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.
# Table of Contents

1.0 Quick Reference .......................................................... 4

2.0 Understanding your Keypad ........................................... 6
   2.1 Icon and LED Keypad Symbols ................................... 6
   2.2 Keypad Models ...................................................... 7

3.0 Securing the Premises .................................................. 8
   3.1 Arming the System ................................................ 8
      3.1.1 Arming the System (Infinite Exit Delay) ............... 8
      3.1.2 Away Arming the System with the Keypad ............ 8
   3.2 Stay Arming the System with the Keypad .................. 9
      3.2.1 Silent Exit Delay .......................................... 9
   3.3 Night Arming the System with the Keypad ............... 9
   3.4 No-Entry Arming ................................................. 10
   3.5 Leaving when the System is Already Armed - Quick Exit 10
   3.6 Arming the System with a 2-way Wireless Key .......... 11
   3.7 Bypassing Zones ................................................ 11
      3.7.1 Additional Bypass Features .............................. 11
   3.8 Bypass Groups .................................................. 13
   3.9 Arming Errors and Exit Faults ............................... 13
      3.9.1 Arming Errors ............................................ 13
      3.9.2 Audible Exit Faults ..................................... 14
      3.9.3 To Correct an Exit Fault ............................... 14
      3.10 Disarming the System ...................................... 14
      3.10.1 Disarming Error ........................................ 14
   3.10 Disarming the System ......................................... 14

4.0 The PowerSeries Neo Security System .............................. 15
   4.1 General System Operation .................................... 15
   4.2 Carbon Monoxide Detection ................................... 15
   4.3 Fire Detection .................................................. 15
   4.4 Testing your System .......................................... 15
   4.5 Monitoring ..................................................... 15
   4.6 Maintenance .................................................... 16

5.0 Emergency Keys ........................................................ 17
   5.1 Alarms ............................................................ 17
      5.1.1 Fire Alarm ................................................ 17
      5.1.2 Carbon Monoxide Alarm - 4 beeps, long pause, 4 beeps 17
      5.1.3 Intrusion (Burglary) Alarm - Continuous Siren .... 17
      5.1.4 Alarm Cancel Window ................................... 17
      5.1.5 View Alarms in Memory .................................. 18
         5.1.5.1 Alarm Messages .................................... 18
   5.2 Resetting Smoke Detectors ................................. 18

6.0 Wireless Keys and other Devices .................................. 19
   6.1 Using 2-way Wireless Keys .................................. 19
      6.1.1 PG4929/PG8929/PG9929 ................................ 19
      6.1.2 PG4939/PG8939/PG9939 ................................ 19
   6.2 Using Proximity Tags ......................................... 19
   6.3 SMS Command and Control .................................. 19
      6.3.1 Using the Keypad to Lookup the Number to Call for SMS Commands 19
      6.3.2 Sending SMS Commands to your System .............. 20
      6.3.3 SMS Commands ........................................... 20
      6.3.4 SMS Responses from your System .................... 21

7.0 Managing Users ....................................................... 22
   7.1 Access Code Types ............................................. 22
      7.1.1 Adding, Changing and Deleting Access Codes ........ 23
      7.1.2 Enrolling and Deleting Proximity Tags ............... 23
      7.1.3 Naming a User ............................................ 24
      7.1.4 Assigning a Partition to a User code ............... 24
      7.2 Configuring additional User Options ................... 24

8.0 User Functions ....................................................... 25
   8.1 Event Buffer .................................................... 25
   8.2 Setting the Time and Date .................................... 25
   8.3 Enabling/Disabling the Auto Arm/Disarm Feature ........ 25
   8.4 Setting the Auto Arm Time ................................... 25
   8.5 Allowing the Installer to Service your System Remotely - DLS 26
   8.6 User Callup ..................................................... 26
   8.7 Late to Open ................................................... 26
   8.8 Changing the Brightness of the LCD keypad ............. 27
   8.9 Changing the Contrast of the LCD keypad ............... 27
   8.10 Setting the Buzzer volume .................................. 27
   8.11 Setting the Voice Prompt volume ......................... 27
   8.12 Setting the Voice Chime volume ........................... 27
   8.13 Resetting the System ....................................... 28
## Table of Contents

8.13.1 Engineer's Reset .................................................. 28  
8.13.2 Remote (Anti-code) Reset ........................................ 28  
8.14 User's Walk Test ..................................................... 28  
8.14.1 Full System Walk Test ........................................... 28  
8.15 Trouble Conditions .................................................. 29  

9.0 Managing Partitions .................................................. 32  
9.1 Partitions ............................................................. 32  
9.1.1 Single Partition Operation ........................................ 32  
9.1.2 Loaning a Keypad to Another Partition ....................... 32  
9.2 Fire and CO Zone Types .............................................. 32  

10.0 Additional Features .................................................. 33  
10.1 Turning the Chime ON/OFF ......................................... 33  
10.2 Audio Verification .................................................... 33  
10.3 Visual Verification ................................................... 33  
10.3.1 System Lockout due to Invalid Attempts .................... 33  
10.4 Command Outputs .................................................... 33  
10.5 Burglary Verification ................................................ 33  
10.6 Swinger Shutdown .................................................... 34  
10.7 Call Waiting .......................................................... 34  
10.8 Fire Alarm Verification .............................................. 34  

11.0 Regulatory Agency Statements .................................... 35  

12.0 Installer Warning .................................................... 36  

13.0 Safety Instructions ................................................... 38  
13.1 Regular Maintenance and Troubleshooting ..................... 38  
13.1.1 Cleaning .......................................................... 38  
13.1.2 Troubleshooting ................................................... 38  
13.1.3 Applicable Models ................................................ 38  

14.0 EULA ................................................................. 39  

15.0 Locating Detectors and Escape Plan ............................... 41  
15.1 Smoke Detectors ....................................................... 41  
15.2 Fire Escape Planning ................................................ 41  
15.3 Carbon Monoxide Detectors ........................................ 42  

16.0 Reference Sheets ..................................................... 43  
16.1 System Information .................................................. 43  
16.2 Service Contact Information ....................................... 43  
16.3 Access Code and Sensor/Zone information ...................... 44
1.0 Quick Reference

The PowerSeries Neo Alarm System uses shortcut keys to access options or features on all models of keypads. When using an LCD keypad, the PowerSeries Neo Alarm System additionally uses a menu based navigation system. The scroll keys can be used to [Scroll] through the list of options contained within the current menu. For more information on keypads see: 2 "Understanding your Keypad". Look up detailed information on any of the listed actions using the accompanying Section number.

For detailed information about the PowerSeries Neo Alarm System, refer to the full online manual, which can be accessed from the DSC.com Web site.

Note: Some features must be enabled by installer.
Note: Bypass Groups are not permitted in UL listed installations.
Note: [*] - If configured by installer.

<table>
<thead>
<tr>
<th>Status Lights</th>
<th>Function Keys</th>
<th>Function Keys</th>
<th>Status Lights Keys</th>
<th>Emergency Keys</th>
</tr>
</thead>
</table>

### Action

#### Arming and Disarming

<table>
<thead>
<tr>
<th>Action</th>
<th>Press</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Away Arm</td>
<td>⌚️ for 2 seconds + [Access Code*]</td>
<td>3.1.2</td>
</tr>
<tr>
<td>Stay Arm</td>
<td>⌚️ for 2 seconds + [Access Code*]</td>
<td>3.2</td>
</tr>
<tr>
<td>Night Arm</td>
<td>When armed in stay mode [<em>][1] + [Access Code</em>]</td>
<td>3.3</td>
</tr>
<tr>
<td>Disarm</td>
<td>[Access Code]</td>
<td>3.1</td>
</tr>
<tr>
<td>No-Entry Arming</td>
<td>[<em>][9] + [Access Code</em>]</td>
<td>3.4</td>
</tr>
<tr>
<td>Quick Arm/Quick Exit</td>
<td>[*][0]</td>
<td>3.5</td>
</tr>
<tr>
<td>Abort Arming Sequence</td>
<td>[Access Code]</td>
<td></td>
</tr>
</tbody>
</table>

#### Bypassing - All bypass commands begin with [*][1] + [Access Code*]

| Bypass Individual Zones | ⌚️ [3 Digit Zone #] | 3.7.1 |
| Bypass All Open Zones  | [9][9][8]           | 3.7.1 |
| Recall Last Bypass     | [9][9][9]           | 3.7.1 |
| Clear Bypass           | [0][0][0] OR [Scroll] Bypass Options + [*] + [Scroll] Clear Bypasses + [*] | 3.7.1 |
| Load Bypass Group      | [9][9][1] OR [Scroll] Bypass Options + [*] + [Scroll] Bypass Group + [*] | 3.8 |

### Common Functions

<table>
<thead>
<tr>
<th>Action</th>
<th>Press</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set Time and Date</td>
<td>[*][6] [Master Code] + [0][1]</td>
<td>8.2</td>
</tr>
<tr>
<td>Turn Chime ON/OFF</td>
<td>[<em>][4] + [Access Code</em>] OR ⌚️</td>
<td>10.1</td>
</tr>
<tr>
<td>Change Brightness</td>
<td>[*][6] [Master Code] + [1][2]</td>
<td>8.8</td>
</tr>
<tr>
<td>Change Contrast</td>
<td>[*][6] [Master Code] + [1][3]</td>
<td>8.8</td>
</tr>
<tr>
<td>Action</td>
<td>Press</td>
<td>Section</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Add/Delete User</td>
<td>[*][5] + [Master Code] + [Access Code] + 1</td>
<td>7.0</td>
</tr>
<tr>
<td>Reset Smoke Detectors</td>
<td>![button] OR [*][7][2]</td>
<td>5.2</td>
</tr>
<tr>
<td>View Troubles</td>
<td>[<em>][2] + [Access Code</em>] + ![button]</td>
<td>8.15</td>
</tr>
<tr>
<td>View Alarms</td>
<td>[<em>][3] + [Access Code</em>] + ![button]</td>
<td>5.1.5</td>
</tr>
<tr>
<td>Perform System Test</td>
<td>[*][6] + [Master Code] + [0][4] + ![button]</td>
<td>4.4</td>
</tr>
<tr>
<td>Buzzer Volume</td>
<td>[*][6] + [Master Code] + [1][4] + ![button]</td>
<td>8.10</td>
</tr>
</tbody>
</table>
2.0 Understanding your Keypad

The PowerSeries Neo Alarm System supports a variety of wireless, hardwired and proximity sensor LCD, LED and Icon keypads. All keypads come equipped with the LED status lights described in section 1 "Quick Reference". HS2LCD series keypads display system messages on their LCD screen. HS2CN series keypads display messages, as described in the following section. HS2LED series keypads display messages via a series of numbered LEDs, as described in the following section. All keypad versions will have a solid blue LED bar that is always on steady except when, if enrolled, a proximity tag is presented to and successfully read by the keypad.

2.1 Icon and LED Keypad Symbols

1. Clock Digits 1, 2
   These two 7 segment clock digits indicate the hour digits when the local clock is active. Digit 2 is also used to identify the zone number as the 1 when the zone number is 100 or higher and the OPEN or ALARM icons are active.

2. : (Colon)
   This icon is the hours/minutes divider and will flash once per second when the local clock is active.

3. Clock Digits 3, 4
   These two 7 segment displays are the minute digits when the local clock is active. The digits 3 and 4 are used to indicate the zone number for open zones or alarm in memory. These two digits combined with the clock digit 2, scroll one zone per second from the lowest number to the highest, when scrolling through zones.

4. 1 to 8
   These numbers identify troubles when [*][2] is pressed.

5. Memory
   Indicates that there are alarms in memory.

6. Bypass
   Indicates that there are zones bypassed.

7. Program
   Indicates that the system is in Installer or User's programming, or that the keypad is busy, and the LED will flash in cadence of 250ms ON and 250ms OFF. If Access Code is required, while accessing star menus, this LED is ON and solid to indicate that the code is required.

8. Away
   Indicates that the panel is armed in the Away Mode.

9. Fire
   Indicates that there are fire and/or CO alarms in memory.

10. Stay
    Indicates that the panel is armed in the Stay Mode.

11. Chime
    This icon turns on when the Chime function key is pressed to enable Door Chime on the system. It will turn off when the chime function key is pressed again to disable Door Chime.

12. OPEN
    This icon is used with clock digits 1 and 2 to indicate activated zones (not alarm) on the system. When zones are opened, the OPEN icon will turn on, and 7 segment displays 1 and 2 will scroll through the violated zones.

13. AC
    Indicates that AC is present at the main panel.

14. System Trouble
    Indicates that a system trouble is active.

15. Night
    Indicates that the panel is armed in the Night Mode.

16. Ready Light (green)
    If the Ready light is on, the system is ready for arming. If the toggle of the Ready LED flashes for Force Arming enabled, the LED flashes with force armable zones open on the partition.

17. Armed Light (red)
    If the Armed light is on, the system has been armed successfully.

Note: For UL listed installations, zones can only be bypassed manually.
2.2 Keypad Models

Note: In the following list if $x = 9$ (the system operates in 912-919MHz), $x=4$ (the system operates in 433MHz band) or $x=8$ (the system operates in 868MHz band). Only models operating in 912-919MHz band are UL/ULC listed.

- **HS2LCD**: Alphanumeric LCD keypad
- **HS2LCDP**: Alphanumeric LCD keypad with Prox. Tag support
- **HS2ICN**: Icon keypad
- **HS2ICNP**: Icon keypad with Prox. Tag support
- **HS2LED**: LED keypad
- **HS2LCDRFx**: Alphanumeric LCD keypad with wireless receiver
- **HS2LCDRFPx**: Alphanumeric LCD keypad with wireless receiver and Prox. tag support
- **HS2ICNRFx**: Icon keypad with wireless receiver
- **HS2ICNRFPx**: Icon keypad with wireless receiver and Prox. tag support
- **HS2LCDWFx**: Wireless Alphanumeric LCD keypad
- **HS2LCDWFpx**: Wireless Alphanumeric LCD keypad with Prox. Tag support
- **HS2ICNRFPx**: Wireless Alphanumeric LCD keypad with Prox. Tag support & Voice Prompt
- **HS2TCHP**: Touchscreen keypad. For additional information, refer to the HS2TCHP Touchscreen User Manual; part #: 29009060R001.
3.0 Securing the Premises

The PowerSeries Neo provides multiple arming modes as described below:

**Away mode**  Use when no one in your household will be home. Away mode activates all perimeter and interior sensors in the alarm system.

**Stay mode**  Use this mode when you are staying home, but expect someone to use the entrance door later. Stay mode partially activates your alarm system by arming all perimeter sensors and bypassing all interior sensors.

**Night mode**  Use when you want the perimeter and interior armed but would like to allow limited movement in your house without activating the alarm. (e.g., disable motion sensors in an area containing bedrooms and a washroom). Night mode is similar to Stay mode but only bypasses internal sensors configured as Night Zones.

**Note:** Verify with your alarm company which modes are available on your system. For SIA FAR listed panels, the Stay Arming Exit Delay will be twice as long as the Away Arming Exit Delay. Depending on your system configuration, there are multiple methods you can use to arm your system. You can arm the system using a:

- Keypad
- 2-way wireless key

See also: Silent Exit Delay

3.1 Arming the System

The PowerSeries Neo system can be armed using a keypad, a 2-way wireless key or a proximity tag.

3.1.1 Arming the System (Infinite Exit Delay)

In an attempt to reduce false alarms, your system is designed to notify you of an improper exit when arming the system. When using the Push to Set, or Final Door Set feature, attempting to arm your system will start an infinite exit delay. The keypad will sound a beep once per second. When you have opened and closed the final exit door, or after pressing the Push to Set button, the exit delay will be reduced to a programmable value, which is typically 10 seconds, after which the alarm will complete the setting. The panel used this time period to allow time for the detectors on the system to return to their normal state. When this time expires, the system checks for detectors/windows/doors that may be open. If any of these are open, the panel will cancel the arming. If this occurs, you must re-enter the premises, check the system, close any open zones, and then attempt to arm again.

3.1.2 Away Arming the System with the Keypad

Away mode activates the complete alarm system by:

- Arming all perimeter sensors.
- Arming all interior sensors.

**To Arm the System in Away Mode**

1. Ensure all windows and doors are closed and that the Ready indicator is on.

2. To arm using the Away key ( ), press and hold the Away key for 2 seconds and, if required, enter your [access code] or present your proximity tag.

**OR**

To Quick Arm the system press [*][0].

3. If zones have been bypassed, ICN or LED keypads bypass LED ( ) will light and the bypassed zones # will be shown. On an LCD keypad a warning appears.

4. After successfully initiating the arming sequence the:
   - Armed ( ) indicator turns on.
   - Ready ( ) indicator remains lit.
   - Exit Delay timer begins counting down.
   - Keypad beeps six times, continues beeping once per second until beeping rapidly in the final ten seconds.
   - The system may be configured to have a persistent exit delay that only ends when the exit door is opened and closed, or when a button is pressed outside the protected premises.

5. To cancel the arming sequence, enter your [access code] or present your proximity tag to the keypad reader.
Chapter 3

6. Once the exit delay timer expires, thereby arming the system, the:
   - Ready indicator turns off.
   - Armed indicator remains on.
   - Keypad stops sounding.

Note: The installer configures the exit delay timer and whether or not an access code is required for arming the system.

3.2 Stay Arming the System with the Keypad

Stay mode partially activates your alarm system by:
- Arming all perimeter sensors.
- Bypassing all interior sensors.

To Arm the System in Stay mode

1. Ensure all windows and doors are closed and that the Ready indicator is on.

2. Press and hold the Stay key \(\text{[9]}\) for 2 seconds and, if required, enter your [access code] or present your proximity tag. Do not leave the premises.

3. If zones have been bypassed, ICN or LED keypads bypass LED \(\text{[9]}\) will light and the bypassed zones \(\text{[9]}\) will be shown. On an LCD keypad a warning appears.

4. After successfully initiating the arming sequence the:
   - Armed \(\text{[9]}\) indicator turns on.
   - Ready \(\text{[9]}\) indicator remains lit.
   - Exit Delay timer begins counting down.

5. To cancel the arming sequence, enter your [access code] or present your proximity tag.

6. Once the exit delay timer expires, thereby arming the system, the:
   - Ready \(\text{[9]}\) indicator turns off.
   - Armed \(\text{[9]}\) indicator remains on.
   - Bypass or system indicator activates.

3.2.1 Silent Exit Delay

If the system is armed using the Stay key \(\text{[9]}\) or the No Entry Arming method \(*[9]\):
- The warning beep is silenced.
- The exit time is doubled for that exit period only (CP-01 versions only).

Note: For non CP-01 versions, Standard Exit Time is used.

3.3 Night Arming the System with the Keypad

Night mode partially activates the alarm system by:
- Bypassing all internal sensors configured as Night zones.
- Arming all perimeter sensors.
- Arming all other internal sensors.

Arming the system in Night mode is possible after the system has first been armed in Stay mode and \(*[1]\) is pressed at the keypad. The keypad can also be configured with a function key to arm the system in Night mode. To access armed interior areas when the system is armed in Night Mode, you must disarm the system.

Note: Ensure that your installer has provided you with a list identifying all programmed night zones. Your installer can configure a function key to arm the panel in Night mode without the system already being armed in Stay mode.
### Chapter 3

#### To Arm the System in Night mode

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>LCD Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>If configured, press and hold the Night key for 2 seconds. OR</td>
<td>Date Time&lt;br&gt;JAN 02/13 2:06a</td>
</tr>
<tr>
<td>2.</td>
<td>Once the system is armed in Stay mode (Armed indicator is on) at any keypad press [<em>][</em>]. OR press [*][1].</td>
<td>Press (*) for &lt;&gt;&lt;br&gt;Interior Arm</td>
</tr>
</tbody>
</table>
| 3.   | If required, enter your [access code]. All interior zones will now be armed, except for devices programmed as Night Zones.  
  - The Night mode icon turns on. | Present Tag or Enter Code<br>Interior Has Been Armed |

To gain access to interior areas that are armed during Night mode disarm the system by entering your [access code].

#### 3.4 No-Entry Arming

No-Entry Arming arms the system in Stay mode by:
- Removing the Entry Delay from all configured zones.
- Arming all perimeter sensors.
- Bypassing all interior sensors.

An entry through any zone will create an instant alarm.

#### To No-Entry Arm the System

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>LCD Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Check that the Ready indicator is on and your system is ready to be armed.</td>
<td>Date Time&lt;br&gt;JAN 02/13 2:06a</td>
</tr>
<tr>
<td>2.</td>
<td>Press [*][9] and, if required, enter your [access code].</td>
<td>Present Tag or Enter Code</td>
</tr>
<tr>
<td>3.</td>
<td>If zones have been bypassed, ICN or LED keypads bypass LED will light and the bypassed zones will be shown. On an LCD keypad a warning appears.</td>
<td>* Warning *&lt;br&gt;Bypass Active</td>
</tr>
</tbody>
</table>
| 4.   | After successfully initiating the arming sequence the:  
  - Armed light flashes as a reminder that the system is armed and has no entry delay.  
  - Keypad sounds fast beeps.  
  - Keypad displays “Exit Delay in Progress”. | Armed With No Entry Delay<br>Exit Delay in Progress |
| 5.   | To cancel the arming sequence, enter your [access code] or present your proximity tag. | System Disarmed<br>No Alarm Memory |
| 6.   | Once the exit delay timer expires, the system is armed. | System Armed in Stay Mode |

#### 3.5 Leaving when the System is Already Armed - Quick Exit

Use the Quick Exit feature if the system is already armed and you would like to leave without disarming and rearming the system. Quick Exit uses the same hot keys as Quick Arming, and it provides you with a two minute exit delay to leave the premises without triggering an alarm. Once the door you leave from closes, the quick exit timer will be canceled.

#### To Quick Exit

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>LCD Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>When the system is already armed and the Armed light is lit, press and hold the Quick Exit key for 2 seconds OR press [*][0].</td>
<td>Quick Exit in Progress</td>
</tr>
<tr>
<td>2.</td>
<td>Exit the premises before the exit delay timer expires. After exiting, the delay timer will be canceled.</td>
<td></td>
</tr>
</tbody>
</table>
3.6 Arming the System with a 2-way Wireless Key

If configured, the PowerSeries Neo system can be armed using the following wireless keys:
- PG4929/PG8929/PG9929
- PG4939/PG8939/PG9939

**To Arm the System with a 2-way wireless key**
- Press the desired Arming mode button anytime the system Ready indicator is on.

3.7 Bypassing Zones

**WARNING!** If a zone is not operating properly contact a service person immediately.
Bypassing zones intentionally unprotects specified zones the next time your system is armed. Depending on the type of keypad, bypassed zones will be identified differently. Using an HS2LCD series keypad, bypassed zones are indicated on the LCD screen as shown in the following table. If using an LED or ICN series keypad, the will light and the bypassed zones #s will be shown.

<table>
<thead>
<tr>
<th>LCD Display</th>
<th>Indication</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone Label &lt;&gt;</td>
<td>none</td>
<td>Zone is ready for arming.</td>
</tr>
<tr>
<td>O</td>
<td>Zone is currently open. You may be unable to arm the system.</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Zone is bypassed.</td>
<td></td>
</tr>
</tbody>
</table>

**Bypassed zones:**
- Must be configured before arming the system.
- Can be done using a keypad or SMS.
- Allow for access to protected areas when the system is armed.
- Allow you to arm the system if a zone is temporarily out of service.
- Reduce the level of security.
- Will not sound an alarm.
- Are automatically cancelled each time the system is disarmed.
- Can be programmed together within bypass groups. For more information see “Bypass Groups”.

3.7.1 Additional Bypass Features

**Recall Last Bypass**
Recalls all zones that were bypassed the last time the bypass zone feature was used.

**Bypass All Open Zones**
Allows the user to quickly bypass all open zones with a single command.

**Clear Bypass**
Instantly clears all bypass conditions from the zones assigned to the partition.

**Programming a Bypass Group**
Use when you consistently bypass the same zones. This feature allows you to store in memory one group of bypassed zones per partition.

**Activating a Bypass Group**
loads a stored bypass group from memory.

**Note:** Ensure that no zones are unintentionally bypassed when arming your system.

**Note:** 24-hour zones can only be unbypassed manually.

**Note:** For security reasons, your installer has programmed the system to prevent you from bypassing certain zones (e.g., smoke detectors). For more information on fire zones see “Fire and CO Zone Types”.

**To Bypass Individual Zones**

1. Press [*] to enter the function menu.

2. Press [*] or [1]. If required enter your [access code] or present your proximity tag.

3. Directly bypass zones by entering their [3 digit zone #]. If using an LCD keypad press [*].

OR

Scroll to the desired zone using the keys and press [*].

4. To toggle and un-bypass a zone reenter the [3 digit zone #] or press [*] again. To bypass more zones repeat steps 3 and 4.

5. To exit bypassing mode press [*].
6. If using an LED or ICN series keypad, the zone LED will light and the bypassed zone #s will be shown. If the system is ready to arm the Ready indicator will be lit. When arming the system the following message briefly displays.

**To Bypass All Open Zones**

1. Press [*] to enter the function menu.

2. Press [*] or [1]. If required enter your [access code] or present your proximity tag.

3. Press [9][9][8]
   OR
   Scroll to Bypass Options using the keys [<] [>] and press [*]. Scroll to Bypass Op Zones and press [*].

4. To exit bypassing mode, press [*].

5. If using an LED or ICN series keypad, the LED will light and the bypassed zone #s will be shown. If the system is ready to arm the Ready indicator will be lit. When arming the system the following message briefly displays.

**To Recall the Last Bypassed Zones**

1. Press [*] to enter the function menu.

2. Press [*] or [1]. If required enter your [access code] or present your proximity tag.

3. Press [9][9][9]
   OR
   Scroll to Bypass Options and press [*]. Scroll to Bypass Recall using [<] [>] the keys and press [*].

4. To exit bypassing mode press [*].

5. If using an LED or ICN series keypad, the LED will light and the bypassed zone #s will be shown. If the system is ready to arm the Ready indicator will be lit. When arming the system the following message briefly displays.

**To Clear the Bypass Indication from All Zones**

1. Press [*] to enter the function menu.

2. Press [*] or [1]. If required enter your [access code].

3. Press [0][0][0]
   OR
   Scroll to Clear Bypasses using the [<] [>] keys and press [*]. All Bypassed zones will now be open.

4. To exit bypassing mode press [*].
3.8 Bypass Groups

Program frequently bypassed zones into the system as a bypass group. Using bypass groups avoids individually bypassing each zone. One bypass group can be programmed per partition.

Note: This feature is not to be used in UL listed installations.

To Program a Bypass Group

1. Press [*] to enter the function menu.

2. Press [*] or [1]. If required enter your [access code].

3. Enter the [3 digit zone #] of all zones you want bypassed
   OR
   Scroll to and press [*] to indicate all zones you want bypassed.

4. Press [9][9][5] to program the bypass group with the currently bypassed zones
   OR
   Scroll to Bypass Options using the < > keys and press [*]. Scroll to Prg Bypass Group and press [*].

5. The Bypass Group is now programmed. The keypad will beep three times.

6. To exit bypassing mode and return to the Ready state, press .

To Load a Bypass Group

1. Press [*] to enter the function menu.

2. Press [*] or [1]. If required enter your [access code].

3. Press or [9][9][1]. If required enter your [access code].
   OR
   Scroll to Bypass Options using the < > keys and press [*]. Scroll to Bypass Group and press [*].

4. The group of zones are now bypassed. The following message briefly displays.

5. To exit bypassing mode and return to the Ready state, press [*].

6. If using an LED or ICN series keypad, the will light and the bypassed zones #s will be shown. If the system is ready to arm the Ready indicator will be lit. When arming the system the following message briefly displays.

3.9 Arming Errors and Exit Faults

The PowerSeries Neo audibly notifies you of any errors when you are attempting to arm the system or exit the premises.

3.9.1 Arming Errors

An error tone (long beep) sounds if the system is unable to arm. Arming errors occur if:
- The system is not ready to arm (i.e., sensors are open).
- An incorrect user code is entered.
- A trouble is present and has not been viewed by the user. This operation must be enabled by the installer.

To Correct an Arming Error

1. Ensure all sensors are secure. Your keypad will identify all open zones.

2. If the trouble light is on, enter [*][2] and enter [99] or scroll to the Acknowledge All Troubles prompt and press [*], if your installer has configured your system to impede arming when a trouble is present.

3. Try arming the system again. For details on arming the system, see one of the previous arming procedures.

4. If errors persist contact your installer.
3.9.2 Audible Exit Faults

**Note:** Must be enabled by installer.
In an attempt to reduce false alarms, the Audible Exit Fault notifies you of an improper exit when arming the system. Improper exits are caused by failing to securely close the Exit/Entry door. Improper exits cause the following system notifications:
- The keypad emits one continuous beep.
- The bell or siren sounds for the duration of the entry delay until a valid user code is entered or until the programmed Bell time out expires.

3.9.3 To Correct an Exit Fault

1. Re-enter the premises.
2. Disarm the system before the entry delay timer expires by entering your [access code].
3. Follow the Away arming procedure again, making sure to close the entry/exit door properly. For more details see: "Away Arming the System with the Keypad".

3.10 Disarming the System

Depending on your system configuration, there are multiple methods you can use to disarm your system. You can disarm the system using a:
- Keypad
- 2-way wireless key
- Proximity Tag

**To Disarm the System with a Keypad**

1. Enter your [access code] or present your proximity tag anytime the system is armed. (Armed indicator is on).
2. If you walk through the entry door the keypad will beep. Disarm within _____ seconds to avoid an alarm condition.

**To Disarm the System with a 2-way Wireless Key**

1. Press the disarm button anytime the system is armed. (Armed indicator is on).
2. If you walk through the entry door the keypad will beep. Press the disarm button within _____ seconds to avoid an alarm condition.

**Note:** After disarming a system with an HS2LCD keypad using a 2-way wireless key, always check the alarm memory to determine if any alarms have occurred during the armed period.

**To Disarm the System with a Proximity Tag**

1. Present your Proximity Tag to a keypad equipped with a proximity sensor anytime the system is armed. (Armed indicator is on) and if configured as required, enter your access code.
2. If you walk through the entry door the keypad will beep. Present your Proximity Tag within _____ seconds to avoid an alarm condition.

**Note:** Duration of Entry timer is programmed by installer.

3.10.1 Disarming Error

If your code is invalid, the system will not disarm and a 2-second error tone will sound. If this occurs, press [0] and re-enter your access code.
4.0 The PowerSeries Neo Security System

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

Note: The PowerSeries Neo security system includes specific false alarm reduction features and is classified in accordance with ANSI/ SIA CP-01-2010 Control Panel Standard - Features for False Alarm Reduction. Please consult your installer for further information regarding the false alarm reduction features built into your system as all are not covered in this manual.

4.1 General System Operation

Your security system is made up of a PowerSeries Neo control panel, one or more keypads and various sensors and detectors. The control panel will be mounted out of the way in a utility closet or in a basement. The metal cabinet contains the system electronics, fuses and standby battery.

All the keypads have an audible indicator and command entry keys. LED keypads have a group of zone and system status lights.

LCD keypads have an alphanumeric liquid crystal display (LCD). The keypad is used to send commands to the system and to display the current system status. The keypad(s) will be mounted in a convenient location inside the protected premises close to the entrance/exit door(s).

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

Note: Only the installer or service professional shall have access to the control panel.

4.2 Carbon Monoxide Detection

This equipment is capable of monitoring carbon monoxide detectors and providing a warning if carbon monoxide is detected. Please read the Family Escape Planning guidelines in this manual and instructions that are available with the carbon monoxide detector.

Note: Must be enabled and configured by installer.

Note: The equipment should be installed in accordance with NFPA 720.

4.3 Fire Detection

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

Note: Must be enabled and configured by installer.

4.4 Testing your System

Tests all system keypad LED’s, keypad sounders, bells and/or sirens.

To ensure that your system continues to function as intended, you must test your system weekly.

IMPORTANT: For UL HOME HEALTH CARE listed applications the system shall also be tested weekly without AC power.

To remove AC from the control unit, remove the screw from the restraining tab of the plug in adapter and remove the adapter from AC outlet. After completing the test of the unit using only the battery backup source, reconnect the plug in adapter and attach the screw through the restraining tab so that the adapter is securely attached to the outlet.

IMPORTANT: Should your system fail to function properly contact your installation company immediately.

IMPORTANT: All smoke detectors must be tested by your smoke detector installer once per year to ensure proper operation.

To Perform a Keypad and Siren Test

1. From the Ready state press [*][6] and enter the [Master code] to access User Functions.

   LCD Display
   Press (*) for <>
   User Functions

2. Press [04] or use the scroll keys to navigate to System Test and press [*]. The system activates all keypad sounders, bells/sirens and keypad LEDs for two seconds.

   LCD Display
   Press (*) for <>
   System Test

3. To go back to the Ready state press [#].

4.5 Monitoring

This system is capable of transmitting alarms, troubles & emergency information to a central station. If you initiate an alarm by mistake, immediately call the central station to prevent an unnecessary response.
Note: For CP-01 systems, the monitoring function must be enabled by the installer before it becomes functional. There is a communicator delay of 30 seconds in this control panel. It can be removed, or it can be increased up to 45 seconds, at the option of the end-user by consulting with the installer.

4.6 Maintenance

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

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

**IMPORTANT**: EMERGENCY USE ONLY!

Pressing both the emergency keys generates a Fire, Medical, or Panic Alarm, and alerts the monitoring station. e.g., to generate a medical alarm press both of the medical alarm keys for 2 seconds and the display on an LCD keypad will show Hold down keys for Med. Alarm. The keypad beeps to indicate that the alarm input has been accepted and sent to the monitoring station.

- 🚭 Fire Alarm
- 🔥 Medical Alarm
- 🔴 Panic Alarm

**Note**: Verify with your alarm company that your system is equipped with emergency keys.
**Note**: Fire keys can be disabled by the installer.
**Note**: Having an optional audio verification module installed in your system allows the monitoring station to open 2-way communication when notified of an alarm.

5.1 Alarms

The system can generate different alarm sounds, each with a different purpose and priority.

<table>
<thead>
<tr>
<th>Priority</th>
<th>Type of Alarm</th>
<th>What you hear</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fire</td>
<td>Temporal (3 beeps then a pause) or pulsed siren (continuous beeping)</td>
</tr>
<tr>
<td>2</td>
<td>Carbon Monoxide</td>
<td>4 beeps, 5 second pause, 4 beeps</td>
</tr>
<tr>
<td>3</td>
<td>Intrusion (Burglary)</td>
<td>Continuous siren</td>
</tr>
<tr>
<td>4</td>
<td>Flood</td>
<td>1 second on, 3 seconds off, repeating</td>
</tr>
</tbody>
</table>

**Note**: Medical alarm is silent, it only results in an alarm transmission to the monitoring station.

5.1.1 Fire Alarm

Follow your emergency evacuation plan immediately!
**If the Fire Alarm was Accidental (e.g., burnt toast, bathroom steam, etc.)**
1. Enter your Access Code to silence the alarm.
2. Call your central station to avoid a dispatch.
**Note**: Verify with your alarm company that your system is equipped with fire detection.
For information on resetting smoke detectors see: “Resetting Smoke Detectors”.

5.1.2 Carbon Monoxide Alarm - 4 beeps, long pause, 4 beeps

**WARNING!** Carefully review your Carbon Monoxide Alarm Installation/User Guide to determine the necessary actions required to ensure your safety and ensure that the equipment is operating correctly. Incorporate the steps outlined in the guide into your evacuation plan.
Activation of your CO alarm indicates the presence of carbon monoxide (CO), which can be fatal. During an alarm:
- The red LED on the CO detector flashes rapidly and buzzer sounds with a repeating cadence of 4 quick beeps, 5-second pause, 4 quick beeps.
- The siren connected to the control panel produces the same cadence as above.
- The keypad provides audible and visual indication of the CO alarm.
**If the Carbon Monoxide Alarm Sounds**
1. Operate Silence button.
2. Call emergency services or your fire department.
3. Immediately move outdoors or to an open door/window.

5.1.3 Intrusion (Burglary) Alarm - Continuous Siren

⚠️ **If you are unsure of the source of the alarm approach with caution!**
**If the Intrusion alarm was accidental**
1. Enter your Access Code to silence the alarm. If the code is entered within 30s (or the programmed value of the alarm transmission delay) the transmission of the alarm to the monitoring station will be cancelled.
2. Call your central station to avoid a dispatch.

5.1.4 Alarm Cancel Window

The control panel provides a period of time in which the user can cancel the alarm transmission. The minimum duration of this time is five minutes.
Chapter 5

If the programmed alarm transmission delay has expired, canceling an alarm sends a message to the monitoring station. Upon a successful transmission of the cancellation message the keypad will beep 6 times.

**Note:** Must be enabled and configured by installer.

**Note:** For CP-01 systems, alarm transmission delay must not exceed 45 seconds.

### 5.1.5 Viewing Alarms in Memory

When an alarm occurs the keypad indicator illuminates. Viewing the Alarm memory provides more information on the sensor(s) that were tripped. When using a ICN or LED keypad the Memory LED will be lit and the zone numbers will be displayed.

**To View Alarms in Memory**

- Press [*][3]
- OR

  use the scroll keys to navigate to Alarm Memory and press . The Alarm information will display. For more information on the messages that could be displayed see: “Alarm Messages”.

#### 5.1.5.1 Alarm Messages

<table>
<thead>
<tr>
<th>LCD Display</th>
<th>What it means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burglary &lt;&gt;</td>
<td>Multiple burglary sensors were tripped. Central station has been notified.</td>
</tr>
<tr>
<td>Verified</td>
<td></td>
</tr>
<tr>
<td>Burglary Not &lt;&gt;</td>
<td>A single burglary sensor was tripped. Central station has been notified.</td>
</tr>
<tr>
<td>Verified</td>
<td></td>
</tr>
<tr>
<td>Hold-up &lt;&gt;</td>
<td>Multiple hold-up sensors were tripped. Central station has been notified.</td>
</tr>
<tr>
<td>Verified</td>
<td></td>
</tr>
<tr>
<td>Hold-up Not &lt;&gt;</td>
<td>A single hold-up sensor was tripped.</td>
</tr>
<tr>
<td>Verified</td>
<td></td>
</tr>
<tr>
<td>Fire Alarm &lt;&gt;</td>
<td>Fire alarm has been triggered. Central station has been notified. On an ICN or LED keypad the [[] ] will be lit.</td>
</tr>
<tr>
<td>Fire Zone 1</td>
<td></td>
</tr>
<tr>
<td>CO Alarm &lt;&gt;</td>
<td>CO alarm has been triggered. Central station has been notified. On an ICN or LED keypad the [[] ] will be lit.</td>
</tr>
<tr>
<td>CO Zone 1 &lt;&gt;</td>
<td></td>
</tr>
</tbody>
</table>

### 5.2 Resetting Smoke Detectors

After having detected an alarm condition smoke detectors require a reset to exit the alarm condition.

**Note:** Verify with your alarm company if this function is required on your system.

**To Reset the Sensors**

1. Press and hold on the keypad for 2 seconds. If the reset is successful, the alarm is cancelled.
2. If a smoke detector fails to reset, it may still be detecting an alarm condition. If unsuccessful, the alarm will reactivate or continue.
6.0 Wireless Keys and other Devices

In addition to the keypad, the PowerSeries Neo system can be controlled using a variety of devices:
- 2-way wireless keys
- Proximity Tags
- via SMS using a cellphone

6.1 Using 2-way Wireless Keys

Note: Panic feature has not been evaluated by UL.

Note: All wireless key buttons are programmable. Verify the functions assigned to each key with your installer.

Note: When using compatible wireless keys there is one bell squawk for arming and two bell squawks for disarming.

2-way wireless keys allow users in the close proximity of their house the ability to readily arm/disarm their system, and to call for help. For information on enrolling wireless keys see: "User Labels (LCD keypads only)".

6.1.1 PG4929/PG8929/PG9929

1. Away arm
2. Stay arm
3. Disarm
4. Panic
5. Command Output 1
6. Message LED
7. Status LEDs

6.1.2 PG4939/PG8939/PG9939

1. Away Arm
2. Stay Arm
3. Disarm
4. Panic
5. Command Output 1
6. LED

6.2 Using Proximity Tags

The MPT proximity tag is ideal for people who have difficulties remembering codes or who do not interact with the system regularly. To operate properly, Proximity tags must be enrolled in the system. The LED Bar flashes 3 times upon a valid Prox Tag being read by the keypad successfully. If the Proximity Tag is invalid, the LED Bar will stay ON and an error tone will sound. For more information see: "Enrolling and Deleting Proximity Tags".

6.3 SMS Command and Control

SMS Command and Control allows you to send text messages to your system, enabling the system to perform certain actions. For a list of commands and how to send them see the following table. As a security measure, only phone numbers configured by your installer will be permitted to contact your system. Messages from all other phone numbers will be rejected.

Note: This is a supplementary feature that has not been investigated by UL/ULC. Must be enabled and configured by installer. Only supported with an LCD keypad.

6.3.1 Using the Keypad to Lookup the Number to Call for SMS Commands

The phone number of the system is programmed by the installer. To quickly find the phone number perform the following steps.

To find the System's Phone Number

1. Check that the Ready indicator ✔ is on and the system is disarmed.

<table>
<thead>
<tr>
<th>Date Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAN 02/13 2:06a</td>
</tr>
</tbody>
</table>
2. Press [*][6]
   OR
   press [*] and use the scroll keys to navigate to User Functions press [*] and enter [Master Code].
3. Press [1][1] or use the scroll keys to navigate to SMS Programming and press [*].
4. Scroll to navigate to SMS Programming and press [*]. The phone number to send your SMS commands to displays.

**6.3.2 Sending SMS Commands to your System**

In order to successfully send commands to your system from your cellphone, you must send SMS messages in the proper format. If configured, commands require the inclusion of a User Access Code in your message. The access code will be verified by the system before executing any commands.

Additional information about sending SMS commands:

- Text messages are not case sensitive and extra spaces are ignored.
- In multi-partition systems and if the User has rights to manage the desired partitions, commands can be sent to specific partitions by including the partition number. For more information on partitions see: “Managing Partitions”.
- If the panel is configured to require an Access Code and the code is not sent or is invalid, the panel will send a notification to the user advising the command was unsuccessful.

The following table lists all available SMS commands with examples of how to enter the Partition number and access codes. The format for entering commands is as follows:

<table>
<thead>
<tr>
<th>Command</th>
<th>Partition number</th>
<th>Access Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stay Arm</td>
<td>001</td>
<td>1234</td>
</tr>
</tbody>
</table>

**Note:** Verify with your installer that the Partition number and access code are required in your SMS message. If one or both are not required, do not enter them in your SMS message.

**Note:** Responses to Status and Alarm Memory requests may require more than 1 SMS message, depending on status of the system. There is a 10 second delay between transmission of SMS messages.

**6.3.3 SMS Commands**

<table>
<thead>
<tr>
<th>Commands</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stay Arm</td>
<td>Stay arms the system</td>
</tr>
<tr>
<td>Away Arm</td>
<td>Away arms the system</td>
</tr>
<tr>
<td>Night Arm</td>
<td>Night arms the system</td>
</tr>
<tr>
<td>Disarm</td>
<td>Disarms the system</td>
</tr>
<tr>
<td>Activate Command Output 1</td>
<td>Activates Output 1</td>
</tr>
<tr>
<td>Activate Command Output 2</td>
<td>Activates Output 2</td>
</tr>
<tr>
<td>Activate Command Output 3</td>
<td>Activates Output 3</td>
</tr>
<tr>
<td>Activate Command Output 4</td>
<td>Activates Output 4</td>
</tr>
<tr>
<td>Deactivate Command Output 1</td>
<td>Deactivates Output 1</td>
</tr>
<tr>
<td>Deactivate Command Output 2</td>
<td>Deactivates Output 2</td>
</tr>
<tr>
<td>Deactivate Command Output 3</td>
<td>Deactivates Output 3</td>
</tr>
<tr>
<td>Deactivate Command Output 4</td>
<td>Deactivates Output 4</td>
</tr>
<tr>
<td>Bypass 001</td>
<td>Bypasses specified zone number</td>
</tr>
<tr>
<td>Unbypass 001</td>
<td>Clears the bypass from the specified zone number</td>
</tr>
<tr>
<td>Status Request</td>
<td>Omitting the partition number causes the system to send a status report for all partitions. To request a status report for a specific partition enter the appropriate partition number.</td>
</tr>
<tr>
<td>Alarm Memory Request</td>
<td>Omitting the partition number causes the system to send a status report for all partitions. To request a status report for a specific partition enter the appropriate partition number.</td>
</tr>
<tr>
<td>Help</td>
<td>The Help command generates an SMS response listing all Interactive commands that can be sent to the module. Access Code is not required.</td>
</tr>
</tbody>
</table>
6.3.4 SMS Responses from your System

SMS responses are sent to the phone that initiated the command.

<table>
<thead>
<tr>
<th>System Response</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Successful</td>
<td>Sent when a command and control function is successfully performed by the panel.</td>
</tr>
<tr>
<td>Unsuccessful</td>
<td>Sent when a command and control function not successfully performed by the panel.</td>
</tr>
<tr>
<td>Invalid Command</td>
<td>Sent when a command sent was not accepted as valid by the system.</td>
</tr>
<tr>
<td>System Stay Armed</td>
<td>Sent in response to a status request and if a partition is stay armed.</td>
</tr>
<tr>
<td>System Away Armed</td>
<td>Sent in response to a status request and if a partition is away armed.</td>
</tr>
<tr>
<td>System Night Armed</td>
<td>Sent in response to a status request and if a partition is night armed.</td>
</tr>
<tr>
<td>System Disarmed Ready</td>
<td>Sent in response to a status request and if a partition is disarmed and ready to arm.</td>
</tr>
<tr>
<td>System Disarmed Not Ready</td>
<td>Sent in response to a status request and if a partition is disarmed and not ready to arm.</td>
</tr>
<tr>
<td>System is in Alarm</td>
<td>Sent in response to a status request and if a partition is in alarm.</td>
</tr>
<tr>
<td>Service is Required</td>
<td>Sent in response to a status request and if a partition is in trouble.</td>
</tr>
<tr>
<td>No Alarm Memory</td>
<td>Sent in response to a alarm memory request and there are no alarms in memory.</td>
</tr>
</tbody>
</table>
7.0 Managing Users

Up to 95 different user access codes can be programmed in the PowerSeries Neo. Each user access code can be:
- Uniquely labeled.
- Assigned a proximity tag. In order to operate, proximity tags must be enrolled in the system.
- Assigned to only operate specific partitions. For more information on partitions see: "Managing Partitions".
- Configured with additional attributes. For more information see: "Configuring additional User Options".

Note: Your installer configures all access codes to be either 4 or 6 digits. You cannot have access codes of both lengths on your system.

Programed zones are indicated on the LCD screen. For more information on user flags see the following table. On an ICN or LED keypad programmed users will have their digits displayed.

<table>
<thead>
<tr>
<th>User Indications</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCD Display</td>
</tr>
<tr>
<td>User Code 01 -</td>
</tr>
<tr>
<td>User Code 01 P</td>
</tr>
<tr>
<td>User Code 01 T</td>
</tr>
</tbody>
</table>

7.1 Access Code Types

The alarm system provides the following user access code types:

<table>
<thead>
<tr>
<th>Code</th>
<th>Add User</th>
<th>Delete User</th>
<th>Arm</th>
<th>Disarm</th>
<th>Access Codes</th>
<th>User Functions</th>
<th>Installer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master</td>
<td>All</td>
<td>All</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>User</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Supervisor</td>
<td>All but Master</td>
<td>All but Master</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Duress</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>One-time user</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>1/day</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Installer and Master code are system codes that can be changed but not deleted. The other codes are user-defined and can be added or deleted as necessary. By default, access codes have the same partition and attribute programming as the code used to program them.

Note: When using 6-digit access codes, the minimum number of access code variations is 10526 per user. Additionally, there are no disallowed codes.

- **Master Code**
  - By default the master code can access all partitions and can perform any keypad function. This code can be used to program all access codes, including the supervisor and duress codes. The master code is code # [01].

- **User Codes**
  - This type of access code is used to arm and disarm assigned partitions and can access the User Functions menu.

- **Supervisor Codes**
  - Use when you want to allow additional users to manage Access Codes [*5] or User Functions [*6]. Supervisor codes created by the master code will have the same attributes as the master code. Supervisor codes created by another supervisor code will have the same attributes, except the supervisor attribute. Must be assigned manually afterward. After creation, attributes can be changed for all supervisor codes. For information on how to program a supervisor code see "Configuring additional User Options".

- **Duress Codes**
  - Use if forced to access your keypad under threat. Duress codes function the same as user access codes, except they transmit a Duress Report to your monitoring station when used to perform any function on the system. Duress codes cannot be used to access Access Codes [*5], User Functions[*6] or Installer [*8] menus. For information on how to program a Duress Code see "Configuring additional User Options".

- **One Time User Code**
  - Use when needing to grant someone one time access to your home once per day, i.e., a cleaning person or contractor. The ability to disarm the system is reset at midnight or when the one time user code is keyed in by the master code user. For information on how to program a One Time User Code see "Configuring Additional User Options".
Chapter 7

To Open the Access Codes Menu

1. Press [*][5]
   OR
   press [*] and use the scroll keys to navigate to Access Codes and press [*].
2. Enter [Master or supervisor code].
3. Enter [2 digit #]
   OR
   scroll through the list of users and press [*]. On an LED keypad the user number will begin flashing.
4. To go back to the Ready state press [#].

7.1.1 Adding, Changing and Deleting Access Codes

Each configured user is assigned a number from 01-95. Access codes cannot be duplicated.

To Add or Change User Access Codes

1. From the desired user press [*] or [1].
2. Enter a new 4 or 6 digit access code. After entering a new code you will be automatically returned to the previous menu, and on an LCD display the flag is changed to P from -. On an ICN or LED keypad the programmed user will have their digits displayed. If a duplicate code is entered the error tone will sound. After the code is programmed, the keypad returns to the previous LCD display.

To Delete a User Access Code

1. From the desired user press [*] or [1].
2. Press [*]. The code is deleted, and you are returned to the previous screen. The flag is changed to - from P. On an ICN or LED keypad the programmed user’s digits will cease being displayed. After the code is programmed, the keypad returns to the previous LCD display.

Note: Any proximity tags associated with deleted user codes will need to be re-enrolled.

7.1.2 Enrolling and Deleting Proximity Tags

When enrolling or deleting proximity tags for a user, the system provides a choice of option depending on if tag is already enrolled or not. For more information on see: "Using Proximity Tags".

To Enroll a Proximity Tag

1. From the desired user press [2] or scroll to Prox Tag and press [*].
2. If no tag is enrolled for this user you will be asked to present the tag to the reader.
   • If the card successfully enrolls the blue LED bar flashes.
   • If the tag is invalid the following message is displayed.
   • If the tag already is enrolled with another user the following message is displayed.

To Delete a Proximity Tag

1. From the desired user press or scroll to Prox Tag and press [*].
2. If a tag is enrolled for this user you will be asked if you would like to delete the Tag. Press [*] to delete the tag.
7.1.3 Naming a User

Adding or editing labels are accomplished by using the keypad to input the desired letters or numbers. The following figure depicts the three letters and one number that corresponds to each keypad button. The first press of the number key displays the first letter. The second press displays the second letter, etc.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>

Space

Entering letters using the keypad

**To Edit a User Label**

1. From the User Codes menu press [3] or scroll to User Labels and press [*].

2. Use the arrow keys to move the cursor to a blank space or existing character.

3. Press the number key corresponding to the appropriate letter as shown in the previous figure.

4. When the required letter or number is displayed use the arrow keys to scroll to the next letter.

5. When finished, press the [*] key, use the keys to scroll to Save then press [*].

7.1.4 Assigning a Partition to a User code

User codes can be configured to have access only to specific partitions. For more information see: "Managing Partitions".

**Note:** Partitions are configured by your installer.

**To Assign a Partition to a User code**

1. From the desired user press [4] or scroll to Partition Assign and press [*].

2. Press [*] to change the partition assignment for the user code, Y or N.

If using an LED or ICN keypad press the corresponding number key for the partition, 1 to 8, to change the programming of the option.

7.2 Configuring additional User Options

Users can also be assigned the following options:

**[1] Supervisor Code** For more information see: "Access Code Types".

**[2] Duress Code** For more information see: "Access Code Types".

**[3] Zone Bypass** Grants the user the ability to bypass zones.

**[4] Remote Access** Grants the user the ability to use SMS features. For more information see: "SMS Command and Control"

**[7] Bell Squawk** Use to generate a bell squawk when arming/disarming the system.

**Note:** When using wireless keys to arm/disarm the system there will be:

- one bell squawk for arming
- two bell squawks for disarming.
- three squawk pairs when disarming with an alarm in memory.

**[8] One Time Use** For more information see: "Access Code Types".

**To Configure additional User Options**

1. From the desired user press or scroll to User Options and press [*].

2. Use the keys to cycle through the User Options and press to toggle configuring the displayed option.

OR

If using an LED or ICN keypad press the [feature number as listed above].
8.0 User Functions

The PowerSeries Neo allows for a variety of user configurable functions as listed below:

<table>
<thead>
<tr>
<th>Event Buffer</th>
<th>Auto Arm Time</th>
<th>Late To Open</th>
<th>Contrast Control</th>
<th>Voice Chime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time and Date</td>
<td>System Service/DLS</td>
<td>Late To Open Time</td>
<td>Buzzer Control</td>
<td>User's Walk Test</td>
</tr>
<tr>
<td>Auto Arm/Disarm</td>
<td>User Call-up</td>
<td>Brightness Control</td>
<td>Voice Prompt</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** User Functions can only be modified when the system is disarmed.

**To access the User Function menu**

1. Press [*][6] OR press [*] and use the scroll keys to navigate to User Functions and press [*].
2. Enter Master code and scroll through the options listed above.
3. To go back to the Ready state press [*].

8.1 Event Buffer

The Event Buffer displays a list of the last 1000 events on your system. You may only view the event buffer using an LCD keypad.

**To view the Event Buffer**

1. From the User Function menu scroll to Event Buffer and press [*].
2. Press to scroll through the Event Buffer. When finished press [*] to return to the Ready state.

8.2 Setting the Time and Date

**To set the Time and Date**

1. From the User Function menu use the shortcut key [0][1] or press to scroll to Time and Date and press [*].
2. Use the number keys to set the time and date. When finished press [*] to return to the Ready state.

8.3 Enabling/Disabling the Auto Arm/Disarm Feature

**Note:** Access to this feature must be configured by installer.

**To enable/disable Auto Arm/Disarm**

1. From the User Function menu use the shortcut key [0][2] or press to scroll to Auto Arm/Disarm.
2. Press [*] to enable/disable the Auto Arm/Disarm feature.
3. When finished press [*] to return to the Ready state.

8.4 Setting the Auto Arm Time

The system can be configured to Auto arm at a specific time on each day of the week. If a specific time is not configured for a day of the week the system will not arm automatically on that day.

**Note:** Access to this feature must be configured by installer.

**To set the Auto Arm Time**

1. From the User Function menu use the shortcut key [0][3] or press to scroll to Auto Arm Time.
2. Press [*] to open a days of the week sub menu. Scroll the days of the week and press [*] to set the time for that day.

OR

If using an ICN or LED keypad to select the desired day press [1-7] where 1= Sunday and 7= Saturday.

3. Using a 24 hour format, set the desired time. After you enter the fourth digit the screen will revert back to the previous day of the week menu. Entering the time 9999 disables the late to open feature for that day. When using an ICN or LED keypad the time will not display.

4. Continue setting the time for the desired days of the week. When finished press [#] to return to the Ready state.

Note: If you set an invalid time the error tone will sound.

8.5 Allowing the Installer to Service your System Remotely - DLS

Occasionally, your installer may need to remotely access the Installer programming of your security system using Downloading Software (DLS). In order for this to successfully occur, you may need to manually allow access to your system.

Note: Access to this feature must be configured by installer.

To enable/disable the System Service/DLS

1. From the User Function menu use the shortcut key [05] or press to scroll to System Serv/DLS.

2. Press [*] to enable/disable the System Serv/DLS feature.

3. When finished press [#] to return to the Ready state.

8.6 User Callup

Using DLS, User Call-up allows your system to make one attempt to connect to the installer’s remote computer. For a successful connection, the remote computer must be waiting for the system’s call.

Note: Access to this feature must be configured by installer.

To perform a User Callup

1. From the User Function menu use the shortcut key [0][6] or press to scroll to User Callup.

2. When finished press [*] to return to the Ready state.

8.7 Late to Open

Typically used to track children after school, the Late to Open feature allows you to be notified if your alarm system is not disarmed by a programmed time of day.

For example, if you arrive from work at 5pm, and your child arrives home at 4 p.m. you could set the programmable time for 4:15 p.m. If the system is not disarmed by 4:15 an alert would be sent to the monitoring station and an event will be stored in the event buffer viewable from an LCD keypad. If SMS notifications are configured for your system the monitoring station will notify you via SMS message. For more information see: "Event Buffer".

Note: Access to this feature must be configured by installer.

To enable/disable Late to Open

1. From the User Function menu use the shortcut key [0][9] or press to scroll to Late to Open.

2. Press [*] to enable/disable the Late to Open feature.

3. When finished press [*] to return to the Ready state.

To set the Late to Open time

1. From the User Function menu use the shortcut key [1][0] or press to scroll to Late to Opn Time.
2. Press [*] to open a days of the week sub menu. Scroll the days of the week and press [*] to set the time for that day.

OR

If using an ICN or LED keypad to select the desired day press [1-7] where 1= Sunday and 7= Saturday.

3. Using a 24 hour format, set the desired time. After you enter the fourth digit the screen will revert back to the previous day of the week menu. Entering the time 9999 disables the late to open feature for that day. When using an ICN or LED keypad the time will not display.

4. Continue setting the time for the desired days of the week. When finished press [#] to return to the Ready state.

**Note:** If you enter an invalid time the error tone will sound.

### 8.8 Changing the Brightness of the LCD keypad

**To change the LCD brightness**

<table>
<thead>
<tr>
<th>LCD Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>Press (*) for &lt;&gt;</td>
</tr>
<tr>
<td>Bright Control</td>
</tr>
</tbody>
</table>

1. From the User Function menu use the shortcut key [1][2] or press <><> to scroll to Bright Control and press [*].

2. Enter the 2 digit value or scroll to the desired brightness level and press [#] to return to the previous menu.

3. Press [#] to return to the Ready state.

### 8.9 Changing the Contrast of the LCD keypad

**To change the LCD contrast**

<table>
<thead>
<tr>
<th>LCD Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>Press (*) for &lt;&gt;</td>
</tr>
<tr>
<td>Contrast Control</td>
</tr>
</tbody>
</table>

1. From the User Function menu use the shortcut key [1][3] or press <><> to scroll to Contrast Control and press [*].

2. Enter the 2 digit value or scroll to the desired contrast level and press [#] to return to the previous menu.

3. Press [#] to return to the Ready state.

### 8.10 Setting the Buzzer volume

**To change Buzzer volume**

<table>
<thead>
<tr>
<th>LCD Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>Press (*) for &lt;&gt;</td>
</tr>
<tr>
<td>Buzzer Control</td>
</tr>
</tbody>
</table>

1. From the User Function menu use the shortcut key [1][4] or press <><> to scroll to Contrast Control and press [*].

2. Enter the 2 digit value or scroll to the desired volume level and press [#] to return to the previous menu.

3. Press [#] to return to the Ready state.

### 8.11 Setting the Voice Prompt volume

This feature is only available when using an HS2LCDWFPV wireless keypad.

**To change Voice Prompt volume**

<table>
<thead>
<tr>
<th>LCD Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>Press (*) for &lt;&gt;</td>
</tr>
<tr>
<td>Voice Prompt</td>
</tr>
</tbody>
</table>

1. From the User Function menu use the shortcut key [1][5] or press <><> to scroll to Voice Prompt and press [*].

2. Enter the 2 digit value or scroll to the desired volume level and press to return to the previous menu.

3. Press [#] to return to the Ready state.

### 8.12 Setting the Voice Chime volume

This feature is only available when using an HS2LCDWFPV wireless keypad.

**To change Voice Chime volume**

<table>
<thead>
<tr>
<th>LCD Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>Press (*) for &lt;&gt;</td>
</tr>
<tr>
<td>Voice Chime</td>
</tr>
</tbody>
</table>

1. From the User Function menu use the shortcut key [1][6] or press <><> to scroll to Voice Chime and press [*].

2. Enter the 2 digit value or scroll to the desired volume level and press [#] to return to the previous menu.
3. Press [#] to return to the Ready state.

8.13 Resetting the System

8.13.1 Engineer's Reset

If an alarm has occurred on your system, the system will not allow you to rearm (Ready light is OFF). You will need to contact your installer. They will check and reset the system for you. This may involve a visit to check your system. After the reset is performed, your system will function properly again.

8.13.2 Remote (Anti-code) Reset

When configured by the installer, an alarm condition will cause the system to require a remote reset and arming will no longer be possible after the system is disarmed. This feature ensures that the end user contacts the monitoring station following an alarm condition. The system keypads will display that a remote reset is required and will show a random 4 digit remote reset code. The user must contact their monitoring station and provide the code that's displayed on the keypad. The monitoring station operator will provide a different 4 digit code that the user can enter at the system keypad which will clear the remote reset condition, allowing the panel to be armed again.

Some user functions are still available while the system is locked out. The user can loan the keypad to a different partition, and can access [*][6] User Functions so the event buffer can be reviewed to determine cause of the alarm condition. The [*][3] Alarms in Memory and [*][7] command output menus are also available during the remote reset condition.

This feature is intended to be used with burglary zones. Fire alarms do not generate remote reset. Each partition will generate a unique Remote Reset code on the system keypads and must be unlocked separately.

8.14 User's Walk Test

8.14.1 Full System Walk Test

Allows the user to verify the operation of system detectors and notifies the central station that a Walk Test is in progress and must be configured by installer. IMPORTANT: During a system (walk) test, do not activate any:
- Fire, Auxiliary or Police buttons
- Fire or CO sensors

A full system test is comprised of activating each sensor in turn. Open each door, window and walk-in areas with motion detectors. It is recommended you perform system tests during off-peak hours, such as early morning or late evening.

**To Initiate a Walk Test**

1. From the ready state press [*][6] and enter the [Master Code] to access User Functions.

2. Press [08] or use the scroll keys [ ] to navigate to Walk Test and press [*]. The system activates all keypad sounders and bell/sirens for two seconds and also notifies the central Station that a walk test has begun.

3. Trigger each detector (zone) in sequence. A squawk occurs at the keypad, all LEDs on the keypad will flash and the violation will be recorded in the Event Buffer.

4. Restore zones. Press [*][6][Master Code][8] to end the Walk Test. The system will notify the Central Station that the walk test has been terminated.

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

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

**Note:** This feature is not available in CP-01 panels.

**To Initiate/Cancel a Walk Test**

1. From the User Function menu, use the shortcut key [08] or press [ ] to scroll to Walk Test.

2. Press [*] to enable/disable the Walk Test feature.

3. Or, when finished press [*] to return to the Ready state.
# 8.15 Trouble Conditions

Trouble Conditions (Level 1) are comprised of various trouble types (Level 2) which may in turn be related to a specific zone, module, device or additional type of system equipment (Level 3). For an explanation of possible trouble conditions and the recommended actions required.

When the system detects a trouble condition the following occurs:
- The Trouble indicator turns on.
- The keypad beeps once every 10 seconds.
- Press the [*] key to silence the keypad beeps.

Examining troubles is done by pressing [*][2]. When viewing troubles, the trouble indicator flashes to identify the level of trouble being viewed. One flash = level 1, two flashes = level 2 etc.

Arming of your system may be impeded by a trouble. To override this condition, enter [*2] and scroll to acknowledge all troubles and press [*] or enter 999.

<table>
<thead>
<tr>
<th>Trouble Condition</th>
<th>Trouble #</th>
<th>Description</th>
<th>Trouble Types</th>
<th>Trouble Notification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Required</td>
<td>01</td>
<td>Assorted Trouble types. Time and Date troubles can be resolved by resetting the Time/Date. To set Time/Date press [*][6][0][1]. For all other troubles call for service.</td>
<td>Bell Circuit</td>
<td>01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>RF Jam</td>
<td>02</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Auxiliary Supply</td>
<td>03</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Loss of clock</td>
<td>04</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Output 1 Fault</td>
<td>05</td>
</tr>
<tr>
<td>Battery Trouble</td>
<td>02</td>
<td>The system has detected a battery trouble condition. Call for service.</td>
<td>Low Battery (System Label)</td>
<td>01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>No Battery service (System Label)</td>
<td>02</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>High Current Output Low Battery</td>
<td>04</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>High Current Output No Battery</td>
<td>05</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Power Supply Low Battery</td>
<td>07</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Power Supply No Battery</td>
<td>08</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>HSM2HOST</td>
<td>01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Keypad</td>
<td>02</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Zone Expander</td>
<td>04</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Power Supply</td>
<td>05</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>High Current Output</td>
<td>06</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Output Expander</td>
<td>08</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>HSM2955 Bus Voltage (Audio Expander)</td>
<td>09</td>
</tr>
</tbody>
</table>

**Note:** Trouble #s are used to identify the number to view the trouble and depending on the keypad type being used, identifies which LED or digit illuminates to display the trouble. Similarly, Trouble Notification identifies the range that may be displayed on the keypad. When exploring the trouble levels, the Trouble indicator will flash to identify which level you are currently viewing.
<table>
<thead>
<tr>
<th>Trouble Condition</th>
<th>Trouble # Level 1</th>
<th>Description</th>
<th>Trouble Types</th>
<th>Trouble Level 2</th>
<th>Trouble Notification Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC Troubles</td>
<td>04</td>
<td>The system is experiencing loss of power. Call for service. If the building and/or neighborhood has lost electrical power, the system will continue to operate on battery for several hours.</td>
<td>Zone</td>
<td>01</td>
<td>Zone label or 001-128</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Siren</td>
<td>03</td>
<td>Siren 1-16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Repeater</td>
<td>04</td>
<td>Repeater 1-8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Power Supply</td>
<td>05</td>
<td>Power supply 1-4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>High Current Output</td>
<td>06</td>
<td>Output terminal 1-4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>System Label</td>
<td>07</td>
<td>n/a</td>
</tr>
<tr>
<td>Device Faults</td>
<td>05</td>
<td>The system has detected an issue with one or more connected devices. Call for service.</td>
<td>Gas</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Heat</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CO</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Freeze</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Probe Disconnected</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Fire</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Zone</td>
<td>01</td>
<td>Zone label or 001-128</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Keypad</td>
<td>02</td>
<td>Keypad 1-16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Siren</td>
<td>03</td>
<td>Siren 1-16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Repeater</td>
<td>04</td>
<td>Repeater 1-8</td>
</tr>
<tr>
<td>Device Battery</td>
<td>06</td>
<td>The system has detected an issue with one or more of the device batteries. For Zone, Keypad and Wireless Key battery troubles see the accompanying documentation for how to change the batteries.</td>
<td>Zone</td>
<td>01</td>
<td>Zone label or 001-128</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Keypad</td>
<td>02</td>
<td>Keypad 1-16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Siren</td>
<td>03</td>
<td>Siren 1-16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Repeater</td>
<td>04</td>
<td>Repeater 1-8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>User</td>
<td>05</td>
<td>Wireless key 1-32</td>
</tr>
<tr>
<td>Device Tamper</td>
<td>07</td>
<td>The system has detected a tamper condition with one or more devices on the system. Call for service.</td>
<td>Zone</td>
<td>01</td>
<td>Zone label or 001-128</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Keypad</td>
<td>02</td>
<td>Keypad 1-16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Siren</td>
<td>03</td>
<td>Siren 1-16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Repeater</td>
<td>04</td>
<td>Repeater 1-8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Audio Station</td>
<td>05</td>
<td>Audio Station 1-4</td>
</tr>
<tr>
<td>RF Delinquency</td>
<td>08</td>
<td>The system has detected wireless signal interference that is causing improper system operation. Call for service.</td>
<td>Zones</td>
<td>01</td>
<td>Zone label or 001-128</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Keypad</td>
<td>02</td>
<td>Keypad 1-16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Siren</td>
<td>03</td>
<td>Siren 1-16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Repeater</td>
<td>04</td>
<td>Repeater 1-8</td>
</tr>
<tr>
<td>Trouble Condition</td>
<td>Trouble # Level 1</td>
<td>Description</td>
<td>Trouble Types</td>
<td>Trouble # Level 2</td>
<td>Trouble Notification Level 3</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>-----------------------------</td>
<td>--------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Module Supervision</td>
<td>09</td>
<td>The system has detected a supervisory trouble condition with one or more modules on the system. Call for service.</td>
<td>HSM2HOST</td>
<td>01</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Keypad</td>
<td>02</td>
<td>Keypad 1-16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Zone Expander</td>
<td>04</td>
<td>Zone Expander 1-15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Power Supply</td>
<td>05</td>
<td>Power supply 1-4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>High Current Output</td>
<td>06</td>
<td>Output terminal 1-4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Output Expander</td>
<td>08</td>
<td>Output module 1-16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Audio Expander</td>
<td>09</td>
<td>n/a</td>
</tr>
<tr>
<td>Module Tampers</td>
<td>10</td>
<td>The system has detected a tamper condition with one or more modules on the system. Call for service.</td>
<td>HSM2HOST</td>
<td>01</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Keypad</td>
<td>02</td>
<td>Keypad 1-16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Zone Expander</td>
<td>04</td>
<td>Zone Expander 1-15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Power Supply</td>
<td>05</td>
<td>Power supply 1-4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>High Current Output</td>
<td>06</td>
<td>Output terminal 1-4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Output Expander</td>
<td>08</td>
<td>Output module 1-16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Audio Expander</td>
<td>09</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Alt. Comm</td>
<td>10</td>
<td>n/a</td>
</tr>
<tr>
<td>Communications</td>
<td>11</td>
<td>The system has detected a communication trouble. Call for service.</td>
<td>TLM Trouble</td>
<td>01</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>FTC Trouble</td>
<td>02</td>
<td>Receiver 1-4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SIM Lock</td>
<td>03</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cellular</td>
<td>04</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ethernet</td>
<td>05</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Receiver</td>
<td>06</td>
<td>Receiver 1-4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Supervision Receiver</td>
<td>07</td>
<td>Receiver 1-4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Alt Comm Fault</td>
<td>09</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Alternate Communicator FTC</td>
<td>10</td>
<td>Receiver 1-4</td>
</tr>
<tr>
<td>Not Networked</td>
<td>12</td>
<td>The system has detected a network trouble condition with one or more modules on the system. If the trouble does not restore within 20 minutes, call for service.</td>
<td>Zone</td>
<td>01</td>
<td>Zone label 001-128</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Keypad</td>
<td>02</td>
<td>Keypad 1-16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Siren</td>
<td>03</td>
<td>Siren 1-16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Repeater</td>
<td>04</td>
<td>Repeater 1-8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>User</td>
<td>05</td>
<td>Users 01-95</td>
</tr>
</tbody>
</table>
9.0 Managing Partitions

A partition is a limited area of the premises which operates independently from the other areas. Partitioning a system can be beneficial if the property has outbuildings that need to be secured independently of a main area or if the home has a separate apartment. Each partition can have its own keypad, or a keypad can have access to all partitions. User access to partitions is controlled via access code. A master code can access the entire system and partitions, while a user code is limited to assigned partitions.

9.1 Partitions

Keypads can be configured to control an individual partition or all partitions.

Note: Access to this feature must be configured by installer.

9.1.1 Single Partition Operation

Single partition keypads provide access to alarm functionality for an assigned partition. Single partition keypads behave as follows:

- Displays the armed state of the partition.
- Displays open zones, if assigned to the partition the keypad is on.
- Displays bypassed zones and allows zone bypassing or creating bypass groups of zones assigned to the keypad partition.
- Displays system troubles (system low battery, system component faults/tamper).
- Displays alarms in memory that occurred on the partition.
- Allows the door chime to be Enabled/disabled.
- System test (sounds bells/PGMs assigned to the partition).
- Label programming (zone, partition and user labels for the partition).
- Command output controls (outputs assigned to the partition, or global outputs such as smoke detector reset).
- Temperatures.

9.1.2 Loaning a Keypad to Another Partition

Keypads can be loaned to operate on other partitions (LCD keypads only). When a keypad is loaned from either the global state or from another partition, it may be configured to behave on the loaned partition just as it would if it was originally assigned there. Loaning a keypad to another partition does not require an access code; However, no function that requires an access code can be performed on that partition unless the user’s code has sufficient permissions. The status of each partition will be identified by a partition flag. For an explanation on partition flags, see the following table.

To Loan a Keypad to Another Partition:

1. Press and hold the [#] key for 2 seconds.

2. Select a partition by pressing digits 1 to 8. The keypad is temporarily loaned to another partition. If the keypad is inactive for more than 30 seconds, it reverts to its original partition.

Partition Flags

<table>
<thead>
<tr>
<th>LCD Display</th>
<th>Flag</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>12345678</td>
<td>1-8</td>
<td>Partition number</td>
</tr>
<tr>
<td>R X A ! E - N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R</td>
<td></td>
<td>Partition is ready to be armed</td>
</tr>
<tr>
<td>X</td>
<td></td>
<td>Partition is in exit delay</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>Partition is not ready to be armed</td>
</tr>
<tr>
<td>!</td>
<td></td>
<td>Partition is in alarm</td>
</tr>
<tr>
<td>E</td>
<td></td>
<td>Partition is in entry delay</td>
</tr>
<tr>
<td>-</td>
<td></td>
<td>Partition is not configured</td>
</tr>
<tr>
<td>A</td>
<td></td>
<td>Partition is armed</td>
</tr>
</tbody>
</table>

9.2 Fire and CO Zone Types

- If a Fire zone generates an alarm only the partition the fire zone is assigned to will go into alarm. Other partitions retain their current state.
- If the [F] key on a global keypad is used to generate an alarm all enabled partitions will go into alarm.
- One or more fire keypads may be located on any partition.
- On alarm, the fire auto-scroll display appears on all partition keypads and on all global keypads. Fire alarm silence and fire system reset may be done directly on any partition keypad. To silence a fire or CO alarm from a global keypad requires that the global keypad be loaned to one of the partitions.
10.0 Additional Features

10.1 Turning the Chime ON/OFF

Turning the chime on audibly notifies you whenever an entry/exit sensor is tripped.

To turn the Chime ON or OFF

- Press to toggle the Chime ON or OFF for the current partition. An access code may be required to change this setting.

10.2 Audio Verification

Allows the monitoring station to initiate a 2-way audio (talk/listen) or 1-way audio (listen-in only) session when an alarm has been received. This feature is used to verify the nature of the alarm or determine the type of assistance required by the occupant.

Note: This is a supplementary feature that has not been investigated by UL/ULC.

Note: Must be enabled and configured by installer.

10.3 Visual Verification

Allows the monitoring station to use video clips captured from system motion cameras for verification of any alarms.

Note: This is a supplementary feature that has not been investigated by UL/ULC.

Note: Must be enabled and configured by installer.

10.3.1 System Lockout due to Invalid Attempts

If too many invalid access codes are entered, your system can be configured to automatically lock out inputs from all keypads, wireless and proximity keys, and SMS commands for a specified duration. When any keys are pressed, an error tone will sound. FMP keys are still active during Keypad Lockout.

Note: Feature and lockout duration must be configured by installer.

10.4 Command Outputs

While being useful for many applications, Command outputs are typically configured to operate items such as garage doors or electric gates. Additionally, Command outputs can be assigned to follow a schedule configured by your installer.

This is a supplementary feature that has not been investigated by UL/ULC.

Must be configured by installer.

To Activate a Command Output

1. Press [*][7] and if required enter your [access code].

   OR

   press [*] and use the scroll keys to navigate to Output Control.

2. Press the number configured to the command output

   OR

   use the scroll keys to navigate to the desired command output and press [*].

To configure a Command Output to Follow a Schedule

1. Press [*][7] and use the scroll keys to navigate to Follow Schedule and press [*], followed by your access code.

   OR

   press [*][7][9][User Code].

2. Press the command output #1-4 to toggle scheduling and if required enter your [access code].

   OR

   use the scroll keys to navigate to the desired command output and press to toggle scheduling and if required enter your [access code].

10.5 Burglary Verification

The Control Panel includes cross zone and sequential detection features that require a trip on two or more zones within a given time period, to generate a confirmed alarm and immediate police response.

Note: Must be enabled and configured by installer.
10.6 Swinger Shutdown

The Control Panel has a swinger shutdown feature that when enabled a programmable number of trips shall shut down the zone. All burglary zone types have this feature enabled in CP-01 installations.

Note: Must be enabled and configured by installer.

10.7 Call Waiting

The Control Panel includes a programmable option for call waiting to prevent a call waiting line from interfering with the alarm verification process. This option is disabled by default.

Note: Must be enabled and configured by installer.

10.8 Fire Alarm Verification

Fire Alarm Verification is an available option for Fire zones. If configured, once the conditions for alarm verification are met the fire alarm will sound and an alarm transmission will be sent to the monitoring station.

Note: Must be enabled and configured by installer.
11.0 Regulatory Agency Statements

FCC COMPLIANCE STATEMENT

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

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of more of the following measures:

- Reorient the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the device to a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

You may find the following booklet prepared by the FCC useful: "How to Identify and Resolve Radio-Television Interference Problems." This booklet is available from the US Government Printing Office, Washington DC, 20402, Stock No. 044-000-00545-3.

The keypad represented in this manual can be used with the following Control Units: HS2161, HS2152, HS2064, HS121B.

IMPORTANT INFORMATION

This equipment complies with Part 68 of the FCC Rules and, if it is product approved July 21, 2001 or later, the requirements adopted by the ACTA. On the side of this equipment is a label that contains, among other information, a product identifier, if supplied. This number must be provided to the Telephone Company.

HS2016 Product Identifier: USF73101BB12B
HS2017 Product Identifier: USF73102BB12B
HS2018 Product Identifier: USF73103BB12B
HS2128 Product Identifier: USF73104BB12B
HS212B Product Identifier: USF73101BB12B
USC Jack: RA-31X

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

Ringer Equivale Number (REN)

The REN is used to determine the number of devices that may be connected to a telephone line. Excess RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas the sum of the RENs should not exceed five (5). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local Telephone Company. For products approved after July 21, 2001, the REN for this product is part of the product identifier that has the format US:AAATXXXXXX. The digits represented by a are the RENs without a decimal point (e.g., 0.3 is a REN of 0.3). For earlier products, the REN is separately shown on the label.

Incidence of Harm

If you experience the conditions in these equipments (HS2160, HS2162, HS2064, HS121B) causes harm to the telephone network, the telephone company will notify you in advance that temporary disconnection of service may be required. But if advance notice is not practical, the Telephone Company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

Changes in Telephone Company Equipment or Facilities

The Telephone Company may make changes in its local or long-distance telephone service that could affect the operation of your equipment. If this happens the Telephone Company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.

Equipment Maintenance Facility

If trouble is experienced with this equipment (HS2160, HS2162, HS2064, HS121B) for repair or warranty information, contact the facility indicated below. If the equipment is causing harm to the telephone network, the Telephone Company may request that you disconnect the equipment until the problem is corrected.

DTE: a AR, Logistics 577 Douglas Dr. Lithia Springs, GA 30122

Additional Information

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

Alarm dialing equipment must be able to seize the telephone line and place a call in an emergency situation. It must seize the line within 30 seconds and place a call to an emergency number or police, fire or medical emergency number. In the case of a no answer or a busy signal, the call must be redialed automatically until a connection is made. The phone must provide a means of user activation. The emergency telephone number(s) for your area are listed in the yellow pages of your telephone directory under "Police," "Fire," or "Emergency Services.

PRODUCTS COMPLIANT WITH THE CANADIAN INDUSTRY COMMERCIAL TELEPHONE EQUIPMENT REQUIREMENTS:

Some products (HS2160, HS2162, HS2064, HS121B) are certified by the Canadian Standards Agency (CSA) to meet the requirements of the Canadian Industry Commercial Telephone Equipment Requirements. The product is labeled with the CSA mark. Issues related to the installation or operation of these products are the responsibility of customer. It's recommended that the customer contact the installer for advice on any installation or operation problems.

INDUSTRY CANADA STATEMENT

NOTICE: The models HS2160, HS2152, HS2064, HS121B must the applicable Industry Canada Terminal Equipment Technical Specifications. This statement is in accordance with the registration number. The abbreviation, IC, before the registration number signifies that registration was performed under the authority of the Telecommunications decimal regulations. The industry Canada registration number is for your convenience only and does not imply that Industry Canada approved the equipment.

- The Ringer Equivalence Number (REN) for this terminal equipment is 0.1. The REN assigned to each terminal equipment provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all devices does not exceed 5.
- HS2016 Registration number IC:1604-6B2128
- HS2012 Registration number IC:1604-6B2128
- HS2018 Registration number IC:1604-6B2128
- HS2128 Registration number IC:1604-6B2128

This product is in conformance with CAN/CSA C1350.1-98, and is designed to meet the requirements for use in telephone line equipment, as specified in the operating instructions. This equipment requires a line (CPE) adapter for use with the telephone line. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the device to a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

This equipment may not be used on party lines. The equipment must be used in accordance with the operating instructions. The equipment must not be used in conjunction with any other telecommunications equipment.

TO THE END USER

TO THE END USER

TO THE END USER

RETURN TO PAGE TOP
12.0 Installer Warning

Warning Please Read Carefully

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

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

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

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

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

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

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

Compromise of Radio Frequency (Wireless) Devices
Signals may not reach the receiver under all circumstances which could include metal objects placed on or near the radio path or deliberate jamming or other inadvertent radio signal interference.

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

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

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

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

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

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

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

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

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

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

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

**Security and Insurance**

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

This equipment is stationary-fixed DIRECT PLUG-IN and must be installed by Service Persons only (Service Person is defined as a person having the appropriate technical training and experience necessary to be aware of hazards to which that person may be exposed in performing a task and of measures to minimize the risks to that person or other persons). It must be installed and used within an environment that provides the pollution degree max 2, over voltages category II, in non-hazardous, indoor locations only.

**WARNING!** This equipment has no mains on/off switch; if the equipment must be quickly disconnected, the plug of the direct plug-in power supply is intended to serve as the disconnecting device; it is imperative that access to the mains plug and associated mains socket/outlet, is never obstructed.

When using equipment connected to the mains and/or to the telecommunication network, there are basic safety instructions that shall always be followed. Refer to the safety instructions provided with this product and save them for future reference. To reduce the risk of fire, electric shock and/or injury, observe the following:

- Do not attempt to service this product yourself. Opening or removing the cover may expose you to dangerous voltage or other risk. Refer servicing to service persons. Never open the device yourself.
- Use authorized accessories only with this equipment! DO NOT leave and/or deposit ANY object on the top of the cabinet of this equipment! The cabinet as it is installed on the wall, is not designed to support any supplementary weight!
- Do not touch the equipment and its connected cables during an electrical storm; there may be a risk of electric shock.
- Never touch un-insulated wires or terminals unless the equipment has been disconnected from the mains supply and from the telecommunication network!
- Ensure that cables are positioned so that accidents cannot occur. Connected cables must not be subject to excessive mechanical strain. Do not spill any type of liquid on the equipment.
- Do not use the Alarm system to report a gas leak if the system is near a leak.

These safety instructions should not prevent you from contacting the distributor and/or the manufacturer to obtain any further clarification and/or answers to your concerns.

13.1 Regular Maintenance and Troubleshooting

Keep your Alarm Controller in optimal condition by following all the instructions that are included within this manual and/or marked on the product. 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.

13.1.1 Cleaning

- Clean the units by wiping with a damp cloth only.
- Do not use abrasives, thinners, solvents or aerosol cleaners (spray polish) that may enter through holes in the Alarm Controller and cause damage and/or create hazards.
- Do not use any water or any other liquid.
- Do not wipe the front cover with alcohol.

13.1.2 Troubleshooting

Occasionally, you may have a problem with your Alarm Controller or telephone line. If this happens, your Alarm Controller will identify the problem and displays an error message. Refer to the provided list when you see an error message on the display. If additional help is required, contact your distributor for service.

**Note:** There are no parts replaceable by the end-user within this equipment, except for the keypad batteries. Dispose of used batteries as per local rules and regulations.

13.1.3 Applicable Models

This publication covers the following models: x = 9 (912-919MHz UL/ULC systems), 4 (433MHz) or 8 (868MHz).

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Model</th>
<th>Description</th>
<th>Model</th>
<th>Description</th>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS2016</td>
<td></td>
<td>HS2LCD</td>
<td></td>
<td>HS2ICN</td>
<td></td>
<td>HS2TCHP</td>
<td></td>
</tr>
<tr>
<td>HS2128</td>
<td></td>
<td>HS2LCDP</td>
<td></td>
<td>HS2ICNP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS2032</td>
<td></td>
<td>HS2LDRFx</td>
<td></td>
<td>HS2ICNRFx</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS2064</td>
<td></td>
<td>HS2LDRFpX</td>
<td></td>
<td>HS2LED</td>
<td></td>
<td>HS2ICNRFPx</td>
<td></td>
</tr>
</tbody>
</table>
14.0 EULA

IMPORTANT - READ CAREFULLY: DSC Software purchased with or without Products and Components is copyrighted and is purchased under the following license terms:

This End-User License Agreement ("EULA") is a legal agreement between You (the company, individual or entity who acquired the Software and any related Hardware) and Digital Security Controls, a division of Tyco Safety Products Canada Ltd. ("DSC"), the manufacturer of the integrated security systems and the developer of the software and any related products or components ("SOFTWARE") which You acquired.

If the DSC software product ("SOFTWARE PRODUCT" or "SOFTWARE") is intended to be accompanied by HARDWARE, and is NOT accompanied by new HARDWARE, You may not use, copy or install the SOFTWARE PRODUCT. The SOFTWARE PRODUCT includes computer software, and may include associated media, printed materials, and "online" or electronic documentation. Any software provided along with the SOFTWARE PRODUCT that is associated with a separate end-user license agreement is licensed to You under the terms of that license agreement.

By installing, copying, downloading, storing, accessing or otherwise using the SOFTWARE PRODUCT, You agree unconditionally to be bound by the terms of this EULA, even if this EULA is deemed to be a modification of any previous arrangement or contract. If You do not agree to the terms of this EULA, DSC is unwilling to license the SOFTWARE PRODUCT to You, and You have no right to use the SOFTWARE PRODUCT LICENSE.

The SOFTWARE PRODUCT is protected by copyright laws and international copyright treaties, as well as other intellectual property laws and treaties. The SOFTWARE PRODUCT is licensed, not sold.

1. GRANT OF LICENSE This EULA grants You the following rights:

(a) Software Installation and Use - For each license You acquire, You may have only one copy of the SOFTWARE PRODUCT installed.

(b) Storage/Network Use - The SOFTWARE PRODUCT may not be installed, accessed, displayed, run, shared or used concurrently on or from different computers, including a workstation, terminal or other digital electronic device ("Device"). In other words, If You have several workstations, You will have to acquire a license for each workstation where the SOFTWARE will be used.

(c) Backup Copy - You may make back-up copies of the SOFTWARE PRODUCT, but You may only have one copy per license installed at any given time. You may use the back-up copy solely for archival purposes. Except as expressly provided in this EULA, You may not otherwise make copies of the SOFTWARE PRODUCT, including the printed materials accompanying the SOFTWARE.

2. DESCRIPTION OF OTHER RIGHTS AND LIMITATIONS

(a) Limitations on Reverse Engineering, Decompilation and Disassembly - You may not reverse engineer, decompile, or disassemble the SOFTWARE PRODUCT, except and only to the extent that such activity is expressly permitted by applicable law notwithstanding this limitation. You may not make any changes or modifications to the Software, without the written permission of an officer of DSC. You may not remove any proprietary notices, marks or labels from the Software Product. You shall institute reasonable measures to ensure compliance with the terms and conditions of this EULA.

(b) Separation of Components - The SOFTWARE PRODUCT is licensed as a single product. Its component parts may not be separated for use on more than one HARDWARE unit.

(c) Single INTEGRATED PRODUCT - If You acquired this SOFTWARE with HARDWARE, then the SOFTWARE PRODUCT is licensed with the HARDWARE as a single integrated product. In this case, the SOFTWARE PRODUCT may only be used with the HARDWARE as set forth in this EULA.

(d) Rental - You may not rent, lease or lend the SOFTWARE PRODUCT. You may not make it available to others or post it on a server or web site.

(e) Software Product Transfer - You may transfer all of Your rights under this EULA only as part of a permanent sale or transfer of the HARDWARE, provided You retain no copies, You transfer all of the SOFTWARE PRODUCT (including all component parts, the media and printed materials, any upgrades and this EULA), and provided the recipient agrees to the terms of this EULA. If the SOFTWARE PRODUCT is an upgrade, any transfer must also include all prior versions of the SOFTWARE PRODUCT.

(f) Termination - Without prejudice to any other rights, DSC may terminate this EULA if You fail to comply with the terms and conditions of this EULA. In such event, You must destroy all copies of the SOFTWARE PRODUCT and all of its component parts.

(g) Trademarks - This EULA does not grant You any rights in connection with any trademarks or service marks of DSC or its suppliers.

3. COPYRIGHT - All title and intellectual property rights in and to the SOFTWARE PRODUCT (including but not limited to any images, photographs, and text incorporated into the SOFTWARE PRODUCT), the accompanying printed materials, and any copies of the SOFTWARE PRODUCT, are owned by DSC or its suppliers. You may not copy the printed materials accompanying the SOFTWARE PRODUCT. All title and intellectual property rights in and to the content which may be accessed through use of the SOFTWARE PRODUCT are the property of the respective content owner and may be protected by applicable copyright or other intellectual property laws and treaties. This EULA grants You no rights to use such content. All rights not expressly granted under this EULA are reserved by DSC and its suppliers.

4. EXPORT RESTRICTIONS - You agree that You will not export or re-export the SOFTWARE PRODUCT to any country, person, or entity subject to Canadian export restrictions.

5. CHOICE OF LAW - This Software License Agreement is governed by the laws of the Province of Ontario, Canada.

6. ARBITRATION - All disputes arising in connection with this Agreement shall be determined by final and binding arbitration in accordance with the Arbitration Act, and the parties agree to be bound by the arbitrator's decision. The place of arbitration shall be Toronto, Canada, and the language of the arbitration shall be English.

7. LIMITED WARRANTY

(a) NO WARRANTY - DSC PROVIDES THE SOFTWARE "AS IS" WITHOUT WARRANTY. DSC DOES NOT WARRANT THAT THE SOFTWARE WILL MEET YOUR REQUIREMENTS OR THAT OPERATION OF THE SOFTWARE WILL BE UNINTERRUPTED OR ERROR-FREE.

(b) CHANGES IN OPERATING ENVIRONMENT - DSC shall not be responsible for problems caused by changes in the operating characteristics of the HARDWARE, or for problems in the interaction of the SOFTWARE PRODUCT with non-DSC SOFTWARE or HARDWARE PRODUCTS.

(c) LIMITATION OF LIABILITY; WARRANTY REFLECTS ALLOCATION OF RISK - IN ANY EVENT, IF ANY STATUTE IMPLIES WARRANTIES OR CONDITIONS NOT STATED IN THIS LICENSE AGREEMENT, DSC'S ENTIRE LIABILITY UNDER ANY PROVISION OF THIS LICENSE AGREEMENT SHALL BE LIMITED TO THE GREATER OF THE AMOUNT ACTUALLY PAID BY YOU TO LICENSE THE SOFTWARE PRODUCT AND FIVE CANADIAN DOLLARS (CAD$5.00) BECAUSE SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

(d) DISCLAIMER OF WARRANTIES - THIS WARRANTY CONTAINS THE ENTIRE WARRANTY AND SHALL BE IN LIEU OF ANY AND ALL OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED (INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE) AND OF ALL OTHER OBLIGATIONS OR LIABILITIES ON THE PART OF DSC. DSC MAKES NO OTHER WARRANTIES. DSC NEITHER ASSUMES NOR AUTHORIZES ANY OTHER PERSON PURPORTING TO ACT ON ITS BEHALF TO MODIFY OR TO CHANGE THIS WARRANTY, NOR TO ASSUME FOR IT ANY OTHER WARRANTY OR LIABILITY CONCERNING THIS SOFTWARE PRODUCT.
(e) EXCLUSIVE REMEDY AND LIMITATION OF WARRANTY - UNDER NO CIRCUMSTANCES SHALL DSC BE LIABLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL OR INDIRECT DAMAGES BASED UPON BREACH OF WARRANTY, BREACH OF CONTRACT, NEGLIGENCE, STRICT LIABILITY, OR ANY OTHER LEGAL THEORY. SUCH DAMAGES INCLUDE, BUT ARE NOT LIMITED TO, LOSS OF PROFITS, LOSS OF THE SOFTWARE PRODUCT OR ANY ASSOCIATED EQUIPMENT, COST OF CAPITAL, COST OF SUBSTITUTE OR REPLACEMENT EQUIPMENT, FACILITIES OR SERVICES, DOWN TIME, PURCHASERS TIME, THE CLAIMS OF THIRD PARTIES, INCLUDING CUSTOMERS, AND INJURY TO PROPERTY.

WARNING: DSC recommends that the entire system be completely tested on a regular basis. However, despite frequent testing, and due to, but not limited to, criminal tampering or electrical disruption, it is possible for this SOFTWARE PRODUCT to fail to perform as expected. Always ensure you obtain the latest version of the User Guide. Updated versions of this User Guide are available by contacting your distributor.
15.0 Locating Detectors and Escape Plan

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

15.1 Smoke Detectors

Research has shown that all hostile fires in homes generate smoke to a greater or lesser extent. Experiments with typical fires in homes indicate that detectable quantities of smoke precede detectable levels of heat in most cases. For these reasons, smoke alarms should be installed outside of each sleeping area and on each storey of the home. The following information is for general guidance only and it is recommended that local fire codes and regulations be consulted when locating and installing smoke alarms. It is recommended that additional smoke alarms beyond those required for minimum protection be installed. Additional areas that should be protected include: the basement; bedrooms, especially where smokers sleep; dining rooms; furnace and utility rooms; and any hallways not protected by the required units. On smooth ceilings, detectors may be spaced 9.1m (30 feet) apart as a guide. Other spacing may be required depending on ceiling height, air movement, the presence of joists, uninsulated ceilings, etc. Consult National Fire Alarm Code NFPA 72, CAN/ULC-S553-02 or other appropriate national standards for installation recommendations.

- Do not locate smoke detectors at the top of peaked or gabled ceilings; the dead air space in these locations may prevent the unit from detecting smoke.
- Avoid areas with turbulent air flow, such as near doors, fans or windows. Rapid air movement around the detector may prevent smoke from entering the unit.
- Do not locate detectors in areas of high humidity.
- Do not locate detectors in areas where the temperature rises above 38°C (100°F) or falls below 5°C (41°F).
- Smoke detectors should always be installed in USA in accordance with Chapter 11 of NFPA 72, the National Fire Alarm Code: 11.5.1.1.

Where required by applicable laws, codes, or standards for a specific type of occupancy, approved single- and multiple-station smoke alarms shall be installed as follows:
1. In all sleeping rooms and guest rooms.
2. Outside of each separate dwelling unit sleeping area, within 6.4 m (21 ft) of any door to a sleeping room, the distance measured along a path of travel.
3. On every level of a dwelling unit, including basements.
4. On every level of a residential board and care occupancy (small facility), including basements and excluding crawl spaces and unfinished attics.
5. In the living area(s) of a guest suite.
6. In the living area(s) of a residential board and care occupancy (small facility).

![Figure 1](image1.png)

Figure 1

![Figure 2](image2.png)

Figure 2

![Figure 3](image3.png)

Figure 3

![Figure 4](image4.png)

Figure 3a

15.2 Fire Escape Planning

There is often very little time between the detection of a fire and the time it becomes deadly. It is thus very important that a family escape plan be developed and rehearsed.
1. Every family member should participate in developing the escape plan.
2. Study the possible escape routes from each location within the house. Since many fires occur at night, special attention should be given to the escape routes from sleeping quarters.
3. Escape from a bedroom must be possible without opening the interior door.

Consider the following when making your escape plans:

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

We recommend that you contact your local fire department and request further information on fire safety and escape planning. If available, have your local fire prevention officer conduct an in-house fire safety inspection.

![Figure 5](image)

### 15.3 Carbon Monoxide Detectors

Carbon monoxide is colorless, odorless, tasteless, and very toxic, it also moves freely in the air. CO detectors can measure the concentration and sound a loud alarm before a potentially harmful level is reached. The human body is most vulnerable to the effects of CO gas during sleeping hours; therefore, CO detectors should be located in or as near as possible to sleeping areas of the home. For maximum protection, a CO alarm should be located outside primary sleeping areas or on each level of your home. Figure 5 indicates the suggested locations in the home.

Do NOT place the CO alarm in the following areas:

- Where the temperature may drop below -10°C or exceed 40°C
- Near paint thinner fumes
- Within 5 feet (1.5m) of open flame appliances such as furnaces, stoves and fireplaces
- In exhaust streams from gas engines, vents, flues or chimneys
- Do not place in close proximity to an automobile exhaust pipe; this will damage the detector

PLEASE REFER TO THE CO DETECTOR INSTALLATION AND OPERATING INSTRUCTION SHEET FOR SAFETY INSTRUCTIONS AND EMERGENCY INFORMATION.
16.0 Reference Sheets
Fill out the following information for future reference and store this guide in a safe place.

16.1 System Information
Mark if Buttons are Enabled

The Exit Delay Time is ______ seconds.

The Entry Delay Time is ______ seconds.

16.2 Service Contact Information
Central Station Information
Account #: __________________ Telephone #: __________________
Installer Information:
Company: __________________ Telephone #: __________________
Battery Installation / Service Date:
________________________

IMPORTANT: If you suspect a false alarm signal has been sent to the central monitoring station, call the station to avoid an unnecessary response.
16.3 Access Code and Sensor/Zone information

Master Code [01] : ______________________

Access Code Reference Sheet

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>02</td>
<td>03</td>
<td>04</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>05</td>
<td>06</td>
<td>07</td>
<td>08</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>09</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>30</td>
<td>31</td>
<td>32</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>34</td>
<td>35</td>
<td>36</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>38</td>
<td>39</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>42</td>
<td>43</td>
<td>44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>46</td>
<td>47</td>
<td>48</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>50</td>
<td>51</td>
<td>52</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>53</td>
<td>54</td>
<td>55</td>
<td>56</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>57</td>
<td>58</td>
<td>59</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>61</td>
<td>62</td>
<td>63</td>
<td>64</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>65</td>
<td>66</td>
<td>67</td>
<td>68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>69</td>
<td>70</td>
<td>71</td>
<td>72</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>73</td>
<td>74</td>
<td>75</td>
<td>76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>77</td>
<td>78</td>
<td>79</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>81</td>
<td>82</td>
<td>83</td>
<td>84</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>85</td>
<td>86</td>
<td>87</td>
<td>88</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>89</td>
<td>90</td>
<td>91</td>
<td>92</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>93</td>
<td>94</td>
<td>95</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Sensor/Zone Information

<table>
<thead>
<tr>
<th>Sensor</th>
<th>Protected Area</th>
<th>Sensor Type</th>
<th>Sensor</th>
<th>Protected Area</th>
<th>Sensor Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td></td>
<td></td>
<td>02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>03</td>
<td></td>
<td></td>
<td>04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>05</td>
<td></td>
<td></td>
<td>06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>07</td>
<td></td>
<td></td>
<td>08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>09</td>
<td></td>
<td></td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
<td>14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
<td></td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td></td>
<td></td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td></td>
<td></td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td></td>
<td></td>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
<td></td>
<td>26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td></td>
<td></td>
<td>28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td></td>
<td></td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td></td>
<td></td>
<td>32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td></td>
<td></td>
<td>34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td></td>
<td></td>
<td>36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37</td>
<td></td>
<td></td>
<td>38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td></td>
<td></td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>41</td>
<td></td>
<td></td>
<td>42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>43</td>
<td></td>
<td></td>
<td>44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45</td>
<td></td>
<td></td>
<td>46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>47</td>
<td></td>
<td></td>
<td>48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>49</td>
<td></td>
<td></td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>51</td>
<td></td>
<td></td>
<td>52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>53</td>
<td></td>
<td></td>
<td>54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>55</td>
<td></td>
<td></td>
<td>56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>57</td>
<td></td>
<td></td>
<td>58</td>
<td></td>
<td></td>
</tr>
<tr>
<td>59</td>
<td></td>
<td></td>
<td>60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>61</td>
<td></td>
<td></td>
<td>62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>63</td>
<td></td>
<td></td>
<td>64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>65</td>
<td></td>
<td></td>
<td>66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>67</td>
<td></td>
<td></td>
<td>68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>69</td>
<td></td>
<td></td>
<td>70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>71</td>
<td></td>
<td></td>
<td>72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>73</td>
<td></td>
<td></td>
<td>74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>75</td>
<td></td>
<td></td>
<td>76</td>
<td></td>
<td></td>
</tr>
<tr>
<td>77</td>
<td></td>
<td></td>
<td>78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>79</td>
<td></td>
<td></td>
<td>80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>81</td>
<td></td>
<td></td>
<td>82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>83</td>
<td></td>
<td></td>
<td>84</td>
<td></td>
<td></td>
</tr>
<tr>
<td>85</td>
<td></td>
<td></td>
<td>86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>87</td>
<td></td>
<td></td>
<td>88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>89</td>
<td></td>
<td></td>
<td>90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>91</td>
<td></td>
<td></td>
<td>92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>93</td>
<td></td>
<td></td>
<td>94</td>
<td></td>
<td></td>
</tr>
<tr>
<td>95</td>
<td></td>
<td></td>
<td>96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>97</td>
<td></td>
<td></td>
<td>98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sensor</td>
<td>Protected Area</td>
<td>Sensor Type</td>
<td>Sensor</td>
<td>Protected Area</td>
<td>Sensor Type</td>
</tr>
<tr>
<td>--------</td>
<td>----------------</td>
<td>-------------</td>
<td>--------</td>
<td>----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>99</td>
<td></td>
<td></td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>101</td>
<td></td>
<td></td>
<td>102</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103</td>
<td></td>
<td></td>
<td>104</td>
<td></td>
<td></td>
</tr>
<tr>
<td>105</td>
<td></td>
<td></td>
<td>106</td>
<td></td>
<td></td>
</tr>
<tr>
<td>107</td>
<td></td>
<td></td>
<td>108</td>
<td></td>
<td></td>
</tr>
<tr>
<td>109</td>
<td></td>
<td></td>
<td>110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>111</td>
<td></td>
<td></td>
<td>112</td>
<td></td>
<td></td>
</tr>
<tr>
<td>113</td>
<td></td>
<td></td>
<td>114</td>
<td></td>
<td></td>
</tr>
<tr>
<td>115</td>
<td></td>
<td></td>
<td>116</td>
<td></td>
<td></td>
</tr>
<tr>
<td>117</td>
<td></td>
<td></td>
<td>118</td>
<td></td>
<td></td>
</tr>
<tr>
<td>119</td>
<td></td>
<td></td>
<td>120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>121</td>
<td></td>
<td></td>
<td>122</td>
<td></td>
<td></td>
</tr>
<tr>
<td>123</td>
<td></td>
<td></td>
<td>124</td>
<td></td>
<td></td>
</tr>
<tr>
<td>125</td>
<td></td>
<td></td>
<td>126</td>
<td></td>
<td></td>
</tr>
<tr>
<td>127</td>
<td></td>
<td></td>
<td>128</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>