent version of the LCD5500 keypad on the system should be assigned to slot 8.

Answering Machine Double Call Timer . . . . . . . . . . . . . . . . . Section [405]
Download Computer Telephone Number . . . . . . . . . . . . . . Section [402]
Download Access Code . . . . . . . . . . . . . . . . . . . . . . Section [403]
Panel Identifier . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Section [404]
GSM/LINKS1000 Preamble (Downloading) . . . . . . . . . . . Section [490]

### [401] - First Downloading Option Codes

<table>
<thead>
<tr>
<th>Option</th>
<th>Downloading Code</th>
<th>On/Off</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Downloading Answer</td>
<td>ON</td>
<td>Downloading Answer Enabled. The system will answer calls for downloading if a successful Double call routine is detected. Have the downloading computer call the system and let the telephone line ring once or twice. After 1 or 2 rings, hang up. If called back within the programmed Double Call Time (000-255 seconds), the panel will answer on the first ring.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OFF</td>
<td>Downloading Answer Disabled. The system will not answer incoming calls using the Double Call routine unless the User enables the DLS window. This option can be enabled by turning Option 2 ON.</td>
</tr>
<tr>
<td>2</td>
<td>Installer Mode Option</td>
<td>ON</td>
<td>Installer/DLS Must Be Enabled through [*][6][Master Code][5].</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OFF</td>
<td>Standard Installer/DLS Functionality. [*][6] is not required.</td>
</tr>
<tr>
<td>3</td>
<td>Call-Back</td>
<td>ON</td>
<td>Call-Back Enabled. When the system answers the downloading computer's call, both the computer and the panel will hang up. The panel will then call the Downloading Telephone Number and connect with the computer at that number. If more than one downloading computer is to be used, this function should be disabled.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OFF</td>
<td>Call-Back Disabled. The downloading computer will have immediate access to the panel once it is identified as a valid system.</td>
</tr>
<tr>
<td>4</td>
<td>User Call-Up</td>
<td>ON</td>
<td>User Call-Up Enabled. When this feature is enabled, the user may initiate a single call of the Downloading Telephone by entering [*][6][Master Code][6].</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OFF</td>
<td>User Call-Up Disabled. An error tone will be generated when [*][6][Master Code][6] is entered.</td>
</tr>
<tr>
<td>5-8</td>
<td></td>
<td></td>
<td>For Future Use</td>
</tr>
</tbody>
</table>
5.11 PGM Output Options
Programmable outputs PGM1 and PGM2 on the main board can be programmed by selecting one of the output options listed below (exceptions noted).

Main Board PGM Outputs .................................. Section [009]

**NOTE:** PGM outputs cannot be disabled in installer’s programming. To disable a PGM output, you must remove all wiring from the output.

[01] Burglary and Fire Bell Output
The output will activate when the alarm output is active and will deactivate when the alarm output is silenced. If the alarm output is pulsing, the PGM output will pulse as well. This output will follow the activation of the alarm output (pre-alert) for delayed fire zones.

[02] For Future Use

[03] Sensor Reset (‘*’/7/2)
**NOTE:** This output will normally be active (switched to ground).
This option is used to reset power for latching smoke detectors. The output will deactivate for five seconds when the [*]/7/2 command is entered (see [*]/7 Command Output Functions). The keypad buzzer will not sound for the five second period. After performing a sensor reset, wait 15 seconds before attempting to arm the system.
Please refer to the Control Panel Wiring Diagram in this manual for wiring instructions.
**NOTE:** Only ONE of options [03] Sensor Reset and [20] Command Output Option #2 may be programmed on the same system.

[04] For Future Use

[05] Armed Status
When the system is armed, the PGM output will activate at the beginning of the exit delay. The output deactivated when the system is disarmed.

[06] Ready To Arm
The PGM will be active as long as the system is ready to arm and all non-force armable zones on the system are restored. Once an access code is entered to arm the system and the exit delay begins, the PGM output is deactivated.

[07] Keypad Buzzer Follower Mode
The PGM will activate when any of the following events occur and will remain active for as long as the keypad buzzer is active:
- Door Chime
- Auto-arm Prealert
- 24-hr Supervisory Buzzer Zone

[08] For Future Use

[09] System Trouble Output
The PGM output will activate when any of the selected trouble conditions are present. It will deactivate when all the selected trouble conditions are cleared.
The PGM attributes for this option, programmed in sections [141] to [142], differ from the standard selection of attributes. Program which trouble conditions will activate the output by selecting some or all of the following attributes:
Attribute
- [1] Service Required (battery, bell, general trouble, general tamper, general supervisory)
- [2] AC Failure
- [3] Telephone Line Trouble
- [4] Failure to Communicate
- [5] Fire Trouble / Zone Fault
- [6] Zone Tamper
- [7] Zone Low Battery
- [8] Loss of Clock

[10] System Event (Strobe Output)
The output activates when any of the selected system events (alarms) occur on the system.
**NOTE:** This output will activate for silent and audible alarms or medical conditions only. It will not activate during pre-alert or delays.

If attribute [8] is turned ON, the output will activate for the number of seconds programmed in the PGM output timer (section [164]).

If attribute [8] is turned OFF, in the armed state, the output will deactivate only once the system is disarmed. If an alarm activates this output in the disarmed state, the output will deactivate if a user enters a valid access code while the Bell Cut-off timer is counting down. The output will also deactivate if someone arms the system after the bell Cut-off has expired.
This output can be used to indicate that an alarm has occurred before entering the premises.

The PGM attributes for this option, programmed in Sections [141] to [142], differ from the standard selection of attributes. Program which events will activate the output by selecting some or all of the following attributes:

Attribute
- [1] Burglary (Delay, Interior, Stay/Away and 24-hr Burglary Zones)
- [2] Fire (Fire Keys, Fire Zones)
- [3] Panic (Panic Keys and Panic Zones)
- [4] Medical (Auxiliary Keys, Medical and Emergency Zones)
- [5] Supervisory (Supervisory, Freezer and Water Zones)
- [6] Priority (Gas, Heat, Sprinkler and 24-hr Latching Zones)
- [7] Holdup (Holdup zones)
- [8] Output Follows Timer (output will activate for the number of seconds programmed in the PGM Output Timer) / Output Latched

**NOTE:** If attribute [8] is turned ON, attributes [1-7] must also be turned ON.

PGM Output Timer ........................................ Section [164]

[11] System Tamper (All Sources)
The PGM output will activate when any tamper condition is present and will deactivate when all tampers are restored.

[12] For Future Use

[13] For Future Use

[14] For Future Use

This output can be activated and deactivated remotely using the DLS software.

[16] GSM1000 Support (PGM1 Only)
The PGM will be used as a data wire to communicate telephone number information for the GSM1000 cellular unit.

[17] Away Armed Status
The system will be armed in the Away mode, the PGM output will activate at the beginning of the exit delay. The output deactivates when the panel is disarmed.
[18] Stay Armed Status
When the system is armed in the Stay mode, the PGM output will activate at the beginning of the exit delay. The output deactivates when the panel is disarmed.

[19] [*][7][1] Command Output Option #1
[20] [*][7][2] Command Output Option #2
These outputs are user-initiated by entering [*][7][1-2] at any keypad. When any output is activated, three acknowledgment beeps are sounded.

NOTES on Option [20] [*][7][2]:
Press [*][7][2][Access Code, if required] to activate any output programmed as one of PGM output option [03] or [20]. Traditionally, [*][7][2] has been reserved for resetting smoke detectors. Smoke detectors should now be programmed as output [03] “Sensor Reset”.

NOTE: Only ONE of options [03] Sensor Reset and [20][*][7][2] Command Output Option #2 may be programmed on the same system.

[21]-[24] For Future Use
For Future Use

[26] Battery Test (PGM1 only)
When the panel performs the 10-second battery check, the Battery Test output will activate. You may use this output type to switch a 20 ohm load across to test the battery for the 10 second battery check period. Connect a resistor between the Bell+ and PGM1 terminals.

[27] Police Code
When a Police Code event occurs, this output will activate until the panel is disarmed or an access code is entered. (See “Cross Zone Police Reporting Code”.)

[28] Holdup
When a Holdup zone (zone type [12]) goes into alarm, this output will activate until the panel is disarmed or an access code is entered. A tamper or fault on a Holdup zone will not cause Holdup outputs to activate.

[29] Zone Follower
Outputs programmed this way will be active when programmed zones are violated. The Output Attributes determine which zones the output will follow. The output will not activate for zone types (22) or (23) if DEOL is enabled.

Example: PGM 1 is programmed as a zone follower with attributes 1, 6, and 8 on. PGM1 will activate when any of zones 1, 6, or 8 are violated. PGM1 will deactivate when all three zones are restored.

NOTE: Zone follower outputs cannot be inverted.

Attribute....ON OFF
[1]……..Follows zone 1 Does not follow zone 1
[2]……..Follows zone 2 Does not follow zone 2
[3]……..Follows zone 3 Does not follow zone 3
[4]……..Follows zone 4 Does not follow zone 4
[5]……..Follows zone 5 Does not follow zone 5
[6]……..Follows zone 6 Does not follow zone 6
[7]……..Follows zone 7 Does not follow zone 7
[8]……..Follows zone 8 Does not follow zone 8

PGM Output Attributes
In addition to programming the output type, you must also program the PGM output attributes for each output. PGM output options [09] “System Trouble”, [10] “System Event” and [29] “Zone Follower” have their own unique set of attributes listed below the description of each output type.

PGM output options [01], [03], [05]-[08], [11]-[28] have the following attributes:

Attribute....ON OFF
[1]……..Output Enabled Disabled
[3]……..True Output Inverted Output
Attribute ON: the output energizes when activated
Attribute OFF: the output de-energizes when activated
[4]……..Output Pulsed Output ON/OFF
Attribute ON: the output will activate once for the amount of time programmed in section [164] when initiated by the user
Attribute OFF: the output will toggle ON or OFF when initiated by the user.
(Only applicable to options [19]-[20].)
Attribute ON: the output requires a code for activation.
Attribute OFF: no code required.
(only applicable to keypad-activated outputs)

PGM attributes return to their default settings when you change PGM output options. Please see the programming worksheets for a list of the default settings for each PGM output type.

Care should be taken in selecting the normal and active states of each PGM output to ensure that an undesirable output state does not occur after a loss and restore of AC power.

NOTE: Attribute [3] must be ON (default) for PGM output option [16].

NOTE: If you program more than one PGM output as the same output type (e.g. if PGM1 and PGM2 are both programmed as [19] Command Output 1), the settings for output attributes [1], [2] and [5] must be the same. This does not apply to outputs programmed as types [09] and [10].

5.12 Telephone Line Monitor (TLM)
When the TLM Enable option is selected, the panel will supervise the telephone line and will indicate a trouble condition if the telephone line is disconnected.

If the TLM Enable option is ON, the panel will check the telephone line every 10 seconds. If the telephone line voltage is below 3V for the number of checks programmed in the TLM Trouble Delay section, the panel will report a TLM trouble. The default number of checks is 3. Enter a number from [003] to [255] in the TLM Trouble Delay section to change the number of checks before the TLM trouble is reported. Programming a delay means that a momentary interruption of the telephone line will not cause a trouble condition.

If the TLM Trouble Beeps When Armed option is enabled, the panel will indicate a TLM trouble at the keypad while the system is armed. To activate the bell output in the case of a TLM trouble while the system is armed, the TLM Audible (Bell) When Armed option must be selected.

When the trouble condition is restored, the panel can send a TLM Restoral reporting code. Any events which occur while the telephone line is down will also be communicated. If the GSM1000 Cellular Communicator is being used the panel can be programmed to report a TLM Trouble Reporting Code.
TLM Enable/Disable . . . . . . . . . . . . . . . . . . . . . Section [015]; [7]
TLM Trouble Beeps When Armed or
TLM Audible (Bell) When Armed . . . . . . . . Section [015]; [8]
TLM Trouble Reporting Code . . . . . . . . . . . . . . Section [349]
TLM Restoral Reporting Code . . . . . . . . . . . . . . Section [350]
TLM Trouble Delay . . . . . . . . . . . . . . . . . . . . . . . . Section [370]

5.13 Bell
The bell will silence after the number of minutes programmed for the Bell Cut-off time have passed.

The panel supervises the Bell output. If an open condition is detected, the panel will immediately indicate a trouble condition by beeping the keypad twice every 10 seconds to alert the owner of the problem. The panel can send a Bell Circuit Trouble and Trouble Restoral reporting codes to indicate the situation (see section 5.8 “Communicator – Reporting Codes”).

If Fire Bell Continuous is enabled, the bell will sound until a code is entered. If disabled, the bell will sound until a code is entered or the bell cut-off time has expired.

Bell Cut-off . . . . . . . . . . . . . . . . . . . . . . . . . . . . Section [005]
Bell Circuit Trouble Reporting Code . . . . . . . . Section [349]
Bell Circuit Trouble Restoral Reporting Code . . . Section [350]
Fire Bell Continuous . . . . . . . . . . . . . . . . . . . . . . Section [014]; [8]

5.14 Test Transmission
To ensure that the communication link with the central station is functioning properly, program the panel to send a test transmission signal on a regular basis.

The panel can send a Periodic Test Transmission Reporting Code at the programmed Test Transmission Time of Day. The Test Transmission Cycle determines the period of time between tests. The option Land Line Test Transmission in Minutes/ Days allows you to select whether the Land Line Test Transmission cycle will be counted in minutes or days. If you have selected the test transmission cycle to be in minutes, the Test Transmission Time of Day counter will not apply.

NOTE: If you have selected the Land Line Test Transmission in Minutes option, do not program the test transmission cycle to be less than 10 minutes.

NOTE: The GSM1000 Test Transmission can only be programmed in days.

If you program the test transmission cycle for a longer period of time than it was programmed for previously, the system will wait the original time period before the next test transmission is sent, and then begin reporting with the new interval.

The option Land Line Test Transmission in Minutes/ Days allows you to select whether the Land Line Test Transmission cycle will be counted in minutes or days. If you have selected the test transmission cycle to be in minutes, the Test Transmission Time of Day counter will not apply.

NOTE: The GSM1000 Test Transmission can only be programmed in days.

5.15 Transmission Delay
If the transmission delay zone attribute is selected for a given zone, the panel will delay reporting an alarm for that zone for the number of seconds programmed for the Transmission Delay Time. If the panel is disarmed before the delay time expires, the panel will not report the event.

Transmission Delay Time . . . . . . . . . . . . . . . . . . . . . Section [370]

5.16 Fire, Auxiliary and Panic Keys
The emergency keys are available on all keypads. These keys must be pressed and held for two seconds before they will activate. This two second delay is designed to help prevent accidental activation.

If the [F] / key option is enabled, when the Fire keys are pressed and held for two seconds, the panel will activate the alarm output. The alarm output will sound until a code is entered or until the bell cut-off time expires. Communication of the signal to central station is immediate.

If the [A] / key is pressed and held for two seconds, the panel will send the keypad beeps three times to verify activation. The panel will beep the keypad ten times rapidly when a kissoff is received, to verify communication to the central station.

If the [P] / key is pressed and held for two seconds, the panel will immediately communicate the signal to central station.

If [P] Key Audible Bell and Buzzer option is enabled, when a user presses the [P] / key, the keypad will beep three times and the panel will activate the alarm output until an access code is entered or the bell cut-off expires. If the option is disabled, the Panic alarm will be completely silent.

Each LCD keypad may be programmed to have the [F], [A], & [P] keys enabled or disabled. Please refer to Appendix B: “Programming LCD Keypads”.

NOTE: The Fire, Auxiliary, Panic keys will operate even if Keypad Blanking is active (See section 5.22 “Keypad Blanking”).

[F] Key Enable . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Section [015]; [1]
[P] Key Audible Bell and Buzzer . . . . . . . . . . . . . . . . Section [015]; [2]

5.17 Arming/Disarming Options
If the Quick Arm option is enabled, the panel can be armed without an access code by entering “[]”[0] or by pressing the Stay or Away function key.

The Quick Exit option, if enabled, will allow someone to leave an armed premises through a Delay type zone without having to disarm and re-arm the system. See “[]”[0] Quick Exit”.

If the Arm/Disarm Bell Squawk option is enabled, the panel will squawk the alarm output once upon arming and twice upon disarming. If an alarm is in memory, when the panel is disarmed the bell will sound three pairs of disarm squawks.

NOTE: If the panel is armed using the Stay function key, or by entering “[]”[9][access code], there will be no bell squawks during entry and exit delays, except for the arm/disarm bell squawks.

Closing Confirmation, if enabled, will cause the keypad to beep 8 times rapidly after the closing reporting code has been successfully transmitted to central station.

If the Bypass Status Displayed While Armed option is chosen, the Bypass light will be ON while the system is armed to indicate that there are bypassed zones.
If the AC/DC Inhibit Arming option is enabled, the panel will not arm if there is an AC or DC (battery) trouble present on the system. Arming will not be allowed until the AC or battery trouble is cleared. If no AC or battery trouble is currently present, when a user attempts to arm the system, the panel will do an automatic battery test of the main panel and modules that support a backup battery. If the battery is good, the system will arm. If the battery is bad, the system will not arm.

If the AC/DC Inhibit Arming option is disabled, the panel will not do an automatic battery test when arming is attempted and the user will not be prevented from arming the system when there is an AC or battery trouble.

If you enable the Unidentified Wireless Key Disarming option, the disarm button will work on wireless keys which have not been assigned access codes. Wireless keys can only be assigned access codes when used with PC5132 v3.0 or higher.

To prevent disarming by wireless keys which don’t have access codes, disable this option. (Please see your PC5132 manual for more information on programming wireless keys.)

NOTE: This option must be enabled when using a PC5132 v2.1 or earlier.

5.18 Entry/Exit Delay Options
Two different Entry Delays can be programmed: the first entry delay will be enabled for Delay 1 type zones and the second for Delay 2 type zones. Only one Exit Delay can be programmed.

NOTE: When the panel is armed, the entry delay will follow the entry delay time programmed for the delay zone which is violated first.

Upon arming, the panel will begin the exit delay. If the Audible Exit Delay with Urgency option is enabled, the keypad will beep at one second intervals until the exit delay expires. The keypad will beep rapidly for the last 10 seconds of exit delay to warn the user that the system is about to arm. If this option is disabled, the keypad will not beep during the exit delay.

For commercial applications, the Bell Squawk on Exit Delay option may be enabled. The panel will squawk the alarm output once every second when the exit delay is initiated and three times per second for the last 10 seconds until the exit delay expires.

NOTE: The bell will not squawk when the panel is Stay or No-arm armed.

Upon entry, if a Delay type zone is violated, the panel will begin the entry delay. The keypad will emit a steady tone. The keypad will pulse the keypad sounder during the last 10 seconds to warn the user the system is about to go into alarm. If there was an alarm during the armed period, the keypad will pulse for the entire entry delay to warn the user of the previous alarm.

For commercial applications Bell Squawk on Entry Delay may be enabled. The panel will squawk the alarm output once every second until the entry delay expires or the system is disarmed.

If the Bell Squawk During Auto Arm option is enabled, the bell will squawk once every 10 seconds for one minute during the Auto-arm pre-alert. This will notify anyone on the premises that the system is being armed.

If the Exit Delay Termination option is enabled, the panel will monitor the Delay 1 zones during exit delay. During the exit delay, if a Delay 1 type zone is violated and then secured, the exit delay will be terminated and the panel will be armed immediately.

5.19 Swinger Shutdown
The swinger shutdown feature is designed to prevent a “runaway” communicator from tying up the central station. After the panel has communicated the programmed number of transmissions for an event, it will no longer report that event until the swinger shutdown is reset. Different swinger shutdown levels can be set for zone alarms, zone tampers and maintenance signals.

By default, each swinger shutdown limit is set to [003]. The panel will not send more than three signals for each zone until the swinger shutdown is reset.

The Bell output will not be activated for alarms on zones that have exceeded the limit of alarms set in the Swinger Shutdown counter. Swinger shutdown will be reset every day at midnight or when the panel is armed. Once reset, the panel will again communicate normally.

5.20 Event Buffer
The panel will store the last 128 events which occurred on the system. The event buffer will contain the name, time and date of each event, along with the zone number, access code number or any other information pertaining to the event.

If the Event Buffer Follows Swinger Shutdown option is enabled, the Event Buffer will not store events after the Swinger Shutdown level has been reached. This will prevent the panel from overwriting the entire buffer if a problem exists.

The event buffer can be viewed in three different ways: from an LCD keypad (see [*][6] User Functions), printed on-site using the PC5400 printer module, or it can be uploaded using DLS software.

5.21 Keypad Lockout Options
The panel can be programmed to “lock out” keypads if a series of incorrect access codes are entered. Once the Number of Invalid Codes Before Lockout limit has been reached, the panel will lock out all keypads for the lockout
duration and log the event to the event buffer. For the duration of the lockout, the panel will sound an error tone when any key is pressed.

**NOTE:** The Invalid Code Counter will be reset every hour.

To disable the keypad lockout option, program the Number of Invalid Codes Before Lockout as [000].

**NOTE:** If Keypad Lockout is active, the panel CANNOT be armed / disarmed with a keyswitch.

### Keypad Lockout Options

**Section [012]**

**Keypad Blank Locking**

If the Blank Keypad When Not in Use option is enabled, the panel will turn off all lights and LCDs on the keypads when no keys are pressed for 30 seconds. The keys, however, will remain backlit.

The panel will turn the lights and LCDs back on if entry delay begins or an audible alarm occurs. The lights and LCDs will also come on if a key is pressed or, if a valid access code is entered when the Code Required to Restore Blankiing option is enabled.

**NOTE:** If using a PC5132 v3.0 or greater, and wireless keys, do not enable the Code Required to Restore Blankinig option, as the keys will not function correctly.

If the Power Save Mode option is enabled the panel will blank all keypad lights including backlighting when AC power fails, in order to conserve the backup battery.

---

**Blank Keypad when not in use.** . . . . . . . . . Section [016]: [3]

**Code Required to Restore Blankinig.** . . . . . Section [016]: [4]

**Power Save Mode.** . . . . . . . . . Section [016]: [6]

### Keypad Backlighting

The keys of all the keypads can be backlit to provide easy viewing in dim lighting conditions. If the Keypad Backlighting option is enabled the keys will be illuminated.

---

**Keypad Backlighting Option** . . . . . . . . . Section [016]: [5]

### Loop Response

The normal loop response time for all zones is under 400 milliseconds.

Zones 1-4 on the control board, however, can be programmed for a fast loop response (under 40ms).

---

Zones 1-4 are Fast Loop Response. . . . . Section [030]: [1-46]

### Keypad Tamper Enable

**Section [016]: [8]**

General System Tamper and Tamper Restoral Reporting Codes. . . . . . . . . . . Section [338]

System Tamperers Req. Installer Reset. . . . . . . . . . . . . . . . . . Section [701]: [4]

**NOTE:** After enabling keypad tamper reporting, it is recommended to tamper and restore all keypads to ensure proper functioning.

### GSM1000 Cellular Communicator

The GSM1000 Cellular Communicator can be used three different ways: as the sole communicator for the panel, as a backup for either or both telephone numbers or as a redundant backup to the land line communicator, where the panel will call both the land line and via the GSM1000. A GSM1000 Preamble is programmable for each telephone number in the event that the land line number is local but the GSM1000 is required to dial an exchange. When programming a GSM1000 Preamble, all unused digits must be programmed with a hexadecimal “F”.

You may need to program a longer delay between dialing attempts to ensure proper operation of the GSM1000.

#### Using GSM1000 as the Sole Communicator

The panel can be programmed to report an event only using the GSM1000 cellular communicator. To program this option, select only the GSM1000 in the Communicator Call Direction options. The Call GSM1000 as well as Land Line option must also be enabled.

When the selected event occurs the panel will only attempt to call central station using the GSM1000.

#### Using the GSM1000 as a Backup Communicator

The panel can be programmed to call using the GSM1000 Cellular Communicator if the panel is having difficulty communicating an event using the land line. To program this option, select both the telephone number and GSM1000 options in the Communicator Call Direction options. The GSM1000 is Backup of Land Lines option must be selected.

When used as a backup communicator, the panel will attempt to call the central station in the following manner:

- the panel will try to call using land lines – if unsuccessful, the panel will try to call using the GSM1000
- if unsuccessful, the panel will try to call using the land lines on the next dialing attempt

This process will continue until the panel has successfully communicated with the central station or until the panel’s programmed number of dialing attempts have been exhausted.

#### Using the GSM1000 as a Redundant Communicator

The panel can be programmed to call using first the GSM1000 and then the land line when an event occurs. To program this option, select both the telephone number and the GSM1000 options for the Communicator Call Direction options for the event. The Call GSM1000 as well as Land Line option must be selected.

**GSM1000 Special Preamble**

In some calling areas dialing specific digits reduces the cellular billing increment. The GSM1000 Special Preamble (section [393]), allows the use of [*] and [#] characters for the programming of these specific digits.

The GSM1000 Special Preamble is sent BEFORE the Preamble programmed in Sections [390] to [392].

Example: [Special Preamble][Regular Preamble][Telephone Number]
NOTE: If this Special Preamble is programmed, it will be inserted before the Regular Preamble of ALL telephone numbers. Hex digits D and E are not supported for Preamble programming.

NOTE: If Busy Tone Detection is enabled, the GSM1000 must be tested to ensure full operation.

Please refer to the GSM1000 installation Manual for more information and connection diagrams.

5.27 Additional System Modules

The following modules are programmed through the Module Programming sections [801]-[804]: the PC5400 Printer module and the PC5132 Wireless Receiver and all of its devices. For instructions on the installation and programming of these additional modules and devices, please see their respective installation and programming manuals.

PC5400 Programming . . . . . . . . . . . . . . . . . . . . . Section [801]
PC5132 Programming . . . . . . . . . . . . . . . . . . . . . Section [804]

5.28 Clock Adjust

In order to compensate for timing inaccuracies, the panel may be programmed to add or subtract seconds during the last minute of each day using the Clock Adjust programming section. Valid entries are 01 - 99. The default setting is 60 seconds. To determine the value to be programmed in this section, monitor the amount of time lost or gained by the panel over a period of time. Then, calculate the average amount of time per day that the panel gains or loses. If the clock’s timing is off, it may be corrected with this setting.

Example #1: The clock loses an average of 9 seconds per day. Solution: Program the panel to adjust the clock by 51 seconds (instead of the default 60 seconds) for the last minute of each day in section [700]. This will speed up the panel’s clock by 9 seconds, correcting the problem.

Example #2: The clock gains an average of 11 seconds per day. Solution: Program the panel to adjust the clock by 71 seconds (instead of the default 60 seconds) for the last minute of each day in section [700]. This will slow down the panel’s clock by 11 seconds, correcting the problem.

NOTE: If the auto-arm time is set for 23:59, any change to the Clock Adjust option will directly affect the auto-arm pre-alert time.

5.29 Timebase

In cases of unstable AC power input you can use the internal crystal to keep a more accurate timebase by enabling the Timebase is Internal Crystal option.

If the 50 or 60Hz AC power input is very stable it can be used as the timebase, by enabling the Timebase is AC line option.

5.30 Resetting Factory Defaults

On occasion, it may be necessary to default the main control panel or one of the connected modules: the PC5132 wireless receiver, the PC5400 Printer module.

To default the main control panel (hardware), perform the following:

1. Remove AC and battery from the panel.
2. Remove all wires from the Zone 1 and PGM1 terminals.
3. With a piece of wire short the Zone 1 terminal to the PGM1 terminal.
4. Apply AC power to the main panel.
5. When Zone Light 1 is lit on the keypad the default is complete.
6. Remove AC power from the control.
7. Reconnect all original wiring and power up the control.

NOTE: AC power must be used to power the panel. The panel will not default if only the battery is used.

To default the main control panel software and other modules, perform the following:

1. Enter the Installer’s Programming mode.
2. Enter the appropriate programming section [XXX].
3. Enter the Installer’s Code.
4. Re-enter the appropriate programming section [XXX].

The panel will take a few seconds to perform the default. When the keypad is again operational the default is complete.

NOTE: If using Identified Wireless Keys (PC5132 v3.0 or later only), when the main panel is defaulted, all wireless key access codes must be re-programmed. Refer to your PC5132 v3.0 Installation Manual for more information.

NOTE: If a PC5132 is used, make sure that all disabled zones have a serial number of [000000].

Restore PC5132 to Default Programming . . . . Section [996]
Restore PC5400 to Default Programming . . . . Section [997]
Restore Panel to Default Programming . . . . Section [999]

5.31 Installer’s Lockout

If Installer’s Lockout is selected, a hardware default cannot be performed. If a software default is performed, all programming will restore to factory default.

If Installer’s Lockout Disable is selected, the panel will restore all programming to factory defaults when a hardware or software default is performed on the main control panel. To enable or disable Installer’s Lockout, perform the following:

1. Enter the Installer’s Programming mode.
2. Enter the appropriate programming section: [990] or [991].
3. Enter the Installer’s Code.
4. Re-enter the appropriate programming section: [990] or [991].

Installer Lockout Enable . . . . . . . . . . . . . . . . . . . . Section [990]
Installer Lockout Disable . . . . . . . . . . . . . . . . . . . . Section [991]

5.32 Walk Test (Installer)

The Installer Walk Test can be used to test the alarm state of each zone of the panel. The walk test cannot be used to test zone type [24].

Before beginning the walk test, ensure the following conditions are met:
1. The panel is disarmed
2. The Keypad Blankling option is disabled (section [016]: [3])
3. The Fire Bell is Continuous option is disabled (section [014]: [8])
4. The Transmission Delay is disabled, if Transmission Delay is not required (section [370])

NOTE: Fire Troubles are not supported in Walk Test.

To perform a Walk Test:
Step 1 - Enter Installer Programming
Step 2 - Enter Section [901]
When any zone is violated the panel will activate the Bell Output for two seconds, log the event to the event buffer and communicate the alarm to central station. Each zone should be tested several times during the test. Check the event buffer to ensure that all zones and FAP keys are functioning properly.

To stop the test:
Step 1 - Enter Installer Programming
Step 2 - Enter Section [901]
Check the event buffer after the Walk Test is complete, to ensure that the Audible/Silent 24-hr PGM alarms have been restored.

NOTE: The Alarm Memory is cleared upon entering Walk Test mode. Zones that were violated during the Walk Test will be stored as alarms in alarm memory. The Memory light will turn off the next time the panel is armed.
Section 6: Programming Worksheets

For the Record
Customer: _______________________________________________________________________________________________________
Address: ________________________________________________________________________________________________________
Telephone: ____________________________________________Installation Date:____________________________________________
Installer's Code: __________________________________________________________________________________________________

<table>
<thead>
<tr>
<th>Module Name</th>
<th>Description</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC585</td>
<td>Main Panel</td>
<td>________________________________</td>
</tr>
<tr>
<td>PC5132</td>
<td>Wireless Receiver</td>
<td>________________________________</td>
</tr>
<tr>
<td>PC5400</td>
<td>Serial Printer Module</td>
<td>________________________________</td>
</tr>
<tr>
<td>PC5928</td>
<td>Audio Interface Module</td>
<td>________________________________</td>
</tr>
<tr>
<td>GSM1000</td>
<td>Cellular Communicator</td>
<td>________________________________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Keypad Type</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keypad 1</td>
<td>________________________________</td>
</tr>
<tr>
<td>Keypad 2</td>
<td>________________________________</td>
</tr>
<tr>
<td>Keypad 3</td>
<td>________________________________</td>
</tr>
<tr>
<td>Keypad 4</td>
<td>________________________________</td>
</tr>
<tr>
<td>Keypad 5</td>
<td>________________________________</td>
</tr>
<tr>
<td>Keypad 6</td>
<td>________________________________</td>
</tr>
<tr>
<td>Keypad 7</td>
<td>________________________________</td>
</tr>
<tr>
<td>Keypad 8</td>
<td>________________________________</td>
</tr>
</tbody>
</table>

Zone programming can be found in sections [001], [101] - [108], [020] and [202]. Use this area to record a summary of your zone programming. Refer to Appendix B: “Programming LCD Keypads”, for instructions on programming zone labels.

<table>
<thead>
<tr>
<th>System Zone</th>
<th>Zone Label</th>
<th>Zone Type</th>
<th>Zone Attributes*</th>
<th>Serial Number (Wireless)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zone 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zone 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zone 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zone 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zone 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zone 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zone 8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Zone Attributes:
Option 1: Audible/Silent  Option 5: Force
Option 2: Steady/Pulsed  Option 6: Swinger Shutdown
Option 3: Chime  Option 7: Transmission Delay
Option 4: Bypass  Option 8: Wireless
Keypad Programming

[000] Keypad Enrollment (Section 2.5 “Keypad Assignment”)

NOTE: This must be done at each keypad requiring programming.

[0] Slot (Valid entries are 11-18; ie. enter [11] for slot 1, [12] for slot 2, etc.)
[1] Function Key 1 Assignment (Valid entries are 00-17)
[2] Function Key 2 Assignment (Valid entries are 00-17)
[3] Function Key 3 Assignment (Valid entries are 00-17)
[4] Function Key 4 Assignment (Valid entries are 00-17)
[5] Function Key 5 Assignment (Valid entries are 00-17)

Function Key Options:

<table>
<thead>
<tr>
<th>Slot</th>
<th>Function Key 1</th>
<th>Function Key 2</th>
<th>Function Key 3</th>
<th>Function Key 4</th>
<th>Function Key 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>LED Defaults</td>
<td>11</td>
<td>04</td>
<td>03</td>
<td>14</td>
<td>00</td>
</tr>
<tr>
<td>LCD Defaults</td>
<td>18</td>
<td>03</td>
<td>04</td>
<td>06</td>
<td>14</td>
</tr>
<tr>
<td>KEYPAD 1</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
</tr>
<tr>
<td>KEYPAD 2</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
</tr>
<tr>
<td>KEYPAD 3</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
</tr>
<tr>
<td>KEYPAD 4</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
</tr>
<tr>
<td>KEYPAD 5</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
</tr>
<tr>
<td>KEYPAD 6</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
</tr>
<tr>
<td>KEYPAD 7</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
</tr>
<tr>
<td>KEYPAD 8</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
<td>_______</td>
</tr>
</tbody>
</table>

Basic Programming

Zone Definitions

<table>
<thead>
<tr>
<th>Slot</th>
<th>Default</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Null Zone (Not Used)</td>
<td>11 24-hr Burglary</td>
</tr>
<tr>
<td>01</td>
<td>Delay 1</td>
<td>12 24-hr Holdup</td>
</tr>
<tr>
<td>02</td>
<td>Delay 2</td>
<td>13 24-hr Gas</td>
</tr>
<tr>
<td>03</td>
<td>Instant</td>
<td>14 24-hr Heat</td>
</tr>
<tr>
<td>04</td>
<td>Interior</td>
<td>15 24-hr Medical</td>
</tr>
<tr>
<td>05</td>
<td>Interior, Stay/Away</td>
<td>16 24-hr Panic</td>
</tr>
<tr>
<td>06</td>
<td>Delay, Stay/Away</td>
<td>17 24-hr Emergency</td>
</tr>
<tr>
<td>07</td>
<td>Delayed 24-hr Fire (Hardwired)</td>
<td>18 24-hr Sprinkler</td>
</tr>
<tr>
<td>08</td>
<td>Standard 24-hr Fire (Hardwired)</td>
<td>19 24-hr Water</td>
</tr>
<tr>
<td>09</td>
<td>24-hr Supervisory</td>
<td>20 24-hr Freeze</td>
</tr>
<tr>
<td>10</td>
<td>24-hr Supervisory Buzzer</td>
<td>21 24-hr Latching Tamper</td>
</tr>
<tr>
<td>22</td>
<td>Momentary Keyswitch Arm</td>
<td>23 Maintained Keyswitch Arm</td>
</tr>
<tr>
<td>24</td>
<td>GSM Links Answer</td>
<td>25 Interior Delay</td>
</tr>
<tr>
<td>26</td>
<td>For Future Use</td>
<td>27 For Future Use</td>
</tr>
<tr>
<td>28</td>
<td>24-hr Bell/Buzzer</td>
<td>29 Instant Stay/Away</td>
</tr>
<tr>
<td>30</td>
<td>Delay 24-hr Fire (Wireless)</td>
<td>31 Delay 24-hr Fire (Wireless)</td>
</tr>
</tbody>
</table>

NOTE: Keypads must be installed to use 24-hr Buzzer zones.

[001] Zone 1-8 Definitions (Section 5.2 “Zone Programming”)

<table>
<thead>
<tr>
<th>Default</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>_______ Zone 1</td>
</tr>
<tr>
<td>04</td>
<td>_______ Zone 2</td>
</tr>
<tr>
<td>03</td>
<td>_______ Zone 3</td>
</tr>
<tr>
<td>03</td>
<td>_______ Zone 4</td>
</tr>
</tbody>
</table>

NOTE: Keypad zones are assigned in section [020]. Zone Attributes are assigned in sections [101] - [108]. Zone assignment is in section [202].
[005] System Times

Default

<table>
<thead>
<tr>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>030</td>
<td>Entry Delay 1 (in seconds) and 5.18 “Entry/Exit Delay Options” on page 24</td>
</tr>
<tr>
<td>045</td>
<td>Entry Delay 2 (in seconds) and 5.18 “Entry/Exit Delay Options” on page 24</td>
</tr>
<tr>
<td>120</td>
<td>Exit Delay (in seconds) and 5.18 “Entry/Exit Delay Options” on page 24</td>
</tr>
<tr>
<td>004</td>
<td>Bell Cut-off (in minutes) and 5.13 “Bell” on page 23</td>
</tr>
</tbody>
</table>

[006] Installer’s Code (Section 4.1 “Installer’s Programming” )

Default

5555

[007] Master Code (Section 5.1 “Programming Security Codes” )

Default

1234

[008] Guard Code (Section 5.1 “Programming Security Codes” )

Default

AAAA

[009] PGM Output Programming (PGM 1 and 2) (Section 5.11 “PGM Output Options” )

Programmable Output Options

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Burglary and Fire Bell Output</td>
</tr>
<tr>
<td>02</td>
<td>For Future Use</td>
</tr>
<tr>
<td>03</td>
<td>Sensor Reset</td>
</tr>
<tr>
<td>04</td>
<td>For Future Use</td>
</tr>
<tr>
<td>05</td>
<td>System Armed Status</td>
</tr>
<tr>
<td>06</td>
<td>Ready To Arm</td>
</tr>
<tr>
<td>07</td>
<td>Keypad Buzzer Follow Mode</td>
</tr>
<tr>
<td>08</td>
<td>For Future Use</td>
</tr>
<tr>
<td>09</td>
<td>System Trouble Output (with Trouble options)</td>
</tr>
<tr>
<td>10</td>
<td>System Event [Strobe (with Event options)]</td>
</tr>
<tr>
<td>11</td>
<td>System Tamper (all sources: zones, kpd, modules)</td>
</tr>
<tr>
<td>12</td>
<td>For Future Use</td>
</tr>
<tr>
<td>13</td>
<td>For Future Use</td>
</tr>
<tr>
<td>14</td>
<td>For Future Use</td>
</tr>
<tr>
<td>15</td>
<td>Remote Operation (DLS-3 Support)</td>
</tr>
<tr>
<td>16</td>
<td>GSM1000 Support (PGM1 only)</td>
</tr>
<tr>
<td>17</td>
<td>Away Armed Status</td>
</tr>
<tr>
<td>18</td>
<td>Stay Armed Status</td>
</tr>
<tr>
<td>19</td>
<td>Command Output #1 ([*][7][1])</td>
</tr>
<tr>
<td>20</td>
<td>Command Output #2 ([*][7][2])</td>
</tr>
<tr>
<td>21</td>
<td>For Future Use</td>
</tr>
<tr>
<td>22</td>
<td>For Future Use</td>
</tr>
<tr>
<td>23</td>
<td>For Future Use</td>
</tr>
<tr>
<td>24</td>
<td>For Future Use</td>
</tr>
<tr>
<td>25</td>
<td>For Future Use</td>
</tr>
<tr>
<td>26</td>
<td>Battery Test</td>
</tr>
<tr>
<td>27</td>
<td>Police Code Output</td>
</tr>
<tr>
<td>28</td>
<td>Holdup Output</td>
</tr>
<tr>
<td>29</td>
<td>Zone Follower</td>
</tr>
</tbody>
</table>

**NOTE:** Output types [03] and [20] cannot be used together on the same system.

Default

<table>
<thead>
<tr>
<th>No.</th>
<th>PGM 1</th>
<th>PGM 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>05</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Program PGM Option Attributes in sections [141] & [142].

[012] Keypad Lockout Options (Section 5.21 “Keypad Lockout Options” )

**NOTE:** If Keypad Lockout is active, the panel cannot be disarmed with a keyswitch.

Default

<table>
<thead>
<tr>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>Number of Invalid Codes Before Lockout (001-255 codes)</td>
</tr>
<tr>
<td>000</td>
<td>Lockout Duration (001-255 minutes)</td>
</tr>
</tbody>
</table>
### [013] First System Option Code

<table>
<thead>
<tr>
<th>Default</th>
<th>Option</th>
<th>ON</th>
<th>Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>1</td>
<td>Normally Closed Loops</td>
<td>End-of-Line Resistors</td>
</tr>
<tr>
<td>ON</td>
<td>2</td>
<td>Double End-of-Line Resistors</td>
<td>Single End-of-Line Resistors</td>
</tr>
<tr>
<td>OFF*</td>
<td>3</td>
<td>For Future Use</td>
<td></td>
</tr>
<tr>
<td>ON</td>
<td>4</td>
<td>Tampers/Faults do not show as open</td>
<td>Tampers/Faults show as open</td>
</tr>
<tr>
<td>OFF</td>
<td>5</td>
<td>For Future Use</td>
<td></td>
</tr>
<tr>
<td>OFF</td>
<td>6</td>
<td>For Future Use</td>
<td></td>
</tr>
<tr>
<td>ON</td>
<td>7</td>
<td>Event Buffer Follows Swinger Shutdown</td>
<td>Event Buffer Logs Events Past shutdown</td>
</tr>
<tr>
<td>ON</td>
<td>8</td>
<td>Troubles are Latching</td>
<td>Troubles Follow Restore</td>
</tr>
</tbody>
</table>

* Option 3 must be OFF if LCD keypads older than v2.0 are used.

### [014] Second System Option Code

<table>
<thead>
<tr>
<th>Default</th>
<th>Option</th>
<th>ON</th>
<th>Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>1</td>
<td>Arm / Disarm Bell Squawk enabled</td>
<td>Arm / Disarm Bell Squawk disabled</td>
</tr>
<tr>
<td>OFF</td>
<td>2</td>
<td>Bell Squawk During Auto Arm</td>
<td>No Bell Squawk During Auto Arm</td>
</tr>
<tr>
<td>OFF</td>
<td>3</td>
<td>Bell Squawk On Exit Delay</td>
<td>No Bell Squawk On Exit Delay</td>
</tr>
<tr>
<td>OFF</td>
<td>4</td>
<td>Bell Squawk On Entry Delay</td>
<td>No Bell Squawk On Entry Delay</td>
</tr>
<tr>
<td>OFF</td>
<td>5</td>
<td>Bell Squawk On Trouble</td>
<td>No Bell Squawk On Trouble</td>
</tr>
<tr>
<td>ON</td>
<td>6</td>
<td>Audible Exit with Urgency</td>
<td>Silent Exit Delay</td>
</tr>
<tr>
<td>OFF</td>
<td>7</td>
<td>Exit Delay Termination Enabled</td>
<td>Exit Delay Termination Disabled</td>
</tr>
<tr>
<td>OFF</td>
<td>8</td>
<td>Fire Bell is Continuous</td>
<td>Fire Bell Follows Bell Cut-off</td>
</tr>
</tbody>
</table>

### [015] Third System Option Code

<table>
<thead>
<tr>
<th>Default</th>
<th>Option</th>
<th>ON</th>
<th>Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>1</td>
<td>Fire Keys Enabled</td>
<td>Fire Keys Disabled</td>
</tr>
<tr>
<td>OFF</td>
<td>2</td>
<td>Panic Keys Audible (Bell / Beeps)</td>
<td>Panic Keys Silent</td>
</tr>
<tr>
<td>ON</td>
<td>3</td>
<td>Quick Exit Enabled</td>
<td>Quick Exit Disabled</td>
</tr>
<tr>
<td>ON*</td>
<td>4</td>
<td>Quick Arming Enabled</td>
<td>Quick Arming Dis. / Function keys Req. Code</td>
</tr>
<tr>
<td>ON</td>
<td>5</td>
<td>Code Required For Bypassing</td>
<td>No Code Required</td>
</tr>
<tr>
<td>OFF</td>
<td>6</td>
<td>Master Code Not Changeable</td>
<td>Master Code Changeable</td>
</tr>
<tr>
<td>ON</td>
<td>7</td>
<td>TLM Enabled</td>
<td>TLM Disabled</td>
</tr>
<tr>
<td>OFF</td>
<td>8</td>
<td>TLM Audible (Bell) When Armed</td>
<td>TLM Trouble Beeps When Armed</td>
</tr>
</tbody>
</table>

* When using a PC5132 version 2.1 or older with WLS909 Wireless Keys, option [4] must be ON for the Arm button to work.

### [016] Fourth System Option Code

<table>
<thead>
<tr>
<th>Default</th>
<th>Option</th>
<th>ON</th>
<th>Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON</td>
<td>1</td>
<td>AC Trouble Displayed</td>
<td>AC Trouble Not Displayed</td>
</tr>
<tr>
<td>OFF</td>
<td>2</td>
<td>Trouble Light Flashes if AC Fails</td>
<td>Trouble Light Does Not Follow AC Status</td>
</tr>
<tr>
<td>OFF</td>
<td>3</td>
<td>Blank Keypad When Not Used</td>
<td>Keypad Active Always</td>
</tr>
<tr>
<td>ON</td>
<td>4</td>
<td>Code Required to Remove Kypd Blanking</td>
<td>No Code Required</td>
</tr>
<tr>
<td>ON</td>
<td>5</td>
<td>Keypad Backlighting is Enabled</td>
<td>Keypad Backlighting is Disabled</td>
</tr>
<tr>
<td>OFF</td>
<td>6</td>
<td>Power Save Mode Enabled</td>
<td>Power Save Mode Disabled</td>
</tr>
<tr>
<td>OFF</td>
<td>7</td>
<td>Bypass Status Displayed While Armed</td>
<td>Bypass Status Not Displayed While Armed</td>
</tr>
<tr>
<td>OFF</td>
<td>8</td>
<td>Keypad Tampers Enabled</td>
<td>Keypad Tampers Disabled</td>
</tr>
</tbody>
</table>
### [017] Fifth System Option Code

<table>
<thead>
<tr>
<th>Default Option</th>
<th>ON</th>
<th>Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON</td>
<td>1</td>
<td>WLS Key Does Not Use Access Codes</td>
</tr>
<tr>
<td>OFF</td>
<td>2</td>
<td>First Zone in Alarm Enabled</td>
</tr>
<tr>
<td>OFF</td>
<td>3</td>
<td>Audible WLS Zone Fault While Armed</td>
</tr>
<tr>
<td>ON</td>
<td>4</td>
<td>Periodic 10s Battery Test Enabled</td>
</tr>
<tr>
<td>OFF</td>
<td>5</td>
<td>AC Troubles are Annunciated</td>
</tr>
<tr>
<td>OFF</td>
<td>6</td>
<td>Keybus Fault Sounds the Bell</td>
</tr>
<tr>
<td>OFF</td>
<td>7</td>
<td>Time Limit Enabled for PGM 05/06/17/18</td>
</tr>
<tr>
<td>OFF</td>
<td>8</td>
<td>5-Second Keypad Blanking</td>
</tr>
</tbody>
</table>

### [020] Keypad Zone Assignments

*(Section 2.11 “Keypad Zones”)*

*NOTE: Only one keypad may be assigned to a zone.*

<table>
<thead>
<tr>
<th>Default</th>
<th>Keypad (slot 1) Zone</th>
<th>Valid entries are zones 01-08</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>00</td>
<td>Keypad (slot 2) Zone</td>
<td>Valid entries are zones 01-08</td>
</tr>
<tr>
<td>00</td>
<td>Keypad (slot 3) Zone</td>
<td>Valid entries are zones 01-08</td>
</tr>
<tr>
<td>00</td>
<td>Keypad (slot 4) Zone</td>
<td>Valid entries are zones 01-08</td>
</tr>
<tr>
<td>00</td>
<td>Keypad (slot 5) Zone</td>
<td>Valid entries are zones 01-08</td>
</tr>
<tr>
<td>00</td>
<td>Keypad (slot 6) Zone</td>
<td>Valid entries are zones 01-08</td>
</tr>
<tr>
<td>00</td>
<td>Keypad (slot 7) Zone</td>
<td>Valid entries are zones 01-08</td>
</tr>
<tr>
<td>00</td>
<td>Keypad (slot 8) Zone</td>
<td>Valid entries are zones 01-08</td>
</tr>
</tbody>
</table>

### [030] Zone Loop Response Options

<table>
<thead>
<tr>
<th>Default Option</th>
<th>ON</th>
<th>Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>1</td>
<td>Zone 1 is Fast Loop Response</td>
</tr>
<tr>
<td>OFF</td>
<td>2</td>
<td>Zone 2 is Fast Loop Response</td>
</tr>
<tr>
<td>OFF</td>
<td>3</td>
<td>Zone 3 is Fast Loop Response</td>
</tr>
<tr>
<td>OFF</td>
<td>4</td>
<td>Zone 4 is Fast Loop Response</td>
</tr>
<tr>
<td>OFF</td>
<td>5-8</td>
<td>For Future Use</td>
</tr>
</tbody>
</table>
**Advanced System Programming**

**Zone Attributes** (Section 5.3 “Zone Attributes”)

**Zone Attribute Defaults** (Y = Option ON; N = Option OFF):

<table>
<thead>
<tr>
<th>Attribute:</th>
<th>ON</th>
<th>1</th>
<th>2</th>
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<td>N</td>
<td>Y</td>
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<td>Y</td>
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<td>N</td>
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<td>N</td>
<td>Y</td>
<td>N</td>
<td>N</td>
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<td>N</td>
<td>Y</td>
<td>Y</td>
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<td>16 24-hr Panic</td>
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<td>N</td>
<td>N</td>
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<td>19 24-hr Water</td>
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<td>20 24-hr Freeze</td>
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<td>N</td>
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<td>21 24-hr Latching Tamper</td>
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<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
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<td>22 Momentary Keyswitch</td>
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<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N</td>
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<td>N</td>
<td>N</td>
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</tr>
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<td>25 Interior Delay</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
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<td>28 24-hour Bell/Buzzer</td>
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<td>N</td>
<td>Y</td>
<td>N</td>
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<td>29 Instant Stay/Away</td>
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<td>Y</td>
<td>Y</td>
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<td>N</td>
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<td>87 Dly. 24-hr Fire (Wireless)</td>
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</table>

**Section** | **Zone #** | **Zone Type** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8**
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</tbody>
</table>

*Record here based on programming in section [001]*
**PGM Output Attributes** (Section 5.11 “PGM Output Options”)

Program only the following attributes for the PGM Options listed. All others will be ignored. PGM Options are programmed in [009]. **PGM Attribute Defaults (Y = Attribute ON; N = Attribute OFF)**:

<table>
<thead>
<tr>
<th>Attribute:</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<tr>
<td><strong>ON</strong></td>
<td>Serv. req.</td>
<td>AC Fail</td>
<td>TLM Fault</td>
<td>FTC</td>
<td>Zone Fault</td>
</tr>
<tr>
<td><strong>OFF</strong></td>
<td>Disabled</td>
<td>Disabled</td>
<td>Disabled</td>
<td>Disabled</td>
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<table>
<thead>
<tr>
<th><strong>PGM Option</strong></th>
<th><strong>09</strong></th>
<th><strong>[01]</strong> Burg. / Fire Bell</th>
<th><strong>03</strong> Sensor Reset</th>
<th><strong>05</strong> Armed Status</th>
<th><strong>06</strong> Ready To Arm</th>
<th><strong>07</strong> Kypd Bzz Follow</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ON</strong></td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td><strong>OFF</strong></td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
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<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td><strong>OFF</strong></td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
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*If attribute [8] is turned ON, attributes [1-7] must also be turned ON.

**Section PGM Output**

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</tr>
<tr>
<td>142</td>
<td>2 ( )</td>
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</tbody>
</table>

*Record here based on programming in [009].

**[160] Maximum Dialing Attempts to Each Telephone Number** (Section 5.5 “Communicator – Dialing”)

Default: 007 | Valid entries are 001-015 attempts (do not enter 000).

**[161] Post Dial Wait for Handshake (All Formats)** (Section 5.5 “Communicator – Dialing”)

Default: 040 | Valid entries are 001-255 seconds

**[164] PGM Output Timer** (Section 5.11 “PGM Output Options”)

Default: 005 | Valid entries are 001-255 seconds
**Programming Worksheets: 5.32 Walk Test (Installer)**

Program zone definitions in section [001] and zone attributes in sections [101] - [108].

Program keypad zone assignments in section [020].

**NOTE:** Any zones not used on the system should be disabled in this section. Disabled wireless zones should have a blank serial number (i.e., [000000]).

**Zones 1-8: Default = ON**

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<tr>
<th>Section</th>
<th>Option</th>
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<td>[202]</td>
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<td>Zone 7</td>
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<td>Zone 8</td>
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</tbody>
</table>

**Communicator Programming**

**NOTE:** For sections [301] to [353], the content of every section by default is [F].

**[301] First Telephone Number (32 Digits)**

**[302] Second Telephone Number (32 Digits)**

**[303] Third Telephone Number (32 Digits)**

**[310] First/Third Telephone Number Account Code**

**[311] Second Telephone Number Account Code**

**[320] Alarm Reporting Codes, Zones 1-8**

**[324] Alarm Restoral Reporting Codes, Zones 1-8**

**[328] Miscellaneous Alarm Reporting Codes**

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<td>Zone Expander Supervisory Alarm</td>
</tr>
<tr>
<td></td>
<td>Opening After Alarm</td>
<td>Zone Expander Supervisory Restoral</td>
</tr>
<tr>
<td></td>
<td>Recent Closing</td>
<td>Cross Zone Police Code Alarm</td>
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**[329] Priority Alarm and Restoral**

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<td>Keypad Fire Alarm</td>
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<td>Keypad Auxiliary Alarm</td>
<td>Keypad Auxiliary Restoral</td>
</tr>
<tr>
<td></td>
<td>Keypad Panic Alarm</td>
<td>Keypad Panic Restoral</td>
</tr>
<tr>
<td></td>
<td>For Future Use</td>
<td>For Future Use</td>
</tr>
</tbody>
</table>

**[330] Tamper Reporting Codes, Zones 1-8**

**[334] Tamper Restoral Reporting Codes, Zones 1-8**
[338] Miscellaneous Tamper Reporting Codes (Section 5.8 “Communicator – Reporting Codes” on pg. 18, & Appendix A)

1. General System Tamper
2. General System Tamper Rest.
3. Keypad Lockout

Closing (Arming) Reporting Codes, Access Codes 1-32 (Section 5.8 “Communicator – Reporting Codes” on pg. 18, & Appendix A)

Section

<table>
<thead>
<tr>
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</table>

Miscellaneous Closing (Arming) Reporting Codes (Section 5.8 “Communicator – Reporting Codes” on pg. 18, & Appendix A)

1. Closing by Duress Code 33
2. Closing by Duress Code 34
3. Closing by Master Code 40
4. Closing by Supervisory Code 41
5. Closing by Supervisory Code 42
6. Partial Closing
7. Special Closing

Opening (Disarming) Reporting Codes, Access Codes 1-8 (Section 5.8 “Communicator – Reporting Codes” on pg. 18, & Appendix A)

Section

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</table>

Miscellaneous Opening (Disarming) Reporting Codes (Section 5.8 “Communicator – Reporting Codes” on pg. 18, & Appendix A)

1. Opening by Duress Code 33
2. Opening by Duress Code 34
3. Opening by Master Code 40
4. Opening by Supervisory Code 41
5. Opening by Supervisory Code 42
6. Auto-arm Cancellation
7. Special Opening

Maintenance Alarm Reporting Codes (Section 5.8 “Communicator – Reporting Codes” on pg. 18, & Appendix A)

1. Battery Trouble Alarm
2. AC Failure Trouble Alarm
3. Bell Circuit Trouble Alarm
4. Fire Trouble Alarm
5. Auxiliary Power Supply Trouble Alarm
6. For Future Use
7. For Future Use
8. General System Supervisory

Maintenance Restoral Reporting Codes (Section 5.8 “Communicator – Reporting Codes” on pg. 18, & Appendix A)

1. Battery Trouble Restoral
2. AC Failure Trouble Restoral
3. Bell Circuit Trouble Restoral
4. Fire Trouble Restoral
5. Auxiliary Power Supply Trouble Restoral
6. TLM Restoral
7. For Future Use
8. General System Supervisory Restore
[351] Miscellaneous Maintenance Reporting Codes (Section 5.8 “Communicator – Reporting Codes” on pg. 18, & Appendix A)

1. Telephone Number 1 Failure to Communicate  
2. Telephone Number 2 Failure to Communicate  
3. Event Buffer is 75% Full Since Last Upload  
4. DLS Lead IN  
5. DLS Lead OUT  
6. General Zone Trouble Alarm  
7. General Zone Trouble Restore  
8. For Future Use

[352] Test Transmission Reporting Codes (Section 5.8 “Communicator – Reporting Codes” on pg. 18, & Appendix A)

1. Periodic Test Transmission  
2. System Test  
3. GSM1000 Test Transmission Code*  
*The GSM1000 Test Transmission Code must be programmed as “00” for the GSM1000 Test Transmission to be disabled.

[353] Wireless Maintenance Reporting Codes (Section 5.8 “Communicator – Reporting Codes” on pg. 18, & Appendix A)

1. Wireless Device Low Battery Alarm  
2. Wireless Device Low Battery Restore

[354] User Walk Test Reporting Codes (Section 5.8 “Communicator – Reporting Codes” on pg. 18, & Appendix A)

1. Walk Test Lead In  
2. Walk Test Lead Out

[360] Communicator Format Options (Section 5.9 “Communicator – Reporting Formats”)

NOTE: The Third telephone number follows the format of the First telephone number.

Default

- 04 1st/3rd Telephone Number
- 04 2nd Telephone Number
- 01 For Future Use  
- 02 For Future Use  
- 03 DTMF CONTACT ID  
- 04 SIA FSK  
- 05 Pager  
- 06 Residential Dial  
- 07 For Future Use  
- 08 For Future Use

[361] Alarm/Restore Communicator Call Directions (Section 5.5 “Communicator – Dialing”)

Default

- ON 1 1st Telephone Number  
- OFF 2 2nd Telephone Number  
- ON 3 1st Telephone Number (via GSM1000)  
- OFF 4 2nd Telephone Number (via GSM1000)  
- OFF 5-8 For Future Use

[363] Tamper/Restore Communicator Call Directions (Section 5.5 “Communicator – Dialing”)

Default

- ON 1 1st Telephone Number  
- OFF 2 2nd Telephone Number  
- OFF 3 1st Telephone Number (via GSM1000)  
- OFF 4 2nd Telephone Number (via GSM1000)  
- OFF 5-8 For Future Use
[365] Opening/Closing Communicator Call Directions (Section 5.5 “Communicator – Dialing”)

<table>
<thead>
<tr>
<th>Default</th>
<th>Option</th>
<th>ON</th>
<th>OFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>______</td>
<td>1</td>
<td>1st Telephone Number</td>
</tr>
<tr>
<td>OFF</td>
<td>______</td>
<td>2</td>
<td>2nd Telephone Number</td>
</tr>
<tr>
<td>OFF</td>
<td>______</td>
<td>3</td>
<td>1st Telephone Number (via GSM1000)</td>
</tr>
<tr>
<td>OFF</td>
<td>______</td>
<td>4</td>
<td>2nd Telephone Number (via GSM1000)</td>
</tr>
<tr>
<td>OFF</td>
<td>______</td>
<td>5-8</td>
<td>For Future Use</td>
</tr>
</tbody>
</table>

[367] System Maintenance Alarm/Restore Communicator Call Directions (Section 5.5 “Communicator – Dialing”)

<table>
<thead>
<tr>
<th>Default</th>
<th>Option</th>
<th>ON</th>
<th>OFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON</td>
<td>______</td>
<td>1</td>
<td>1st Telephone Number</td>
</tr>
<tr>
<td>OFF</td>
<td>______</td>
<td>2</td>
<td>2nd Telephone Number</td>
</tr>
<tr>
<td>OFF</td>
<td>______</td>
<td>3</td>
<td>1st Telephone Number (via GSM1000)</td>
</tr>
<tr>
<td>OFF</td>
<td>______</td>
<td>4</td>
<td>2nd Telephone Number (via GSM1000)</td>
</tr>
<tr>
<td>OFF</td>
<td>______</td>
<td>5-8</td>
<td>For Future Use</td>
</tr>
</tbody>
</table>

[368] System Test Transmissions Communicator Call Directions (Section 5.5 “Communicator – Dialing”)

<table>
<thead>
<tr>
<th>Default</th>
<th>Option</th>
<th>ON</th>
<th>OFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON</td>
<td>______</td>
<td>1</td>
<td>1st Telephone Number</td>
</tr>
<tr>
<td>OFF</td>
<td>______</td>
<td>2</td>
<td>2nd Telephone Number</td>
</tr>
<tr>
<td>OFF</td>
<td>______</td>
<td>3</td>
<td>1st Telephone Number (via GSM1000)</td>
</tr>
<tr>
<td>OFF</td>
<td>______</td>
<td>4</td>
<td>2nd Telephone Number (via GSM1000)</td>
</tr>
<tr>
<td>OFF</td>
<td>______</td>
<td>5-8</td>
<td>For Future Use</td>
</tr>
</tbody>
</table>

NOTE: The GSM1000 backup call directions will only back up their respective telephone numbers.

[370] Communication Variables

<table>
<thead>
<tr>
<th>Default</th>
<th>Option</th>
<th>ON</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>010</td>
<td>______</td>
<td></td>
<td>Swinger Shutdown (Alarms and Rest) (001-014 Transmissions, 000=disabled)</td>
</tr>
<tr>
<td>010</td>
<td>______</td>
<td></td>
<td>Swinger Shutdown (Tampers and Rest)(001-014 Transmissions, 000=disabled)</td>
</tr>
<tr>
<td>010</td>
<td>______</td>
<td></td>
<td>Swinger Shutdown (Maint and Rest) (001-014 Transmissions, 000=disabled)</td>
</tr>
<tr>
<td>000</td>
<td>______</td>
<td></td>
<td>Transmission Delay       (001-255 seconds)</td>
</tr>
<tr>
<td>030</td>
<td>______</td>
<td></td>
<td>AC Failure Communication Delay (001-255 minutes)</td>
</tr>
<tr>
<td>003</td>
<td>______</td>
<td></td>
<td>TLM Trouble Delay         (No. of checks required - valid entries 003 - 255)</td>
</tr>
<tr>
<td>030</td>
<td>______</td>
<td></td>
<td>Test Transmission Cycle (land line) (001-255 minutes/days)†</td>
</tr>
<tr>
<td>030</td>
<td>______</td>
<td></td>
<td>For Future Use</td>
</tr>
<tr>
<td>003</td>
<td>______</td>
<td></td>
<td>Zone Low Battery Transmission Delay (000-255 days)</td>
</tr>
</tbody>
</table>

†Depends on programming in section [702], option [3].

NOTE: To program [000] for immediate AC failure reporting.

[371] Test Transmission Time of Day (Section 5.14 “Test Transmission”)

NOTE: If the land line test transmission cycle is programmed in minutes (section [702], option [3]), this section will not affect the land line test transmission cycle.

<table>
<thead>
<tr>
<th>Default</th>
<th>Option</th>
<th>ON</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>9999</td>
<td>______</td>
<td></td>
<td>(Valid entries are 0000-2359, 9999 to disable)</td>
</tr>
</tbody>
</table>
### [380] First Communicator Option Code

<table>
<thead>
<tr>
<th>Default</th>
<th>Option</th>
<th>ON</th>
<th>Off</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>Communications Enabled</td>
<td>Communications Disabled</td>
</tr>
<tr>
<td>OFF</td>
<td>2</td>
<td>Restorals on Bell Time-out</td>
<td>Restorals Follow Zones</td>
</tr>
<tr>
<td>OFF</td>
<td>3</td>
<td>For Future Use</td>
<td></td>
</tr>
<tr>
<td>OFF</td>
<td>4</td>
<td>For Future Use</td>
<td></td>
</tr>
<tr>
<td>ON</td>
<td>5</td>
<td>3rd Telephone Number enabled</td>
<td>3rd Telephone Number disabled</td>
</tr>
<tr>
<td>OFF</td>
<td>6</td>
<td>For Future Use</td>
<td></td>
</tr>
<tr>
<td>OFF</td>
<td>7</td>
<td>Call GSM1000 as well as Land Line</td>
<td>GSM1000 is Backup of Land Line(s)</td>
</tr>
<tr>
<td>OFF</td>
<td>8</td>
<td>For Future Use</td>
<td></td>
</tr>
</tbody>
</table>

### [381] Second Communicator Option Code

<table>
<thead>
<tr>
<th>Default</th>
<th>Option</th>
<th>ON</th>
<th>Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>1</td>
<td>For Future Use</td>
<td></td>
</tr>
<tr>
<td>OFF</td>
<td>2</td>
<td>For Future Use</td>
<td></td>
</tr>
<tr>
<td>OFF</td>
<td>4</td>
<td>For Future Use</td>
<td></td>
</tr>
<tr>
<td>OFF</td>
<td>5-6</td>
<td>For Future Use</td>
<td></td>
</tr>
<tr>
<td>OFF</td>
<td>7</td>
<td>Contact ID Uses Programmed Reporting Codes</td>
<td>Contact ID Uses Auto Reporting Codes</td>
</tr>
<tr>
<td>OFF</td>
<td>8</td>
<td>For Future Use</td>
<td></td>
</tr>
</tbody>
</table>

### [390] GSM1000 Preamble (First Telephone Number)

Default: FFFF  ____________  (Program all unused digits with Hex F)

### [391] GSM1000 Preamble (Second Telephone Number)

Default: FFFF  ____________  (Program all unused digits with Hex F)

### [392] GSM1000 Preamble (Third Telephone Number)

Default: FFFF  ____________  (Program all unused digits with Hex F)

### [393] GSM1000 Special Function Preamble (All Telephone Numbers)

Default: FFFFF  ________________  (Program all unused digits with Hex F)  
- Enter [*][2][*] (Hex B) to dial [*]  
- Enter [*][3][*] (Hex C) to dial [#]

### Downloading Options

#### [401] First Downloading Option Code

<table>
<thead>
<tr>
<th>Default</th>
<th>Option</th>
<th>ON</th>
<th>Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>1</td>
<td>Answering Machine/Double Call Enabled</td>
<td>Answering Machine/Double Call Disabled</td>
</tr>
<tr>
<td>OFF</td>
<td>2</td>
<td>Installer Mode Available with [*][6]</td>
<td>Installer Mode Available without [*][6]</td>
</tr>
<tr>
<td>OFF</td>
<td>3</td>
<td>Call-Back Enabled</td>
<td>Call-Back Disabled</td>
</tr>
<tr>
<td>OFF</td>
<td>4</td>
<td>User-initiated Call-up Enabled</td>
<td>User-initiated Call-up Disabled</td>
</tr>
<tr>
<td>OFF</td>
<td>5</td>
<td>Auto Event Buffer Upload Enabled</td>
<td>Auto Event Buffer Upload Disabled</td>
</tr>
<tr>
<td>OFF</td>
<td>6-8</td>
<td>For Future Use</td>
<td></td>
</tr>
</tbody>
</table>

#### [402] Downloading Computer's Telephone Number (32 Digits)

[5.10 “Downloading Options”]

#### [403] Downloading Access Code

Default: 0585  ____________  Enter 4 Hex digits
Panel Identification Code (Section 5.10 “Downloading Options”)
Default: 0585 ________ Enter 4 Hex digits

Answering Machine Double-call Timer (Section 5.10 “Downloading Options”)
Default: 060 ________ (Valid entries are 001-255 seconds)

Number of Rings to Answer On (Section 5.10 “Downloading Options”)
Default: 015 ________ (Valid entries are 000-255 rings)

[499][Installer Code][499] Initiate PC-Link (Local Downloading) (Section 5.10 “Downloading Options”)

International Programming
Clock Adjust (Section 5.28 “Clock Adjust”)
Default: 60 ________ (Valid entries are 01-99 seconds)

First International Options Code

<table>
<thead>
<tr>
<th>Default</th>
<th>Option</th>
<th>ON</th>
<th>Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>1</td>
<td>For Future Use</td>
<td></td>
</tr>
<tr>
<td>OFF</td>
<td>2</td>
<td>Time Base is Internal Crystal</td>
<td>Time Base is AC Line</td>
</tr>
<tr>
<td>OFF</td>
<td>3</td>
<td>AC/DC Arming Inhibit Enabled</td>
<td>AC/DC Arming Inhibit Disabled</td>
</tr>
<tr>
<td>OFF</td>
<td>4</td>
<td>All System Tampers Require Installer Reset</td>
<td>All System Tampers Follow Restore</td>
</tr>
<tr>
<td>OFF</td>
<td>5</td>
<td>6-Digit User Access Codes</td>
<td>4-Digit User Access Codes</td>
</tr>
<tr>
<td>OFF</td>
<td>6</td>
<td>For Future Use</td>
<td></td>
</tr>
<tr>
<td>OFF</td>
<td>7</td>
<td>For Future Use</td>
<td></td>
</tr>
<tr>
<td>OFF</td>
<td>8</td>
<td>For Future Use</td>
<td></td>
</tr>
</tbody>
</table>

Second International Options Code

<table>
<thead>
<tr>
<th>Default</th>
<th>Option</th>
<th>ON</th>
<th>Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>1</td>
<td>For Future Use</td>
<td></td>
</tr>
<tr>
<td>OFF</td>
<td>2</td>
<td>For Future Use</td>
<td></td>
</tr>
<tr>
<td>OFF</td>
<td>3</td>
<td>Land Line Test Tc Interval in Minutes</td>
<td>Land Line Test Tc Interval in Days</td>
</tr>
<tr>
<td>OFF</td>
<td>4</td>
<td>For Future Use</td>
<td></td>
</tr>
<tr>
<td>OFF</td>
<td>5</td>
<td>For Future Use</td>
<td></td>
</tr>
<tr>
<td>OFF</td>
<td>6</td>
<td>For Future Use</td>
<td></td>
</tr>
<tr>
<td>OFF</td>
<td>7</td>
<td>For Future Use</td>
<td></td>
</tr>
<tr>
<td>OFF</td>
<td>8</td>
<td>For Future Use</td>
<td></td>
</tr>
</tbody>
</table>

Delay Between Dialing Attempts (Section 5.5 “Communicator – Dialing”)
Default: 001 _________ (Valid entries are 000-255 Seconds)

Module Programming

PC5400 Printer Module Programming
Please refer to your PC5400 Installation Manual for installation and programming instructions.

PC5132 Wireless Expansion Programming
Please refer to your PC5132 Installation Manual for programming locations and instructions.
Special Installer Functions

[901] Installer Walk Test Mode Enable / Disable (Section 5.32 “Walk Test (Installer)”)

[902] Module Supervision Reset (Section 2.7 “Removing Modules”)

[903] Module Supervision Field (Section 2.6 “Supervision”)

[904] Wireless Module Placement Test
For more information, please refer to your PC5132 Installation Manual

- Select the module / transmitter (Zones 01-8).
- Press [#] to Cancel.

<table>
<thead>
<tr>
<th>Placement</th>
<th>Led Keypad</th>
<th>LCD Keypad</th>
<th>Bell / Buzzer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>Light 1 ON Steady</td>
<td>“GOOD”</td>
<td>1 Beep / Squawk</td>
</tr>
<tr>
<td>Fair</td>
<td>Light 2 ON Steady</td>
<td>“FAIR”</td>
<td>2 Beeps / Squawks</td>
</tr>
<tr>
<td>Bad</td>
<td>Light 3 ON Steady</td>
<td>“BAD”</td>
<td>3 Beeps / Squawks</td>
</tr>
</tbody>
</table>

[900] Installer Lockout Enable (Section 5.31 “Installer’s Lockout”)

[901] Installer Lockout Disable (Section 5.31 “Installer’s Lockout”)

[993] For Future Use

[996] Restore PC5132 Factory Default Programming (Section 5.30 “Resetting Factory Defaults”)

[997] Restore PC5400 Factory Default Programming (Section 5.30 “Resetting Factory Defaults”)

[999] Restore PC585 Factory Default Programming (Section 5.30 “Resetting Factory Defaults”)
Appendix A: Reporting Codes

The following tables contain Contact ID and Automatic SIA format reporting codes. For more information on reporting code formats and notes about individual reporting codes, see sections 5.8 “Communicator – Reporting Codes” and 5.9 “Communicator – Reporting Formats”.

Contact ID

The first digit (in parentheses) will automatically be sent by the control. The second two digits are programmed to indicate specific information about the signal.

For example, if zone 1 is an entry/exit point, you could program the event code as [34]. The central station would receive the following:

*BURG - ENTRY/EXIT - 1
where the “1” indicates which zone went into alarm.

### SIA Format - Level 2 (Hardcoded)

The SIA communication format used in this product follows the level 2 specifications of the SIA Digital Communication Standard - January 1996. This format will send the Account Code along with its data transmission. The transmission would look similar to the following at the receiver:

<table>
<thead>
<tr>
<th>N</th>
<th>Ri01</th>
<th>BA</th>
<th>01</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>=</td>
<td>New Event</td>
<td></td>
</tr>
<tr>
<td>Ri01</td>
<td>=</td>
<td>Partition/Area Identifier</td>
<td></td>
</tr>
<tr>
<td>BA</td>
<td>=</td>
<td>Burglary Alarm</td>
<td></td>
</tr>
<tr>
<td>01</td>
<td>=</td>
<td>Zone 1</td>
<td></td>
</tr>
</tbody>
</table>

Section # Reporting Code Code Sent When... Dialer Direction* Contact ID Codes SIA Auto Rep Codes**

<table>
<thead>
<tr>
<th>Section</th>
<th>Reporting Code</th>
<th>Code Sent When...</th>
<th>Dialer Direction*</th>
<th>Contact ID Codes</th>
<th>SIA Auto Rep Codes**</th>
</tr>
</thead>
<tbody>
<tr>
<td>[320]</td>
<td>Zone Alarms</td>
<td>zone goes into alarm</td>
<td>A/R</td>
<td>(1) 3A</td>
<td>See Table 3</td>
</tr>
<tr>
<td>[324]</td>
<td>Zone Restorals</td>
<td>alarm condition has been restored</td>
<td>A/R</td>
<td>(1) 3A</td>
<td></td>
</tr>
<tr>
<td>[330]</td>
<td>Zone Tamper/Restorals</td>
<td>zone exhibits a tamper condition/tamper condition restored</td>
<td>T/R</td>
<td>(1) 44</td>
<td>TA-ZZ/TR-ZZ</td>
</tr>
<tr>
<td>[328]</td>
<td>Duress Alarm</td>
<td>duress code entered at keypad</td>
<td>A/R</td>
<td>(1) 21</td>
<td>HA-00</td>
</tr>
<tr>
<td>[326]</td>
<td>Opening After Alarm</td>
<td>system disarmed with alarm in memory</td>
<td>A/R</td>
<td>(4) A6</td>
<td>CR-00</td>
</tr>
<tr>
<td>[328]</td>
<td>Recent Closing</td>
<td>alarm occurs within two minutes of system arming</td>
<td>A/R</td>
<td>(4) 59</td>
<td>CR-00</td>
</tr>
<tr>
<td>[328]</td>
<td>Zone Expander Supervisory Alarm/Rest.</td>
<td>panel loses/restores supervisory transmission over the Keybus from enrolled PCS132 module or keypads with zone inputs</td>
<td>A/R</td>
<td>(1) 43</td>
<td>UA-00/Priv-00</td>
</tr>
<tr>
<td>[328]</td>
<td>Cross Zone (Police Code) Alarm</td>
<td>two zones on the same partition go into alarm during any given armed-to-armed period (incl. 24-hr zones)</td>
<td>A/R</td>
<td>(1) 4A</td>
<td>BV-00</td>
</tr>
<tr>
<td>[329]</td>
<td>[F] Key Alarm/Rest.</td>
<td>Keypad fire alarm (alarm and restore rep. codes sent together)</td>
<td>A/R</td>
<td>(1) 15</td>
<td>FA-00/PH-00</td>
</tr>
<tr>
<td>[329]</td>
<td>[A] Key Alarm/Rest.</td>
<td>Keypad auxiliary alarm (alarm and restore rep. codes sent together)</td>
<td>A/R</td>
<td>(1) AA</td>
<td>MA-00/MH-00</td>
</tr>
<tr>
<td>[329]</td>
<td>[P] Key Alarm/Rest.</td>
<td>Keypad panic alarm (alarm and restore rep. codes sent together)</td>
<td>A/R</td>
<td>(1) 2A</td>
<td>PA-00/PH-00</td>
</tr>
<tr>
<td>[329]</td>
<td>PGM2 Alarm/Rest.</td>
<td>a panic button wired to PGM2 is pressed / access code is entered (PGM2 programmed as option [23] or [24])</td>
<td>A/R</td>
<td>(1) 4A</td>
<td>UA-99/Priv-99</td>
</tr>
<tr>
<td>[338]</td>
<td>General System Tamper/Rest.</td>
<td>enrolled module with tamper inputs has a tamper alarm/ all module tampers restored</td>
<td>T/R</td>
<td>(1) 45</td>
<td>TA-00/PR-00</td>
</tr>
<tr>
<td>[338]</td>
<td>Keypad Lockout</td>
<td>max. number of incorrect access codes has been entered at a keypad</td>
<td>T/R</td>
<td>(4) 21</td>
<td>JA-00</td>
</tr>
<tr>
<td>[339-343]</td>
<td>Closings</td>
<td>system armed (user 01-34, 40-42 indicated)</td>
<td>O/C</td>
<td>(4) A2</td>
<td>CL-UU</td>
</tr>
<tr>
<td>[343]</td>
<td>Partial Closing</td>
<td>one or more zones bypassed when system armed</td>
<td>O/C</td>
<td>(4) 7A</td>
<td>CG-ZZ</td>
</tr>
<tr>
<td>[343]</td>
<td>Special Closing</td>
<td>Closing (arming) using one of the following methods: quick arm, auto arm, keyswitch, function key, guard code, DLS software</td>
<td>O/C</td>
<td>(4) AA</td>
<td>CL-00</td>
</tr>
<tr>
<td>[344-348]</td>
<td>Openings</td>
<td>system disarmed (user 01-34, 40-42 indicated)</td>
<td>O/C</td>
<td>(4) A2</td>
<td>OP-UU</td>
</tr>
<tr>
<td>[348]</td>
<td>Auto Arm Cancellation</td>
<td>auto arm cancelled</td>
<td>O/C</td>
<td>(4) A5</td>
<td>CE-00</td>
</tr>
<tr>
<td>[348]</td>
<td>Special Opening</td>
<td>Opening (disarming) using one of the following methods: keyswitch, guard code, DLS software</td>
<td>O/C</td>
<td>(4) AA</td>
<td>OP-00</td>
</tr>
<tr>
<td>[349-350]</td>
<td>Battery Trouble/Rest.</td>
<td>PC585 battery is low/battery restored</td>
<td>MA/R</td>
<td>(3) A2</td>
<td>YT-00/PR-00</td>
</tr>
</tbody>
</table>

* A/R = alarms/restorals; T/R = tampers/restorals; O/C = openings/closings; MA/R = miscellaneous alarms/restorals; T = test transmissions
** UU = user number (user01-42); ZZ = zone number (01-08)
### Reporting Codes: 5.32 Walk Test (Installer)

#### Table 2: Contact ID Zone Alarm/Restoral Event Codes (as per ADEMCO):
Program any of these codes for zone alarms/restorals when using the standard (non-automatic) Contact ID reporting format.

<table>
<thead>
<tr>
<th>Section #</th>
<th>Reporting Code</th>
<th>Code Sent When...</th>
<th>Dialer Direction*</th>
<th>Contact ID Codes</th>
<th>SIA Auto Rep Codes**</th>
</tr>
</thead>
<tbody>
<tr>
<td>[349-350]</td>
<td>AC Line Trouble/Rest.</td>
<td>AC power to control panel is disconnected or interrupted/AC power restored (Both codes follow AC Failure Comm. Delay.)</td>
<td>MA/R</td>
<td>(3) A1</td>
<td>AT-00/AR-00</td>
</tr>
<tr>
<td>[349-350]</td>
<td>Fire Trouble/Rest.</td>
<td>a trouble occurs/restores on a fire zone</td>
<td>MA/R</td>
<td>(3) 73</td>
<td>FT-00/FF-00</td>
</tr>
<tr>
<td>[349-350]</td>
<td>Auxiliary Power Trouble/Rest.</td>
<td>aux voltage supply trouble/restoral</td>
<td>MA/R</td>
<td>(3) AA</td>
<td>YP-00/YQ-00</td>
</tr>
<tr>
<td>[350]</td>
<td>TLM Restore</td>
<td>Telephone line trouble restore</td>
<td>MA/R</td>
<td>(3) 51</td>
<td>LR-00</td>
</tr>
<tr>
<td>[349-350]</td>
<td>Gen System Trouble/Rest.</td>
<td>&quot;Service Required&quot; trouble occurs (view troubles using [*][2]) trouble restored</td>
<td>MA/R</td>
<td>(3) 33</td>
<td>ET-00/ER-00</td>
</tr>
<tr>
<td>[349-350]</td>
<td>Gen System Supervisory Trouble/Rest.</td>
<td>control panel loses/restores communications with module(s) connected to the Keybus</td>
<td>MA/R</td>
<td>(3) 33</td>
<td>ET-00/ER-00</td>
</tr>
<tr>
<td>[351]</td>
<td>Line 1 or 2 FTC Restoral</td>
<td>control panel has restored communications to central station on line 1 or 2 (after FTC)</td>
<td>MA/R</td>
<td>(3) 54</td>
<td>YK-00</td>
</tr>
<tr>
<td>[351]</td>
<td>Event Buffer is 75% Full</td>
<td>event buffer is almost full since last upload</td>
<td>MA/H</td>
<td>(6) 23</td>
<td>JL-00</td>
</tr>
<tr>
<td>[351]</td>
<td>DLS Lead In</td>
<td>downloading session start</td>
<td>MA/R</td>
<td>(4) 11</td>
<td>RB-00</td>
</tr>
<tr>
<td>[351]</td>
<td>DLS Lead Out</td>
<td>downloading session complete</td>
<td>MA/H</td>
<td>(4) 12</td>
<td>RS-00</td>
</tr>
<tr>
<td>[351]</td>
<td>Zone Fault/Rest.</td>
<td>one or more zones have fault/fault restored</td>
<td>MA/R</td>
<td>(3) 72</td>
<td>UT-00/UJ-00</td>
</tr>
<tr>
<td>[352]</td>
<td>Periodic Test</td>
<td>periodic system test transmission</td>
<td>Y</td>
<td>(6) A2</td>
<td>RP-00</td>
</tr>
<tr>
<td>[353]</td>
<td>Wireless Device Low Battery Trouble/Rest.</td>
<td>wireless zones (WLS904, WLS905, WLS907); panic pendants (WLS908); handheld keypads (WLS910); wireless keys (WLS909) have low battery/all low batteries restored</td>
<td>MA/R</td>
<td>(3) 84</td>
<td>XT-00/XR-00</td>
</tr>
</tbody>
</table>

* A/R = alarms/restorals; T/R = tampers/restorals; O/C = openings/closings; MA/H = miscellaneous alarms/restorals; T = test transmissions ** UU = user number (user01-42); ZZ = zone number (01-08)

#### Table 3: SIA Format Automatic Zone Alarm/Restoral Codes:

<table>
<thead>
<tr>
<th>Zone Definition</th>
<th>SIA Auto Rep Codes*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delay, Instant, Interior, Delay Stay/Away, Interior Stay/Away, 24-hr Burg.</td>
<td>BA-ZZ/BH-ZZ</td>
</tr>
<tr>
<td>Standard 24-hr Fire, Delayed 24-hr Fire</td>
<td>FA-ZZ/FH-ZZ</td>
</tr>
<tr>
<td>24-hr Supervisory</td>
<td>US-ZZ/UR-ZZ</td>
</tr>
<tr>
<td>24-hr Supervisory Buzzer</td>
<td>UA-ZZ/UH-ZZ</td>
</tr>
<tr>
<td>24-hr Sprinkler</td>
<td>SA-ZZ/SH-ZZ</td>
</tr>
<tr>
<td>24-hr Gas</td>
<td>GA-ZZ/GH-ZZ</td>
</tr>
<tr>
<td>24-hr Heat</td>
<td>KA-ZZ/KH-ZZ</td>
</tr>
<tr>
<td>24-hr Medical</td>
<td>MA-ZZ/MH-ZZ</td>
</tr>
<tr>
<td>24-hr Emergency (non-medical)</td>
<td>QA-ZZ/QH-ZZ</td>
</tr>
<tr>
<td>24-hr Waterflow</td>
<td>WA-ZZ/WH-ZZ</td>
</tr>
<tr>
<td>24-hr Freeze</td>
<td>ZA-ZZ/ZH-ZZ</td>
</tr>
<tr>
<td>24-hr Holdup</td>
<td>HA-ZZ/HH-ZZ</td>
</tr>
<tr>
<td>24-hr Panic</td>
<td>PA-ZZ/PH-ZZ</td>
</tr>
<tr>
<td>Latching 24-hr, 24-Hr Bell/Buzzer</td>
<td>BA-ZZ/BH-ZZ</td>
</tr>
</tbody>
</table>

* ZZ = zones 01-08
Appendix B: Programming LCD Keypads

If you have an LCD5500Z Keypad, additional programming is required for proper operation. The following is a description of the available programming options and their accompanying programming sections:

**How to Enter LCD Programming**
Follow the programming procedure as outlined in Section 4 by pressing [*][8][Installer's Code]. Press the [*] key. Enter the two digit Section number to be programmed.

**Programmable Labels – Sections [01] - [08], [33], [34], [40], [44], [51], [52]**
Zone labels and other LCD display identifiers can be customized to make operation of the system easier for the end user. The following procedure should be used for creating all LCD labels:

- Enter Installer's Programming. Enter the Number corresponding to the label to be programmed.
- Use the arrow keys (<>) to move the underline bar underneath the letter to be changed.
- Press the number key [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:

<table>
<thead>
<tr>
<th>Number</th>
<th>Letters</th>
</tr>
</thead>
<tbody>
<tr>
<td>[1]</td>
<td>A, B, C, 1</td>
</tr>
<tr>
<td>[2]</td>
<td>D, E, F, 2</td>
</tr>
<tr>
<td>[6]</td>
<td>P, Q, R, 6</td>
</tr>
<tr>
<td>[8]</td>
<td>V, W, X, 8</td>
</tr>
<tr>
<td>[9]</td>
<td>Y, Z, 9, 0</td>
</tr>
<tr>
<td>[0]</td>
<td>Space</td>
</tr>
</tbody>
</table>
- When the required letter or number is displayed use the arrow keys (<>) to scroll to the next letter.
- When you are finished programming the label, press the [*] key, scroll to "Save," then press [*].
- Continue from Step 2 until all labels are programmed.

**[01] to [08] Zone Labels (14 Characters)**
Default: "Zone 1"
Default: "Zone 2"
Default: "Zone 3"
Default: "Zone 4"
Default: "Zone 5"
Default: "Zone 6"
Default: "Zone 7"
Default: "Zone 8"

**[33] Fire Alarm Label (14 Characters)**
Default: "Fire Zone"

**[34] System Label (14 Characters)**
Default: "System"

**[40] to [44] [*][7][1-2] Command Output Option Labels (14 Characters)**
[40] Default: "Command O/P 1"
[44] Default: "Command O/P 2"

**[51] Fail to Arm Event Message**
Default: "System Has Failed to Arm"

**[52] Alarm When Armed Event Message**
Default: "Alarm Occurred While Armed"

**[60] First User Display Mask**

<table>
<thead>
<tr>
<th>Default</th>
<th>Option</th>
<th>ON</th>
<th>OFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON</td>
<td>1</td>
<td>Hold [P]anic Keys Prompt ON</td>
<td>Hold [P]anic Keys Prompt OFF</td>
</tr>
<tr>
<td>ON</td>
<td>2</td>
<td>Zone Bypassing Prompt ON</td>
<td>Zone Bypass Prompt OFF</td>
</tr>
<tr>
<td>ON</td>
<td>3</td>
<td>Troubles Prompt ON</td>
<td>Troubles Prompt OFF</td>
</tr>
<tr>
<td>ON</td>
<td>4</td>
<td>Alarm Memory Prompt ON</td>
<td>Alarm Memory Prompt OFF</td>
</tr>
<tr>
<td>ON</td>
<td>5</td>
<td>Door Chime Control Prompt ON</td>
<td>Door Chime Control Prompt OFF</td>
</tr>
<tr>
<td>ON</td>
<td>6</td>
<td>Access Codes Prompt ON</td>
<td>Access Codes Prompt OFF</td>
</tr>
<tr>
<td>ON</td>
<td>7</td>
<td>User Functions Prompt ON</td>
<td>User Functions Prompt OFF</td>
</tr>
<tr>
<td>ON</td>
<td>8</td>
<td>Output Control Prompt ON</td>
<td>Output Control Prompt OFF</td>
</tr>
</tbody>
</table>
### [61] Second User Display Mask

<table>
<thead>
<tr>
<th>Default</th>
<th>Option</th>
<th>ON</th>
<th>OFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td></td>
<td>1</td>
<td>Installer Programming Prompt ON</td>
</tr>
<tr>
<td>ON</td>
<td></td>
<td>2</td>
<td>Stay Arm Prompt ON</td>
</tr>
<tr>
<td>ON</td>
<td></td>
<td>3</td>
<td>Quick Arm Prompt ON</td>
</tr>
<tr>
<td>ON</td>
<td></td>
<td>4</td>
<td>Interior Arm Prompt ON</td>
</tr>
<tr>
<td>OFF</td>
<td></td>
<td>5</td>
<td>Quick Exit Prompt ON</td>
</tr>
<tr>
<td>ON</td>
<td></td>
<td>6</td>
<td>View Event Buffer Prompt ON</td>
</tr>
<tr>
<td>OFF</td>
<td></td>
<td>7-8</td>
<td>For Future Use</td>
</tr>
</tbody>
</table>

### [62] Third User Display Mask

<table>
<thead>
<tr>
<th>Default</th>
<th>Option</th>
<th>ON</th>
<th>OFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON</td>
<td></td>
<td>1</td>
<td>System Test Prompt ON</td>
</tr>
<tr>
<td>ON</td>
<td></td>
<td>2</td>
<td>Time and Date Prompt ON</td>
</tr>
<tr>
<td>ON</td>
<td></td>
<td>3</td>
<td>Auto-arm Control Prompt ON</td>
</tr>
<tr>
<td>ON</td>
<td></td>
<td>4</td>
<td>Auto-arm Time Prompt ON</td>
</tr>
<tr>
<td>ON</td>
<td></td>
<td>5</td>
<td>Download Enable Prompt ON</td>
</tr>
<tr>
<td>ON</td>
<td></td>
<td>6</td>
<td>Bright Control Prompt ON</td>
</tr>
<tr>
<td>ON</td>
<td></td>
<td>7</td>
<td>Contrast Control Prompt ON</td>
</tr>
<tr>
<td>ON</td>
<td></td>
<td>8</td>
<td>Buzzer Control Prompt ON</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>For Future Use</td>
</tr>
</tbody>
</table>

### [63] Downloaded LCD Message Duration

Default: 003 (Valid entries are 000-255, 000=Unlimited Message Display. This number represents the number of times the Downloaded message is cleared by pressing any key while the message is up after timeout)

### [64] Key Options

<table>
<thead>
<tr>
<th>Default</th>
<th>Option</th>
<th>ON</th>
<th>OFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON</td>
<td></td>
<td>1</td>
<td>[F]ire Keys Enabled</td>
</tr>
<tr>
<td>ON</td>
<td></td>
<td>2</td>
<td>[A]uxiliary Keys Enabled</td>
</tr>
<tr>
<td>OFF</td>
<td></td>
<td>4-8</td>
<td>For Future Use</td>
</tr>
</tbody>
</table>

### [65] Fourth User Display Mask

<table>
<thead>
<tr>
<th>Default</th>
<th>Option</th>
<th>ON</th>
<th>OFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON</td>
<td></td>
<td>1</td>
<td>User Initiated Call-up Prompt ON</td>
</tr>
<tr>
<td>OFF</td>
<td></td>
<td>2</td>
<td>For Future Use</td>
</tr>
<tr>
<td>OFF</td>
<td></td>
<td>3</td>
<td>For Future Use</td>
</tr>
<tr>
<td>ON</td>
<td></td>
<td>4</td>
<td>Command Output #1 Prompt ON</td>
</tr>
<tr>
<td>ON</td>
<td></td>
<td>5</td>
<td>Command Output #2 Prompt ON</td>
</tr>
<tr>
<td>OFF</td>
<td></td>
<td>6-8</td>
<td>For Future Use</td>
</tr>
</tbody>
</table>

### [66] Keypad Options

<table>
<thead>
<tr>
<th>Default</th>
<th>Option</th>
<th>ON</th>
<th>OFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON</td>
<td></td>
<td>1</td>
<td>Display Access Code when Programming</td>
</tr>
<tr>
<td>ON</td>
<td></td>
<td>2</td>
<td>Local Clock Display Enabled</td>
</tr>
<tr>
<td>OFF</td>
<td></td>
<td>3</td>
<td>Local Clock Displays 24-hr Time</td>
</tr>
<tr>
<td>ON</td>
<td></td>
<td>4</td>
<td>Auto Alarm Memory Scroll Enabled</td>
</tr>
<tr>
<td>OFF</td>
<td></td>
<td>65-8</td>
<td>For Future Use</td>
</tr>
</tbody>
</table>

### [97] View Software Version

### [98] Initiate Global Label Broadcast

All LCD programming is done per keypad. If more than one LCD keypad are present on the system, and the PC5400 receives labels, labels programmed at one keypad can be broadcast to all other LCD keypads. Perform the following procedure in order to broadcast labels:

Step 1 - Program one LCD keypad completely.
Step 2 - Make sure all LCD keypads are connected to the Keybus.
Step 3 - Enter Installer's Programming, then enter Section [98] at the keypad that was programmed. The keypad will now broadcast all the information programmed to all the other LCD keypads on the system.
Step 4 - When the keypad is finished press the [#] key to exit.
[99] Reset LCD EEPROM to Factory Defaults

**ASCII Characters**

<table>
<thead>
<tr>
<th>Character</th>
<th>ASCII Value</th>
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</thead>
<tbody>
<tr>
<td>!</td>
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<td>@</td>
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</tbody>
</table>

...
DSC declares herved at denne komponenten overholder alle viktige krav samt andre bestemmelser iht direkten 1999/5/EC.
Per este mego, a DSC, declarata 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 Ltd dichiara che questo prodotto è conforme ai requisiti essenziali ed alle disposizioni pertinenti relative alla Direttiva 1999/5/CE.
"Per la presente, DSC, declara que este equipo cumple con los requisitos requeridos por la Directiva 1999/5/EC."
"Όλα τα παρακάτω, η DSC, δηλώνει ότι αυτή η επιπλαφή είναι σύμφωνη με τις ανωτέρω ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχυρής και με όλες τις άλλες ισχy
Hierbei 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 stipulées par la directive 1999/5/EC.
DSC vuokrattaa laitteen täytävän direktiivin 1999/5/EC olemaan 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/int/frtedirect.htm.
## New Features for PC585 v2.2C

The PC585 v2.2C software incorporates several new features and changes. The most important additions are listed here:

### New Downloading Software

Downloading software DLS-3 v1.3 must be used. Do not attempt to perform downloading/uploading functions with other software versions.

### New Options
- 5-Second Keypad Blanking
- User Walk Test
- Audible Trouble Warning
- Troubles are Latching Option
- First Zone on Alarm Feature

### Communicator Changes
- Robofon format

## PC585 v2.2C Module Compatibility

<table>
<thead>
<tr>
<th>Module</th>
<th>Compatible?</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classic Escort (VPM-1)</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Escort5580(TC)</td>
<td>No</td>
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<tr>
<td>PC-16 Out</td>
<td>No</td>
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<tr>
<td>PCS204</td>
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<tr>
<td>PCS208</td>
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<td>PCS108</td>
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<tr>
<td>PC5132 v1.X</td>
<td>Yes</td>
<td>No support for wireless keys, pendants or handheld keypads</td>
</tr>
<tr>
<td>PC5132 v2.X</td>
<td>Yes</td>
<td>No identified wireless keys support</td>
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<tr>
<td>PC5132 v3.X</td>
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<tr>
<td>PC5506</td>
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<tr>
<td>PC55XX</td>
<td>Yes</td>
<td>No keypad zone support</td>
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<tr>
<td>PC55XXZ</td>
<td>Yes</td>
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<tr>
<td>LCD5500 v1.X</td>
<td>Yes</td>
<td>No keypad zone support; some display messages not supported</td>
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<tr>
<td>LCD5500Z v2.X</td>
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<tr>
<td>LCD5501Z</td>
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<td>LCD600</td>
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<td>LED615</td>
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<tr>
<td>SL-XX</td>
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<tr>
<td>PC1500RK</td>
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<td>PC5908</td>
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<td>PC5928</td>
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<td>PC5400 v1.X to v2.1</td>
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<td>Some printing messages not supported</td>
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<td>PC5400 v2.2</td>
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<td>PC5502Z2</td>
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<td>Links1000</td>
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