# tyco

# HSM2HOST 2-Way Wireless Transceiver Installation Manual

CE UL ULC

Johnson Controls

# Contents

# Introduction

**About this task:**
The HSM2HOSTx two-way wireless transceiver adds wireless capability to alarm controllers, models HS2016, HS2032, HS2064, HS2128, HS3128, HS3032.The HSM2HOST receives signals from wireless zones and wireless keys, and provides information to the alarm controller. This manual describes how to install, program and maintain the HSM2HOST.

ⓘ  **Note:** Only one HSM2HOST or one RFK keypad can be enrolled on the alarm system.
Before installing complete the following steps:

1. Plan the placement and wiring of the security system (see system installation manual).
2. Install the control panel and optional modules.
3. Temporarily mount all wireless devices in the intended location.

## Installation Process Overview

**About this task:**
To install and set up the HSM2HOST and wireless devices:

1. Temporarily mount and wire the HSM2HOST module (See "Mounting").
2. Enroll the HSM2HOST and the first wireless keypad (See "Enroll The HSM2HOST").
3. Check the location for RF interference levels (See "[804][801] RF Jam Detect").
4. Enroll wireless devices (See "[804][000] Enroll Wireless Devices").
5. Complete zone and other programming on the system (See "Wireless Device Setup and Programming").
6. Test the placement of all the wireless devices (See "[904] Placement Testing Wireless Devices").
7. Permanently mount the HSM2HOST and wireless devices (See "Permanently Mount").

## Controls and indicators

### Status LEDs

The LEDs on the front of the HSM2HOST provide feedback regarding the installation, operation and troubleshooting of the unit. The LEDs function as follows:

**Table 1: Status LEDs**

| Red LED | Operation |
|---|---|
| Module Power Up: | On steady during module power-up sequence then off. |
| Firmware Update: | Slow flashing = update in progress<br><br>Rapid flashing = update failed |
| Trouble Condition: | • No trouble: 1 rapid flash every 10 seconds.<br>If troubles are present, a series of flashes occur every 2 seconds. Each series of flashes indicate troubles as follows:<br><br>• 1 flash: Module not enrolled<br>• 2 flashes: Loss of contact with module for over 60 seconds<br>• 3 flashes: Corbus low voltage<br>• 8 flashes: RF interference (jam condition) |

**Table 1: Status LEDs**

| Red LED | Operation |
|---|---|
| Module Confirmation: | Flashes rapidly during module confirmation process. |
| Placement Test: | On steady when location is unsuitable. Off when location is suitable. |
| **Green LED** | **Operation** |
| Placement Test: | On steady when location is suitable. Off when location is unsuitable.<br><br>ⓘ **Note:** For UL/ULC listed systems, signal must be Strong. See Wireless Device Status Indications  for details. |

## Tamper

The HSM2HOST has built-in wall and case tampers. The tamper function is disabled by default on the NA version (enabled on the EU version). The tamper function can be enabled or disabled in Option 3, [804][810] Wireless Option 1. The case tamper activates when the case is opened and restores when the case is closed. The wall tamper on the back of the unit is depressed by the mounting surface when properly installed. If the unit is removed, the tamper activates. Ensure the mounting surface is smooth and free of obstructions that block access to the rear of the unit. Electrical wires should not run over or under the module when it is mounted.

ⓘ **Note:** The built-in wall and case tamper must be installed and enabled for UL/ULC listed Commercial/ Residential Burglary applications.

# Safety instructions

Read the safety information before you install the equipment.

➤ **Important:** This equipment must be installed by a skilled person only. A skilled person is an installer with appropriate technical training. The installer must be aware of potential hazards during installation and measures available to minimize risks to the installer and other people.

- Before you install this equipment, disconnect all power sources (for example mains, battery, and telephone line) connected to the alarm panel.
- Install the equipment indoors in a non-hazardous environment where the following conditions are met:

  - Pollution degree - Maximum 2
  - Over voltages - Category II

- Internal wiring must be routed to prevent strain on wire and terminal connections, loose terminal connections, and damage to conductor insulation.
- Instruct the user that there are no user serviceable parts in this equipment. All equipment must be serviced by a skilled person.

# Specifications and features

- Current Draw: 60mA
- Voltage: Draws current from the PowerSeries Neo or PowerSeries Pro alarm controller (10.8VDC to 12.5VDC) - (Limited Power Supply)
- Frequency: 433MHz (HSM2HOST4), 868MHz (HSM2HOST8), 912-919MHz (HSM2HOST9$^{UL}$)
- Zones - can receive signals from up to 128 wireless zones, and 16 wireless keypads
- Supports up to 32 wireless keys or 32 panic pendants
- Supervisory - programmable supervisory window
- Can be wired up to 1000 ft. / 230 m from the main panel with 22 AWG wire
- Connects to Corbus
- Compatibility: The HSM2HOST is used with PowerSeries Neo or PowerSeries Pro alarm panels
- Operating temperature: NA= 0°C to +49°C (32°F to 122°F); EU= -10°C to +55°C
- Relative humidity: 93% non-condensing
- Built-in wall and case tampers

ⓘ **Note:** For Commercial BURG (UL) the Supervisory window shall be set to 4 hours. For Residential Fire (UL/ULC) the Supervisory window shall be set to 200 seconds. For Residential BURG (UL/ULC) the supervisory window shall be set to 24 hours. For UL Home Healthcare applications the supervisory window shall be set to 24 hours Only models operating in the band 912-919 MHz are UL/ULC listed where indicated. Only UL approved devices are to be used with UL/ULC listed systems.

# Compatible wireless devices

The HSM2HOSTx (x= 4/8/9) can receive signals from the devices listed in the following table. For more information, refer to the individual device instruction sheet.

ⓘ **Note:** Throughout this document, x in the model number represents the operating frequency of the device for one of the following models: 9 (912-919 MHz), 8 (868MHz), 4 (433MHz).

**Table 2: Compatible wireless devices**

| Alarm Controllers | |
|---|---|
| Alarm Controllers | HS2016/HS2032/ HS2064/HS2128/ HS3032/HS3128/ HS3248 |
| **Modules** | |
| Wireless keypads | HS2LCDWFx/ HS2LCDWFPx/ HS2LCDWFPVx |
| **Wireless Devices** | |
| PowerG wireless short range ceiling mount detector with temperature monitoring | PGx862$^{UL}$ |
| PowerG wireless long range ceiling mount detector with temperature monitoring | PGx872$^{UL}$ |
| PowerG wireless outdoor curtain PIR | PGx902$^{UL}$ |
| PowerG wireless PRI motion detector with optional animal resistance | PGx904(P)$^{UL}$ |
| PowerG wireless PIR motion detector with temperature monitoring | PGx914(P)$^{UL}$ |
| PowerG wireless curtain PIR motion detector | PGx924$^{UL}$ |
| PowerG wireless PIR motion detector with camera | PGx934(P)$^{UL}$ |
| PowerG wireless outdoor PIR motion detector with camera and with anti-masking | PGx944(P)$^{UL}$ |
| PowerG wireless mirror optic PIR motion detector | PGx974(P)$^{UL}$ |
| PowerG wireless dual technology (PIR and MW) with anti-masking | PGx984(P)$^{UL}$ |
| PowerG wireless outdoor PIR motion detector with anti-masking | PGx994 |
| PowerG wireless recessed door/window contact | PGx307 |
| PowerG wireless outdoor contact with auxiliary input, temperature monitoring, and anti-masking | PGx312$^{UL}$ |
| PowerG wireless door/window contact with auxiliary input | PGx945$^{UL}$ |
| PowerG wireless vanishing door/window contact | PGx975$^{UL}$/ PGx303$^{UL}$ |
| PowerG wireless glassbreak detector | PGx912$^{UL}$/ PGx922$^{UL}$ |
| PowerG wireless shock detector with auxiliary input | PGx935$^{UL}$ |
| PowerG wireless flood detector | PGx985$^{UL}$ |

**Table 2: Compatible wireless devices**

| | |
|---|---|
| PowerG wireless temperature detector | PGx905$^{UL}$ |
| PowerG wireless temperature probe extender (requires PGx905) | PGTEMP-PROBE |
| PowerG wireless CO detector (US only) | PGx913$^{UL}$ |
| PowerG wireless CO detector with temperature monitoring | PGx933$^{UL}$ |
| PowerG wireless smoke and heat detector | PGx916$^{UL}$ |
| PowerG wireless smoke and heat detector with temperature monitoring | PGx936$^{UL}$ |
| PowerG wireless smoke detector | PGx926$^{UL}$ |
| | PGx901$^{UL}$ |
| PowerG wireless outdoor siren | PGx911$^{UL}$ |
| PowerG wireless repeater | PGx920$^{UL}$ |
| PowerG wireless 1-button security panic key | PGx938$^{UL}$ |
| PowerG wireless 2-button security panic key | PGx949$^{UL}$<br><br>PGx929$^{UL}$<br><br>PGx939$^{UL}$ |
| PowerG wireless 4-button security panic key | PGx929$^{UL}$<br><br>PGx939$^{UL}$ |

ⓘ  **Note:** Devices are not compatible in all markets.

# Installing the HSM2HOST

This section describes how to install the HSM2HOST module.

## Temporary mounting requirements

Before installing the HSM2HOST, you must temporarily mount the HSM2HOST in a location that meets the following requirements.

- Ensure that the location is dry.
- Ensure that the location is within the operating temperature range.
- Ensure that the location is central to the proposed placement of all wireless devices.
- Mount the module in a high location. Mounting the module below ground level can reduce the range of the system.
- Mount the module in a location that is far away from sources of interference, such as computers, electric motors, appliances, heating, air conditioning units, and other sources of electrical noise. Large metal objects like heating ducts and plumbing can also shield the electromagnetic waves
- Ensure that there are no obstructions blocking the rear of the unit.

## Connecting the HSM2HOST to the alarm panel

**About this task:**

⚠ **WARNING:** Ensure that you disconnect all power supplies from the system before connecting the modules to the Corbus. Power supplies can include AC, DC, and telephone lines.

To connect the HSM2HOST to the alarm panel, complete the following steps:

1. Connect the HSM2HOST to the four-wire Corbus in the alarm panel. For more information, see Figure 1.
2. Turn on the system.

**Figure 1: Wiring Diagram**
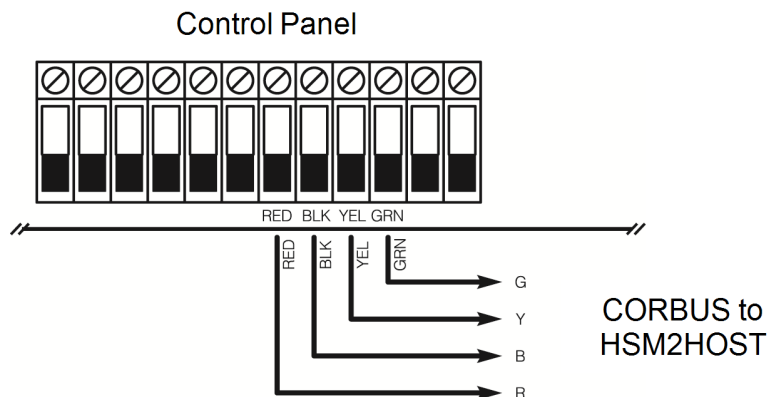
# Enrolling The HSM2HOST

The enrollment of a HSM2HOST to an alarm panel is dependent on the system configuration.

## Enrolling the HSM2HOST without a hardwired keypad

**About this task:**
To enroll the HSM2HOST without a hardwired keypad, complete the following steps:

1. Turn on the wireless keypad by connecting the power source.
2. Simultaneously press [*] and [1] on the keypad.
   ⓘ   **Note:** The system can take up to 30 seconds to complete the enrollment.

## Enrolling the HSM2HOST with an enrolled hardwired keypad

**About this task:**
To enroll the HSM2HOST with an enrolled hardwired keypad, complete the following steps:

1. On the enrolled keypad, enter Installer Programming section [902][000] (Auto Enroll All Modules).
2. When the system prompts you, press [*].

## Enrolling the HSM2HOST with only unenrolled hardwired keypads

**About this task:**
To enroll the HSM2HOST with only unenrolled hardwired keypad(s), complete the following steps:

1. Enroll only one hardwired keypad onto the system by pressing any key on the keypad.
2. Enter Installer Programming section [902][000](Auto Enroll All Modules).
3. When the system prompts you, press [*] to enroll the HSM2HOST and all other keypads or modules on the system.

# Permanently mounting the HSM2HOST and wireless devices

**About this task:**
After a suitable location to permanently mount the HSM2HOST and wireless devices is found, complete the following steps:

1. Pull the Corbus wires through the holes at the back of the HSM2HOST cabinet.
2. Using a screwdriver, securely mount the HSM2HOST cabinet to the wall using the three screw supplied. For more information, see Figure 2.
3. To install the wall tamper, securely attach the breakaway wall tamper bracket to the wall using the screws supplied (ST#6 L1" PHIL FLAT ST ZN).
4. Install the wireless devices. For more information, refer to the device's Installation Guide.

**Figure 2: Mounting the HSM2HOST**
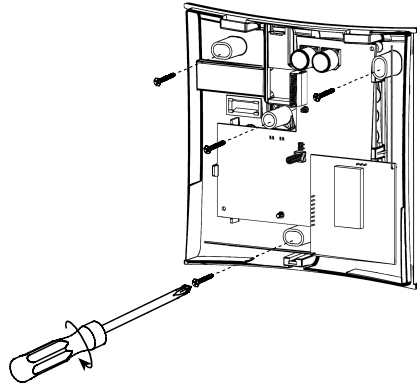


## Other Options

The following actions can be performed on the HSM2HOST:

| Section | Action |
|---------|--------|
| [902][106] | Delete the HSM2HOST from the alarm system. |
| [903][106] | Confirm that the HSM2HOST is enrolled. |
| [000][806] | Add a label to appear on LCD keypads. |
| [900][461] | View HSM2HOST model information. |

# Enrolling and programming wireless devices

This section describes how to enroll and program wireless devices such as contacts, motion sensors and sirens on the alarm panel.

## [804][000] Enrolling wireless devices

**About this task:**
After the HSM2HOST is installed and enrolled on the alarm panel, wireless devices can be enrolled using the following method:

1. Enter Installer Programming section [804][000].
2. When prompted, either activate the device (see device installation sheet) to enroll immediately or enter a device ID number. Do the latter to pre-enroll devices then enroll them later at the customer site. The alarm panel determines the type of device being enrolled and presents the appropriate programming options.

**Table 3: Wireless Device Options**

| Device Type | Programming Options |
|---|---|
| Zone | (01) Zone type<br><br>(02) Partition assignment<br><br>(03) Zone label |
| Wireless Key | (01) Partition assignment<br><br>(02) User label |
| Siren | (01) Partition assignment<br><br>(02) Siren label |
| Repeater | (01) Repeater label |

3. Use the scroll keys or type in the corresponding number to select an option.
4. Scroll through the available selections, key in a number or enter text as appropriate.
5. Press [*] to accept and move to the next option.
6. After all options are configured, the system prompts you to enroll the next device.
7. Repeat the above steps until all wireless devices are enrolled.
   ⓘ **Note:** The configuration options listed above can be modified using [804][911] Modify Device.

## [804][001]-[716] Wireless Device Configuration

To configure wireless devices, complete the following steps:

1. Enter Installer Programming section [804] then select one of the following sub-sections:

   - 001-248 – Configure Wireless Zones
   - 601-632 – Configure Wireless Keys
   - 701-716 – Configure Wireless Keypads

2. Select a device to configure using the scroll keys or go directly to a specific device by entering a hotkey.

3. Use the scroll buttons or enter a hotkey to select a configuration option for the device. See wireless device installation sheets for details.

4. Press [*] to accept and move to the next option.

5. After all options are configured, the system returns to the base configuration menu.

6. Repeat the above steps to configure other wireless devices.

ⓘ **Note:** The configuration options listed above can be modified using [804][911] Modify Device.

## [804][801] RF Jam Detect

**About this task:**
RF jam detection (continuous interfering transmissions on the radio network) can be turned on or off. When on, RF jamming is logged and reported.
To configure RF jamming, complete the following steps:

1. Enter Installer Programming section [804][801] then select one of the following options:

| 00 | Disabled | Jamming detection and reporting is enabled/disabled. ⓘ **Note:** Must be enabled for UL/ULC listed installations. |
|---|---|---|
| 01 | UL 20/20-USA | Continuous RF jamming for 20 seconds |
| 02 | EN 30/60-Europe | 30 seconds of accumulated jamming within 60 seconds |
| 03 | Class 6 30/60-British | As EN (30/60) but reported only if the jamming duration exceeds 5 minutes |

2. Press [*] to accept the selection.

3. Press [#] to exit the section.

## [804][802] Wireless supervisory time window

**About this task:**
This option is used to program the length of time a wireless device can be absent from the system before a fault is generated.
Before programming the wireless supervisory time window, note the following UL/ULC specifications:

**Table 4: UL/ULC wireless supervision specifications**

| UL/ULC specifications | Maximum wireless supervision time window |
|---|---|
| UL Residential Burglary (UL1023) | 24 hours |
| Home Health Care (UL1637) | 24 hours |
| ULC Residential Burglary (ULC/ORD-C1023) | 24 hours |
| UL Residential Fire (UL985) installations | 200 seconds |
| UL Commercial Burglary (UL1610/UL365) | 4 hours |
| ULC Residential Fire (ULC-S545) | 4 hours |

To program the wireless supervisory time window, complete the following steps:

1. Enter Installer Programming section [804][802].

2. Select one of the following options by scrolling or entering the hot key:

   - 00 – Disabled

- 01 – After 1 Hour
- 02 – After 2 Hours
- 03 – After 4 Hours
- 04 – After 8 Hours
- 05 – After 12 Hours
- 06 – After 24 Hours

3. Press [*] to accept the selection.
4. Press [#] to exit the section.

**Result:**
For EN installations, 1 hour or 2 hours must be selected.

When option 06 is used, which configures the system to generate fault conditions after a device has been detected as absent for 24 hours, smoke detectors generate a fault condition after a maximum of 18 hours when the 200s supervision toggle option is disabled.

# [804][810] Wireless Option 1

**About this task:**
To program wireless options, complete the following steps:

1. Enter Installer Programming section [804][810].
2. Select one of the following options by scrolling or entering the hotkey:

| 01 | RF Delinquency | On: the system cannot be armed if a wireless supervisory trouble exists. An RF delinquency trouble is generated. Off: wireless supervisory troubles do not prevent arming. |
|----|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 02 | Wireless Supervisory/ RF Jam Alarm | On: if a supervisory or jamming trouble occurs during Away arming, the siren activates and the event is logged and reported. Off: supervisory or RF jam troubles during Away arming do not activate the siren or get logged and reported. |
| 03 | Wireless Tamper | On: module tampers are logged and reported. Off: module tampers are not logged or reported. |
| 04 | Fire Supervision | On: fire devices are supervised every 200 seconds. If the device fails to report within this window, a supervision trouble is generated. Off: fire devices follow the supervision window programmed in section 802, up to a maximum of 18 hours. The supervisory window can be programmed with a higher value, but detectors still go into fault after 18 hours. |
| 05 | Smart Temperature Reporting | On: Wireless devices with smart temperature reporting support will periodically report their ambient temperature to the control panel. Off: Smart temperature reporting is disabled on all devices. |

3. Press [*] to accept the selection and [#] to exit.

# [804][841] Motion cameras

**About this task:**
To program motion cameras, complete the following steps:

1. Enter Installer Programming section [804][841].
2. Select one of the following options by scrolling or entering the hotkey:

| [001] | Visual Verification | On: Alarms trigger image capture from PIR Cameras<br><br>Off: Alarms do not trigger image capture from PIR Cameras |
|---|---|---|
| [002] | View Time Window | 01 Alarm + 5 Minutes<br><br>02 Alarm + 15 minutes<br><br>03 Alarm + 1 Hour<br><br>ⓘ **Note:** The Video on Demand via Integration sessions follow this configuration. |
| [003] | View Other Alarms | 01 Fire key enabled/disabled<br><br>02 Duress enabled/disabled<br><br>03 Medical key enabled/disabled<br><br>04 Panic key enabled/disabled<br><br>ⓘ **Note:** Video on Demand by third-party integrators follow this configuration. |

A maximum of 8 zones can be assigned to a PIR camera to initiate video capture. When an alarm occurs on any of the 8 zones, the panel initiates video capture from the PIR camera.

ⓘ **Note:** This option is only available with a PIR camera, for example the PGx934 or PGx944.

# [804][901]-[905] Deleting wireless devices

**About this task:**
To delete wireless devices, complete the following steps:

1. Enter Installer Programming section [804] then select one of the following sub-sections:
   [901] – Delete wireless zone devices
   [902] – Delete wireless key
   [904] – Delete repeaters
   [905] – Delete keypads
2. Scroll or enter a hotkey to select a device.
3. Press [*] to delete or [#] to exit.

# [804][921]-[925] Replacing wireless devices

**About this task:**
Use this option to replace a faulty device enrolled on the system with another device of the same type while maintaining the configuration of the original. The faulty device does not need to be deleted.

To replace a wireless device, complete the following steps:

1. Enter Installer Programming section [804] then select one of the following sub-sections:

    [921] – Replace wireless zone devices
    [922] – Replace wireless key
    [924] – Replace repeaters
    [925] – Replace keypads

2. Press [*] to select a sub-section. The first available device is displayed.
3. Scroll or enter a hotkey to select a device, press [*].
4. When prompted, activate the device (full enrollment) or enter the device ID (pre-enrollment). A message is displayed confirming enrollment.

## [804][990][001 – 005] Show all devices

**About this task:**
Use this section to review wireless devices enrolled on the system and to view serial numbers associated with each device.
To review wireless device information, complete the following steps:

1. Enter Installer Programming section [804][990] then select one of the following sub-sections:

    - [001] – All zones
    - [002] – Repeaters
    - [004] – Wireless keys
    - [005] – keypads

2. Press [*] to select a wireless device type. The first available device is displayed.
3. Use the scroll keys to view the enrolled devices.

    ⓘ   **Note:** This option is not fully supported by LED and ICON keypads.

## [804][999] Reset to factory defaults

Selecting this option resets HSM2HOST programming to factory default settings.

## [904] Placement testing of wireless devices

This test is used to determine RF signal status for wireless devices and can be performed at a system keypad or at the individual device. These instructions pertain to testing at the keypad. For instructions on placement testing at the device, refer to the installation sheet provided with the wireless equipment. The following test modes are available:

| [904][001]-[128] | Test wireless zones | Test wireless devices individually by zone. Zones with vanishing contacts must be activated to placement test. |
|---|---|---|
| [904][521]-[528] | Test all repeaters | Test each enrolled wireless repeater. 521-528 for repeaters 1-8 |
| [904][551]-[566] | Test all sirens | Test each enrolled wireless siren. 551-566 for sirens 1-16 |
| [904][601]-[632] | Test all wireless keys | Test individual wireless keys. Once in this section, press a button on the wireless key to begin the test. 601-632 for wireless keys 1-32. |
| [904][701]-[716] | Test all keypads | Test each enrolled keypad. 701-716 for keypads 1-16 |

Two test results are provided:

- 24-hour: Average results of signal strength testing over a 24-hour period.
- Now: Signal status results of the current test.

A flashing Trouble LED indicates RF interference. The following status indicators may be displayed:

| LCD | Icon* | LED+ | Status |
|---|---|---|---|
| Strong | 1 | 9 | Strong signal strength |
| Good | 2 | 10 | Good signal strength |
| Poor | 3 | 11 | Poor signal strength |
| Not Test | 5 | 13 | Displayed as the Now result if no test was performed |
| Not Test | 5 | 13 | Always displayed as the 24-hour result when testing wireless keys |

*For Icon keypads, digit 1 indicates 24-hour test results; digit 2 indicates Now test results.

+For LED keypads, the first digit indicates 24-hour results; the second digit indicates Now test results.

ⓘ **Note:** For EN/UL/ULC installations, only strong signal levels are acceptable.

# Programming Worksheets

Use these pages to record custom programming options (Installers Programming: [*][8]).

| | | |
|---|---|---|
| [902] | Enroll Module | 000 - Auto Enroll |
| | | 001 - Enroll Modules |
| | | 002 - Module Slot Assignment (LED/ICON) |
| | | 003 - Module Slot Assignment (LED only) |
| | Delete Module | 101 - Delete Keypads |
| | | 102 - Delete Zone Expander |
| | | 103 - Delete Output Expander |
| | | 106 - Delete HSM2HOST |
| | | 108 - Delete Audio Verification |
| | | 109 - Delete Power Supply |
| [903] | Confirm Module | 001 - Confirm Keypad |
| | | 002 - Confirm Zone Expander |
| | | 003 - Confirm Output Expander |
| | | 006 - Confirm HSM2HOST |
| | | 008 - Confirm Audio Verification |
| | | 009 - Confirm Power Supply |

## [804] Wireless programming

| | |
|---|---|
| [000] | Enroll Wireless Device |
| | Zone |
| | Wireless Key |
| | Siren |
| | Keypad |
| | Repeater |

## [804][000] Wireless Device Enrollment – Zones

| Zone | Label | Zone Definition | Zone Type | Partition |
|------|-------|-----------------|-----------|-----------|
| | | | | |
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## [804][000] Wireless device enrollment – Wireless keys

| Key# | Partition # | User | Label | Key# | Partition # | User | Label |
|------|-------------|------|-------|------|-------------|------|-------|
| 1 | | | | 17 | | | |
| 2 | | | | 18 | | | |
| 3 | | | | 19 | | | |
| 4 | | | | 20 | | | |
| 5 | | | | 21 | | | |
| 6 | | | | 22 | | | |
| 7 | | | | 23 | | | |
| 8 | | | | 24 | | | |
| 9 | | | | 25 | | | |
| 10 | | | | 26 | | | |
| 11 | | | | 27 | | | |
| 12 | | | | 28 | | | |
| 13 | | | | 29 | | | |
| 14 | | | | 30 | | | |
| 15 | | | | 31 | | | |
| 16 | | | | 32 | | | |

## [804][000] Wireless device enrollment – Wireless keypads

| WLS Keypad # | Keypad Assignment | Keypad Label | WLS Keypad # | Keypad Assignment | Keypad Label |
|--------------|-------------------|--------------|--------------|-------------------|--------------|
| 1 | | | 9 | | |
| 2 | | | 10 | | |
| 3 | | | 11 | | |
| 4 | | | 12 | | |
| 5 | | | 13 | | |
| 6 | | | 14 | | |
| 7 | | | 15 | | |
| 8 | | | 16 | | |

## [804][000] Wireless device enrollment – Wireless repeaters

| Repeater # | Repeater Label |
|---|---|
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |

## [804][001]-[128] Configure wireless zones 1-128

| Zone#: | | | |
|---|---|---|---|
| **Toggle Options** | | | |
| | **[001] Device Options** | | **[003] High Traffic Shutdown** |
| x | 01 – Alarm LED | x | 01 – Not Active |
| x | 02 – Reed Switch | | 02 – Yes - No Delay |
| | 03 – External Input On | | 03 – Yes - 5s Delay |
| x | 04 – Supervision | | 04 – Yes - 15s Delay |
| | 05 – Not Used | | 05 – Yes - 30s Delay |
| | 06 – Not Used | | 06 – Yes - 1m Delay |
| | 07 – Anti- Masking | | 07 – Yes - 5m Delay |
| | 08 – Not Used | | 08 – Yes - 10m Delay |
| | 09 – Shock Accumulator | | 09 – Yes - 20m Delay |
| | 10 – Not Used | | 10 – Yes - 60m Delay |
| x | 11 – 24hr/Night | | **[004] Image Brightness** |
| | 12 – Not used | | 01 – Image Bright -3 |
| | 13 – Not Used | | 02 – Image Bright -2 |
| x | 14 – Fire Alarm | | 03 – Image Bright -1 |
| | 15 – Not Used | x | 04 – Image Bright 0 |
| | 16 – Not Used | | 05 – Image Bright +1 |
| | **[002] Zone EOL** | | 06 – Image Bright +2 |
| | 00 – Disable | | 07 – Image Bright +3 |
| x | 01 – Single EOL | | |

| Zone#: | | |
|---|---|---|
| **Toggle Options** | | |
| 02 – Normally Open | | |
| 03 – Normally Closed | | |
| 04 – Double EOL | | |

| Zone#: | | |
|---|---|---|
| Toggle Options | | |

| **[005] Image Contrast** | | **[011] - Camera Toggles** |
|---|---|---|
| 01 – Image Contrast -3 | | 01- Color |
| 02 – Image Contrast -2 | | 02 - High Resolution |
| 03 – Image Contrast -1 | | 03 - Low Quality |
| 04 – Image Contrast - 0 | | 04 - Microphone |
| 05 – Image Contrast +1 | | 05 - Video on Demand |
| 06 – Image Contrast +2 | | 06 - Video on Demand (away only) override<br>ⓘ **Note:** This overrides [851][010] Option 5 Video on Demand in away mode only, when enabled. |
| 07 – Image Contrast +3 | | **[016] Event Counter** |
| | | 001-002 (Default: 002) |
| | | |
| **[006] Detection Range** | | **[018] Shock Sensitivity** |
| 01 - Low Sensitivity | | 001-019 (Default: 008) |
| 02- Mid Sensitivity | | **[019] High Temperature Warning** |
| 03 - High Sensitivity | | +/- 000 to 999 |
| **[007] Detection Security** | | **[020] High Temperature Alarm** |
| 01 - Low Sensitivity | | +/- 000 to 999 |
| 02 - High Sensitivity | | +/- 000 to 999 |
| 03-UL Standard | | **[022] Low Temperature Alarm** |
| | | +/- 000-999c (Default: 999c) |
| **[010] Anti-masking** | | **[025]-[032] Camera Zone Assignment** |
| 01- Disabled | | |
| 02- Low Sensitivity | | |
| 03- High Sensitiity | | |

# [804][551]-[566] Configure wireless sirens 1-16 (copy as needed)

| Zone# | | | | | |
|---|---|---|---|---|---|
| **Toggle Options** | | | | | |
| | **[000] Partition Assignment** | | 1 2 3 4 5 6 7 8 | | |
| | **[001] Device Toggles** | | **[002] Strobe Alarm** | | **[004] Squawk** |
| x | 01 – Fire Alarm | | 01 – Disabled | | 01 – Disabled |
| x | 02 – Gas/CO Alarm | x | 02 – Timer Limited | x | 02 – Sounder Only |
| x | 03 – Burglary Alarm | | 03 – Until Disarmed | | 03 – Strobe Only |
| x | 04 – Flood Alarm | | **[003] Exit Entry Beeps** | | 04 – Sounder/Strobe |
| | 05 – Not Used | x | 01 – Disabled | | **[005] Sounder Volume** |
| | 06 – Auto Temp Alarm | | 02 – Enabled | | 01 – Low |
| | 07 – Activity LED | | 03 – Disabled Stay | x | 02 – Medium |
| | 08 – Not Used | | | | 03 – High |
| | 09 – AC Power | | | | |
| x | 10 – Buzzer Notification | | | | |
| x | 11 – Door Chime | | | | |
| x | 12 – Trouble Beep | | | | |

| Zone# | | | | | |
|---|---|---|---|---|---|
| **Toggle Options** | | | | | |
| | **[000] Partition Assignment** | | 1 2 3 4 5 6 7 8 | | |
| | **[001] Device Toggles** | | **[002] Strobe Alarm** | | **[004] Squawk** |
| x | 01 – Fire Alarm | | 01 – Disabled | | 01 – Disabled |
| x | 02 – Gas/CO Alarm | x | 02 – Timer Limited | x | 02 – Sounder Only |
| x | 03 – Burglary Alarm | | 03 – Until Disarmed | | 03 – Strobe Only |
| x | 04 – Flood Alarm | | **[003] Exit Entry Beeps** | | 04 – Sounder/Strobe |
| | 05 – Not Used | x | 01 – Disabled | | **[005] Sounder Volume** |
| | 06 – Auto Temp Alarm | | 02 – Enabled | | 01 – Low |
| | 07 – Activity LED | | 03 – Disabled Stay | x | 02 – Medium |
| | 08 – Not Used | | | | 03 – High |
| | 09 – AC Power | | | | |
| x | 10 – Buzzer Notification | | | | |
| x | 11 – Door Chime | | | | |
| x | 12 – Trouble Beep | | | | |

## [804][601]-[632] Configure Wireless Keys (copy as needed)

[000] Wireless Key Partition Assignment (Default: 01)

[001]-[005] Wireless Key Button Programming (Defaults: Key 1: 04, Key 2: 03, Key 3: 01, Key 4: 52, Key 5: 21)

[011] Wireless Key Device Toggles (Default: 01)

[020] Wireless Key User Assignment (Default: 00 – Not Assigned)

| Available programming options: | | | |
|---|---|---|---|
| 00- Disabled (Null) | 06- Chime On/Off | 15- Temperature | 24- Comm. Output 4 |
| 01- Disarm | 07- System Test | 16- Quick Exit | 29- Bypass Group Recall |
| 02- Instant Stay Arm | 09- Night Arm | 17- Arm Interior | |
| 03- Stay Arm | 12- Global Stay Arm | 21- Comm. Output 1 | 33- Bypass Recall |
| 04- Away Arm | 13- Global Away Arm | 22- Comm. Output 2 | 51- [M] Key Alarm |
| 05- [*][9] No Entry | 14- Global Disarm | 23- Comm. Output 3 | 52- [P] Key Alarm |

## [601]-[632] Wireless Key 1-32

| Wireless Key# | Partition | Button | Supervision | Yes | No | User Number |
|---|---|---|---|---|---|---|
| | 1 2 3 4 5 6 7 8 | 1:<br>2:<br>3:<br>4:<br>5 | | | x | |

| Wireless Key# | Partition | Button | Supervision | Yes | No | User Number |
|---|---|---|---|---|---|---|
| | 1 2 3 4 5 6 7 8 | 1:<br>2:<br>3:<br>4:<br>5 | | | x | |

| Wireless Key# | Partition | Button | Supervision | Yes | No | User Number |
|---|---|---|---|---|---|---|
| | 1 2 3 4 5 6 7 8 | 1:<br>2:<br>3:<br>4:<br>5 | | | x | |

| Wireless Key# | Partition | Button | Supervision | Yes | No | User Number |
|---|---|---|---|---|---|---|
| | 1 2 3 4 5 6 7 8 | 1:<br><br>2:<br><br>3:<br><br>4:<br><br>5 | | | x | |

| Wireless Key# | Partition | Button | Supervision | Yes | No | User Number |
|---|---|---|---|---|---|---|
| | 1 2 3 4 5 6 7 8 | 1:<br><br>2:<br><br>3:<br><br>4:<br><br>5 | | | x | |

## [804]-[701]-[716] Wireless Keypad Programming

| Keypad # | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| [000] | Partition Assignment | | 00 – Global | | 03 – Partition 3 | | 03 – Partition 3 |
| | | x | 01 – Partition 1 | | 04 – Partition 4 | | 04 – Partition 4 |
| | | | 02 – Partition 2 | | 05 – Partition 5 | | 05 – Partition 5 |

**Function Key Programming Options**

| 00 - Null Key | | 30 - Quick Bypass | |
|---|---|---|---|
| 02 - Instant Stay Arm | 13 - Global Away Arm | 31 - Local PGM Active | |
| 03 – Stay Arm | 14 - Global Disarming | 32 - Bypass Mode | 61 - Partition Select 1 |
| 04 - Away Arm | 15 - Temperature | 33 - Bypass Recall | 62 - Partition Select 2 |
| 05 - [*][9]No Entry Arm | 16 - Quick Exit | 34 - User Programming | 63 - Partition Select 3 |
| 06 - Chime On/Off | 17 - Arm Interior | 35 - User Functions | 64 - Partition Select 4 |
| 07 - System Test | 21 - Command Output 1 | 36 - Reactivate Stay/ Away/Night zones | 65 - Partition Select 5 |
| 09 - Night Arm | 22 - Command Output 2 | 37 - Time/Date Programming | 66 - Partition Select 6 |
| 11 - Away Arm no Entry | 23 - Command Output 3 | 39 - Trouble Display | 67 - Partition Select 7 |
| 12 - Global Stay Arm | 24 - Command Output 4 | 40 - Alarm Memory | 68 - Partition Select 8 |
| | 29 - Bypass Group Recall | | |

| Function Key: | [001] – Key 1: (Default: 03) | [003] – Key 3: (Default: 06) | [005] – Key 5: (Default: 16) |
|---|---|---|---|
| | [002] – Key 2: (Default: 04) | [004] – Key 4: (Default: 22) | |

| [011] Keypad I/O (Zone number or output number; 3-digit decimal; Default: 000) | |
|---|---|
| [012] Local PGM Output Timer: | Pulse Time (Default:00 minutes): Pulse Time (Default:05 minutes): |

| [021] Keypad Option 1 | x | 01 – [F] Key Enabled |
|---|---|---|
| | x | 02 – [M] Key Enabled |
| | x | 03 – [P] Key Enabled |
| | x | 04 – Display Code or X's |
| [022] Keypad Option 1 | x | 01 – Local Clock Display |
| | | 02 – Local Clock 24-Hour |
| | x | 03 – Auto Alarm Scroll |
| | x | 05 – Power LED |
| | x | 06 – Power LED AC Present |
| | x | 07 – Alarms Displayed if Armed |
| | x | 08 – Auto Scroll Open Zones |

| [023] Keypad Option 3 | | 01 – Armed LED Power Save |
|---|---|---|
| | x | 02 – Keypad Status Shows Arm Mode |
| | | 03 – 5th Terminal is PGM Output/Zone Input |
| | | 07 – Local Display of Temperature |
| | | 08 – Low Temperature Warning |

| |
|---|
| [030] LCD Message: |
| [031] Downloaded LCD Message Duration (3-digit decimal; 000-255; Default: 000): |
| [041] Indoor Temperature Zone Entry (3-digit decimal; 000-128; Default: 000): |
| [042] Outdoor Temperature Zone Entry (3-digit decimal; 000-128; Default: 000): |

| [101]-[128] Door Chime Beeps: | | 00 – Disabled |
|---|---|---|
| | x | 01 – 6 beeps |
| | | 02 – Bing Bong |
| | | 03 – Ding Dong |
| | | 04 – Alarm Tone |
| | | 05 – Zone Name |

Door Chime Zone Assignment:

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 ___ | 2 ___ | 3 ___ | 4 ___ | 5 ___ | 6 ___ | 7 ___ | 8 ___ | 9 ___ | 10 ___ |
| 11 ___ | 12 ___ | 13 ___ | 14 ___ | 15 ___ | 16 ___ | 17 ___ | 18 ___ | 19 ___ | 20 ___ |
| 21 ___ | 22 ___ | 23 ___ | 24 ___ | 25 ___ | 26 ___ | 27 ___ | 28 ___ | 29 ___ | 30 ___ |
| 31 ___ | 32 ___ | 33 ___ | 34 ___ | 35 ___ | 36 ___ | 37 ___ | 38 ___ | 39 ___ | 40 ___ |
| 41 ___ | 42 ___ | 43 ___ | 44 ___ | 45 ___ | 46 ___ | 47 ___ | 48 ___ | 49 ___ | 50 ___ |
| 51 ___ | 52 ___ | 53 ___ | 54 ___ | 55 ___ | 56 ___ | 57 ___ | 58 ___ | 59 ___ | 60 ___ |
| 61 ___ | 62 ___ | 63 ___ | 64 ___ | 65 ___ | 66 ___ | 67 ___ | 68 ___ | 69 ___ | 70 ___ |
| 71 ___ | 72 ___ | 73 ___ | 74 ___ | 75 ___ | 76 ___ | 77 ___ | 78 ___ | 79 ___ | 80 ___ |
| 81 ___ | 82 ___ | 83 ___ | 84 ___ | 85 ___ | 86 ___ | 87 ___ | 88 ___ | 89 ___ | 90 ___ |
| 91 ___ | 92 ___ | 93 ___ | 94 ___ | 95 ___ | 96 ___ | 97 ___ | 98 ___ | 99 ___ | 100 __ |
| 101 __ | 102 __ | 103 __ | 104 __ | 105 __ | 106 __ | 107 __ | 108 __ | 109 __ | 110 __ |
| 111 __ | 112 __ | 113 __ | 114 __ | 115 __ | 116 __ | 117 __ | 118 __ | 119 __ | 120 __ |
| 121 __ | 122 __ | 123 __ | 124 __ | 125 __ | 126 __ | 127 __ | 128 __ | | |

| [804][801] Jam Detect | | | [804][802] Supervisory Window | | | | [804][810] Wireless Options | | |
|---|---|---|---|---|---|---|---|---|---|
| UL | EN | | UL | EN | Disabled | | UL | E N | |
| | | Disabled | | | After 1 Hour | | | | 1 – RF Delinquency Tamper |

| x |   | UL – UL 20/20 |   |   | x | After 2 Hours |   |   | x | 2 – Missing/Jam Alarm |
|---|---|---|---|---|---|---|---|---|---|---|
|   | x | EN 30/60 |   |   |   | After 4 Hours |   |   |   | 3 – Wireless Tamper |
|   |   | Class 6 (30/60) |   |   |   | After 8 Hours |   |   |   | 4 – 200s Fire Supervision |
|   |   |   |   |   |   | After 12 Hours |   |   |   | 5- Smart Temperature Reporting |
|   |   |   |   | x |   | After 24 Hours |   |   |   |   |

## [804][841] Motion Cameras

| 001 Visual Verification |   | 01 – Disabled |
|---|---|---|
|   | x | 02 – Enabled |
|   |   | 03 – Enabled |
| 002 View Time Window | x | 01 – Alarm + 5 Minutes |
|   |   | 02 – Alarm + 15 Minutes |
|   |   | 03 – Alarm + 1 Hour |
| 003 View Other Alarms | x | 01 – Fire Alarm |
|   | x | 02 – Duress Alarm |
|   | x | 03 – Medical Alarm |
|   | x | 04 – Panic Alarm |

## [804][901]-[905] Delete Wireless Devices

| [901] | Delete Zones |
|---|---|
| [902] | Delete Wireless Keys |
| [903] | Delete Sirens |
| [904] | Delete Repeaters |
| [905] | Delete Keypads |

## [804][921]-[925] Replace Wireless Devices

| [921] | Replace Zones |
|---|---|
| [922] | Replace Wireless Keys |
| [923] | Replace Sirens |
| [924] | Replace Repeaters |
| [925] | Replace Keypads |

## [804][990] Show All Devices

| [001] | Show All Zones |
|-------|----------------|
| [002] | Show All Repeaters |
| [003] | Sirens |
| [004] | Wireless Keys |
| [005] | Keypads |

# LIMITED WARRANTY

LIMITED WARRANTY

Digital Security Controls warrants the original purchaser that for a period of twelve months from the date of purchase, the product shall be free of defects in materials and workmanship under normal use. During the warranty period, Digital Security Controls shall, at its option, repair or replace any defective product upon return of the product to its factory, at no charge for labour and materials. Any replacement and/or repaired parts are warranted for the remainder of the original warranty or ninety (90) days, whichever is longer. The original purchaser must promptly notify Digital Security Controls in writing that there is defect in material or workmanship, such written notice to be received in all events prior to expiration of the warranty period. There is absolutely no warranty on software and all software products are sold as a user license under the terms of the software license agreement included with the product. The Customer assumes all responsibility for the proper selection, installation, operation and maintenance of any products purchased from DSC. Custom products are only warranted to the extent that they do not function upon delivery. In such cases, DSC can replace or credit at its option.

International Warranty

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

Warranty Procedure

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

Conditions to Void Warranty

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

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

Items Not Covered by Warranty

In addition to the items which void the Warranty, the following items shall not be covered by Warranty: (i) freight cost to the repair centre; (ii) products which are not identified with DSC's product label and lot number or serial number; (iii) products disassembled or repaired in such a manner as to adversely affect performance or prevent adequate inspection or testing to verify any

warranty claim. Access cards or tags returned for replacement under warranty will be credited or replaced at DSC's option. Products not covered by this warranty, or otherwise out of warranty due to age, misuse, or damage shall be evaluated, and a repair estimate shall be provided. No repair work will be performed until a valid purchase order is received from the Customer and a Return Merchandise Authorization number (RMA) is issued by DSC's Customer Service.

Digital Security Controls Ltd.'s liability for failure to repair the product under this warranty after a reasonable number of attempts will be limited to a replacement of the product, as the exclusive remedy for breach of warranty. Under no circumstances shall Digital Security Controls be liable for any special, incidental, or consequential damages based upon breach of warranty, breach of contract, negligence, strict liability, or any other legal theory. Such damages include, but are not limited to, loss of profits, loss of the product or any associated equipment, cost of capital, cost of substitute or replacement equipment, facilities or services, down time, purchaser's time, the claims of third parties, including customers, and injury to property. The laws of some jurisdictions limit or do not allow the disclaimer of consequential damages. If the laws of such a jurisdiction apply to any claim by or against DSC, the limitations and disclaimers contained here shall be to the greatest extent permitted by law. Some states do not allow the exclusion or limitation of incidental or consequential damages, so that the above may not apply to you.

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

Out of Warranty Repairs

Digital Security Controls will at its option repair or replace out-of-warranty products which are returned to its factory according to the following conditions. Anyone returning goods to Digital Security Controls must first obtain an authorization number. Digital Security Controls will not accept any shipment whatsoever for which prior authorization has not been obtained.

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

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

WARNING – READ CAREFULLY

Note to Installers

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

System Failures

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

Inadequate Installation

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

Criminal Knowledge

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

Access by Intruders

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

Power Failure

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

Failure of Replaceable Batteries

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

Compromise of Radio Frequency (Wireless) Devices

Signals may not reach the receiver under all circumstances which could include metal objects placed on or near the radio path or deliberate jamming or other inadvertent radio signal interference.

System Users

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

Smoke Detectors

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

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

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

Motion Detectors

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

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

Warning Devices

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

Telephone Lines

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

Insufficient Time

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

Component Failure

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

Inadequate Testing

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

Security and Insurance

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

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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.

# FCC Compliance Statement

This equipment generates and uses radio frequency energy and if not installed and used properly, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for Class B device in accordance with the specifications in Subpart "B" of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in any residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to television or radio reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient the receiving antenna

- Relocate the alarm control with respect to the receiver

- Move the alarm control away from the receiver

- Connect the alarm control into a different outlet so the alarm control & receiver are on different circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the FCC helpful: "How to Identify and Resolve Radio/Television Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402, Stock # 004-000-00345-4.

## IC Statement

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This Class B digital apparatus meets all requirements of the Canadian interference-causing equipment regulations.

Cet appareil numérique de la Classe B respecte toutes les exigences de règlement sur le matériel brouilleur du Canada.

IC:160A-HS2HOST9.

The term 'IC:' before the radio certification number only signifies that Industry Canada technical specifications were met.

## EU Compliance Statement

The Model HSM2HOST8 Wireless Transceiver has been certified by Telefication according to EN50131-1:2006 + A1:2009 and EN50131-3:2009, for Grade 2, Class II.

ⓘ  **Note:** For EN50131 compliant installations only, the intrusion portion of the alarm system has been investigated. Fire Alarm and Auxiliary (Medical) Alarm functions were not included in the evaluation of this product under the requirements of the above mentioned standards.

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