

51000-600 / 51000-601

## Wireless Combination Smoke, Heat and Carbon Monoxide Detector Installation Guide

**ATTENTION:** This manual should be read prior to use and retained for further information.

### **1. GENERAL INFORMATION**

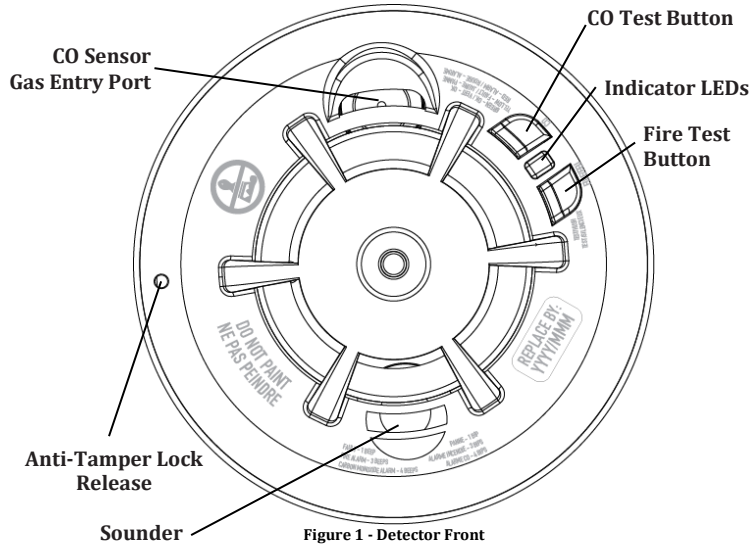
The Wireless Combination Smoke, Heat and Carbon Monoxide Detector is a 2xCR123A battery powered wireless detector intended for use with a compatible wireless alarm system. The detector consists of a photoelectric smoke sensor, thermistor heat sensor and electrochemical carbon monoxide sensor coupled to a

wireless transmitter, which communicates with the control panel. When fire or carbon monoxide is detected, the detector sounds a loud local alarm and the built-in transmitter sends a signal to the control panel. The Wireless Combination Smoke, Heat and Carbon Monoxide Detector contains an integrated fixed 41°F (5°C) temperature freeze sensor that will send a warning signal based on temperature detected. This detector is designed to provide protection with 70-foot spacing capability. The detector can send alarm, tamper and battery condition messages to the system's receiver. Refer to the wireless system's instruction for the maximum number of transmitters that can be supported. The detector has an operational life of 10 years. After 10 years of operation the detector will provide audio visual trouble indication and must be replaced.

**WARNING:** This product is intended for use in ordinary indoor residential areas. It is not designed to measure compliance with Occupational Safety & Health Administration (OSHA) commercial and industrial standards.

## 2. DETECTOR OVERVIEW

### 2.1 DETECTOR FRONT

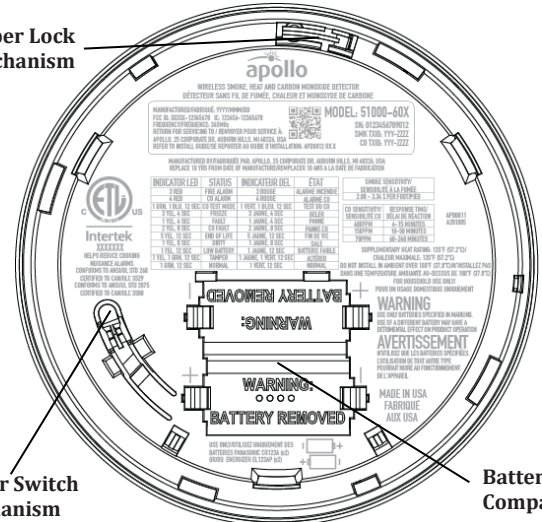


### 2.2 DETECTOR BACK

#### Anti-Tamper Lock Mechanism

#### Tamper Switch Mechanism

#### Battery Compartment



## 2.3 DETECTOR MOUNTING BASE

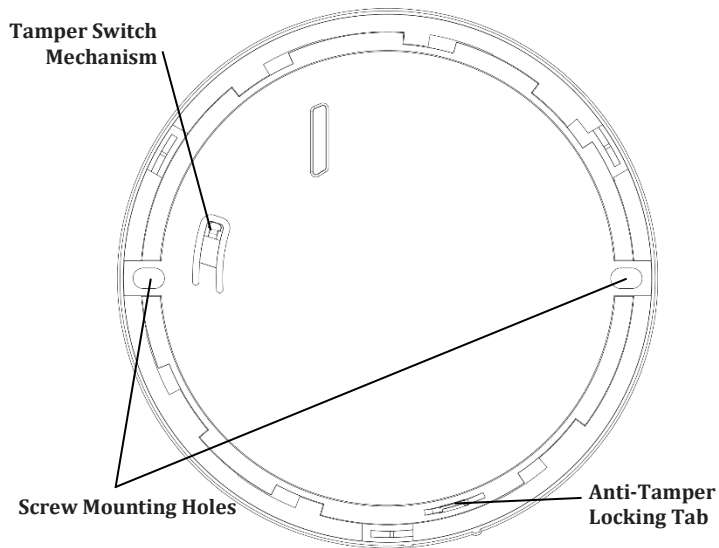


Figure 3 - Mounting Base

## 3. CONTENTS OF BOX

- Wireless Combination Smoke, Heat and Carbon Monoxide Alarm with mounting base
- Installation guide (APD0812)
- Pack of screws and anchors
- Labels or decals as appropriate
- 2 CR123A Panasonic batteries or 2 EL123AP Energizer batteries

## 4. OPERATION

The Wireless Combination Smoke, Heat and Carbon Monoxide Detector contains a sounder which generates ANSI S3.41 Temporal-3 pattern when fire is detected or ANSI S3.42 Temporal-4 pattern when Carbon Monoxide is detected. In alarm, a message is also sent to the control panel and the detector's ID is displayed. During an alarm condition, pressing either of the FIRE or CO test/hush buttons will silence the sounder for a short period (see LED and sounder operating modes table). A multi-color LED indicator provides visual indication for the detector operating modes and states. In general, RED is used to indicate ALARM conditions, YELLOW is used to indicate FAULT conditions and GREEN is used for normal operation (see Detector Status LED & Sounder operating modes table).

### 4.1 DETECTOR STATUS LED & SOUNDER OPERATING MODES

| Status           | Description  | LEDs  | Sounder   |
|------------------|--|---|---|
| Smoke Alarm      | Smoke has been detected  | 3 RED flashes in time with sounder                      | Temporal-3 BEEP-BEEP-BEEP-pause (press either button to hush for 7 minutes)       |
| Heat Alarm       | Heat has been detected   | 3 RED flashes in time with sounder                      | Temporal-3 BEEP-BEEP-BEEP-pause   |
| CO Alarm         | Carbon Monoxide has been detected                                  | 4 RED flashes in time with sounder                      | Temporal-4 PIP-PIP-PIP-PIP-long pause (press either button to hush for 5 minutes) |
| CO GO/NO-GO Test | Test mode for checking Carbon Monoxide functionality with test gas | 1 GREEN flash followed by 1 BLUE flash every 12 seconds | None  |
| Freeze Warning   | Temperature is below 41°F (5°C)                                    | 3 YELLOW flashes every 4 seconds                        | None  |

|                               |   |                                    |  |
|-------------------------------|---|------------------------------------|--|
| General Fault                 | A sensor has failed or some other fault has occurred  | 1 YELLOW flash every 4 seconds     | Chirp every 48 seconds   |
| CO Fault                      | The CO cell has reached the end of its useable life or a fault has occurred with the CO detection portion of the detector | 2 YELLOW flashes every 8 seconds   | Chirp every 48 seconds   |
| End Of Life                   | The detector has been operational for 10 years and must be replaced   | 5 YELLOW flashes every 12 seconds  | Chirp every 48 seconds   |
| Sensitivity Drift/Dirty Fault | The detector may no longer alarm within the smoke sensitivity limits on the back of the device and must be cleaned        | 1 YELLOW flash every 8 seconds     | Chirp every 48 seconds   |
| Low Battery                   | The batteries are low and must be replaced  | 1 YELLOW flash every 12 seconds    | Chirp every 48 seconds (press either button to silence for 12 hours) |
| Fire Test                     | Fire test button pressed and held to initiate test  | 3 RED flashes in time with sounder | Temporal-3 BEEP-BEEP-BEEP-pause                                      |
| CO Test                       | CO test button pressed and held to initiate test  | 4 RED flashes in time with sounder | Temporal-4 PIP-PIP-PIP-PIP-long pause                                |

|                  |  |  |                |
|------------------|--|--|----------------|
| Tamper           | The detector has been removed from the base                          | 1 YELLOW flash followed by 1 GREEN flash every 12 seconds        | None           |
| Power Up         | The detector has had batteries installed and is powered up           | 1 RED flash followed by 1 YELLOW flash followed by 1 GREEN flash | A single chirp |
| Normal Operation | The detector is operating normally with no fault or alarm conditions | 1 GREEN flash every 12 seconds                                   | None           |

**Table 1 - Detector Status LED & Sounder Operating Modes**

#### 4.2 DETECTOR DIRTY FEATURE

When the detector has been contaminated and may no longer be within the marked sensitivity limits the detector will chirp every 48 seconds and flash the YELLOW LED once every 8 seconds. Refer to Section 10.1 for cleaning your detector.

#### 4.3 DETECTOR END OF LIFE

When the detector has reached the end of its 10 year operating life it will chirp every 48 seconds and flash the YELLOW LED 5 times every 12 seconds. The detector must be replaced.

#### 4.4 LOW BATTERY DETECTION

The detector regularly checks the battery condition. If a low battery is detected the detector will chirp every 48 seconds and flash the YELLOW LED once every 8 seconds. The chirp may be silenced for 12 hours by pressing either button (See Section 2.1 Figure 1). The batteries must be replaced using 2 Panasonic CR123A batteries or 2 Energizer EL123AP batteries.

## 5. BATTERY INSTALLATION AND REPLACEMENT

### 5.1 FIRST DETECTOR USE

The detector ships with batteries installed and a pull tab to prevent electrical contact while in transit. Remove the pull tab before installing the detector.

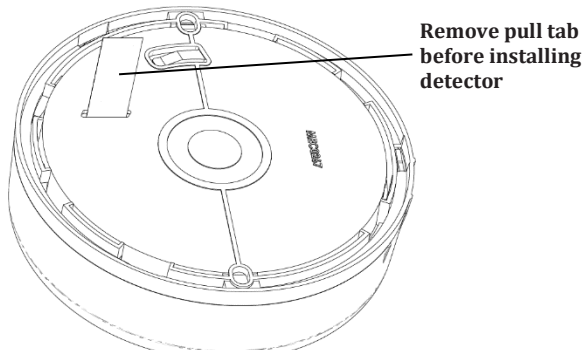


Figure 4 - Pull Tab

### 5.2 BATTERY REPLACEMENT

To replace the batteries, remove the detector from the mounting base. Remove the batteries from the detector, a flat bladed screwdriver may be used to help remove the batteries, but care must be taken to ensure the batteries are not damaged. Wait a minimum 20 seconds for the detector to power down completely. Install 2 new Panasonic CR123A or Energizer EL123AP batteries, taking care to follow the battery polarity indication on the detector next to the battery compartment. The detector should flash RED, YELLOW, GREEN and chirp 8 seconds after the batteries are installed. Return the detector to the mounting base, the detector should flash GREEN every 12 seconds to indicate normal operation. Test the detector as described in Section 9 FIELD SERVICE TESTS of this installation guide.

**WARNING:** CONSTANT EXPOSURES TO HIGH OR LOW TEMPERATURES OR HIGH HUMIDITY MAY REDUCE BATTERY LIFE

## 6. PROGRAMMING TO CONTROL PANEL

Refer to the appropriate compatible control panel programming guide for the proper procedure required to enroll the Wireless Combination Smoke, Heat and Carbon Monoxide Detector into the system.

## 7. MOUNTING THE DETECTOR

### 7.1 RECOMMENDED LOCATIONS FOR SMOKE HEAT DETECTORS

According to National Fire Protection Association (NFPA) the major threat from fire in a dwelling unit occurs at night when everyone is asleep. The principal threat to persons in sleeping areas comes from fires in the remainder of the unit; therefore, a smoke detector(s) is best located between the bedroom areas and the rest of the unit. In units with only one bedroom area on one floor, the smoke detector(s) should be located as shown in Figure 5. In dwelling units with more than one bedroom area or with bedrooms on more than one floor, more than one smoke detector is required, as shown in Figure 6.

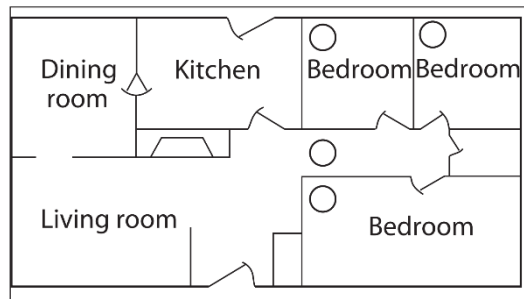


Figure 5 - Location of the detectors in units with only one bedroom area on one floor

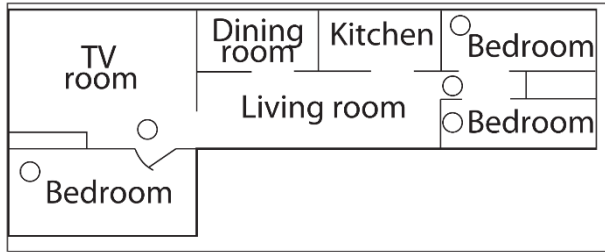


Figure 6 - Location of the detectors in dwelling units with more than one bedroom area or with bedrooms on more than one floor

In addition to smoke detectors outside of the sleeping areas, the device should be installed on each additional story of the dwelling unit, including the basement. These installations are shown in Figure 7. The living area smoke detector should be installed in the living room or near the stairway to the upper level, or in both locations. The basement smoke detector should be installed in close proximity to the stairway leading to the floor above. Where installed on an open-joisted ceiling, the detector should be placed on the bottom of the joists. The detector should be positioned relative to the stairway so as to intercept smoke coming from a fire in the basement before the smoke enters the stairway.

Smoke detectors are optional where a door is not provided between living room and recreation room (Figure 8). The smoke from a fire generally rises to the ceiling, spreads out across the ceiling surface, and begins to bank down from the ceiling. The corner where the ceiling and wall meet is an air space into which the smoke could have difficulty penetrating. In most fires, this dead air space measures about 0.1m (4in.) along the ceiling from the corner and about 0.1m (4in.) down the wall. Detectors should not be placed in this dead air space, see Figure 9, Figure 10 and Figure 11.

**Where NOT to install the alarm:**

- Directly above a sink, cooker, stove or oven
- Do not locate detector within 5 feet (1.5 m) of any cooking appliance

- Next to a door or window that would be affected by drafts i.e. extractor fan or air vent
- Outside
- Do not install in any environment that does not comply with the detector’s environmental specifications
- In or below a cupboard
- Where air flow would be obstructed by curtains or furniture
- Where dirt or dust could collect and block the sensor
- Where it could be knocked, damaged, or inadvertently removed

This detector shall not be installed in location where the normal ambient temperature is below 40°F (4.4°C) or where it exceeds 100°F (37.8°C). THIS EQUIPMENT SHOULD BE INSTALLED IN ACCORDANCE WITH NFPA 72: NATIONAL FIRE ALARM AND SIGNALING CODE.

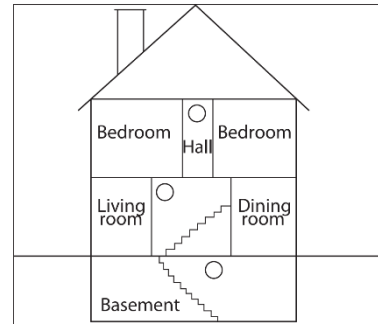
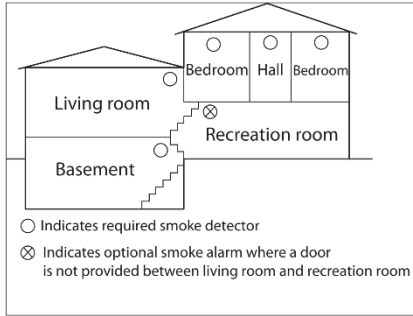
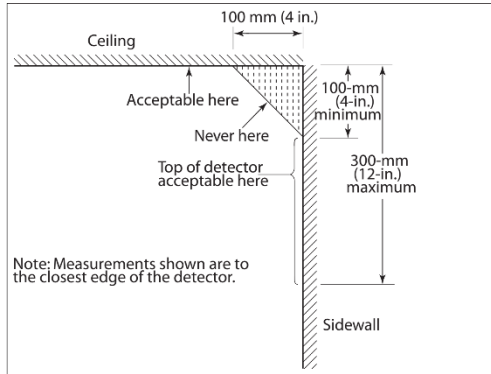


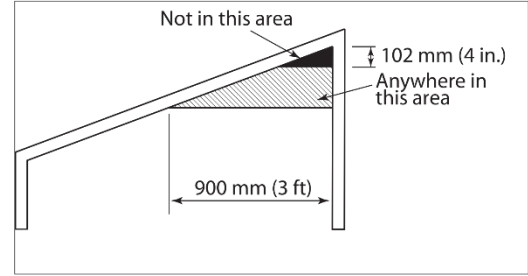
Figure 7 - Detector located on each story



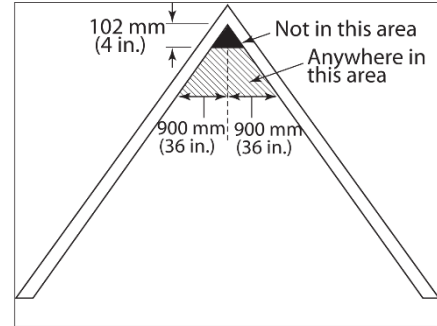
**Figure 8 - Split level arrangement**



**Figure 9 - Example of proper mounting for detectors**



**Figure 10 - Example of proper mounting for detectors with sloped ceilings**



**Figure 11 - Example of proper mounting for detectors with peaked ceilings**

## 7.2 RECOMMENDED LOCATIONS FOR CARBON MONOXIDE DETECTORS

Ceiling Mounted - position at least 12" from any wall.

Wall Mounted - position at least 6" from ceiling, but not lower than a light switch.

### Where to install, ideally:

- Within 10 feet (3m) of a sleeping area
- Inside the bedroom if it contains a fuel burning appliance
- On every floor of the building
- Ideally, install in any room that contains a fuel burning appliance
- If the appliance or the room is not normally used, such as the boiler room, the detector should be placed just outside the room so the alarm can be heard more easily

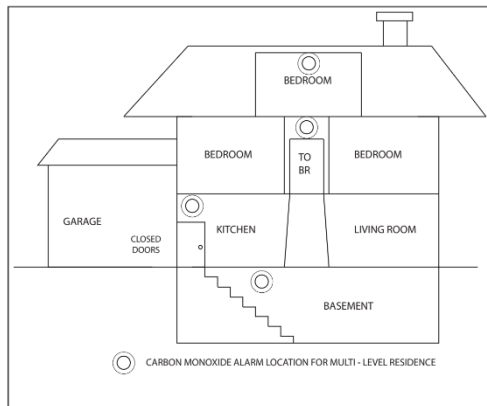


Figure 12 - CO Detector location diagram

### Where NOT to install, ideally:

- Directly above a sink, cooker, stove or oven
- Do not locate detector within 5 feet (1.5m) of any cooking appliance

- Next to a door or window that would be affected by drafts i.e. extractor fan or air vent
- Outside
- Do not install in any environment that does not comply with the detector's environmental specifications
- In or below a cupboard
- Where air flow would be obstructed by curtains or furniture
- Where dirt or dust could collect and block the sensor
- Where it could be knocked, damaged, or inadvertently removed

## 7.3 MOUNTING PROCEDURE

**NOTE:** The Wireless Combination Smoke, Heat and Carbon Monoxide Detector should only be installed by a competent technician or installer.

**NOTE:** The Wireless Combination Smoke, Heat and Carbon Monoxide Detector must not be used with a guard.

**NOTE:** DO NOT attach the detector to removable ceiling panels.

**NOTE:** Two warning labels are provided with the detector. One should be mounted near the CO detector and the other near a source of fresh air where members of the household will gather if the alarm signal sounds.

**CAUTION:** Airborne dust particles can enter the detector, remove the detector before beginning construction work or other dust producing activity. Immediately replace detector when dust producing activity has ceased.

**WARNING:** DO NOT PAINT Detector

Once a suitable location has been identified install the mounting base on the ceiling or wall (if local ordinances permit) using the two screws and anchors provided (Figure 13). Remove the battery pull tab (Section 5.1) and ensure the detector powers up (Section 5.2). Fit the detector on the mounting base (Figure 14) and turn clockwise until the detector clicks into place and the alignment notches are aligned (Figure 15). Test the detector as described in Section 9 FIELD SERVICE TESTS of this installation guide.



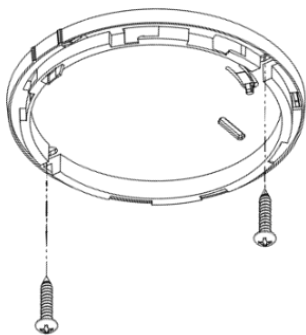


Figure 13 - Installing the base

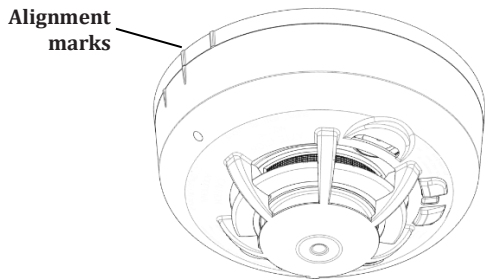


Figure 14 - Detector aligned to base prior to completing installation

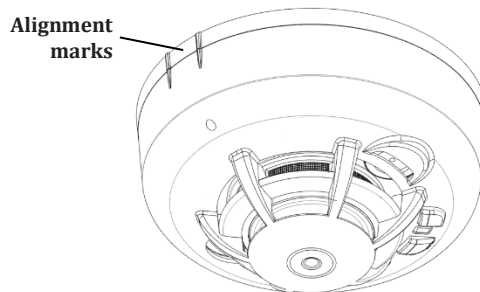


Figure 15 - Detector fully aligned and installed on mounting base

## 8. TAMPER PROTECTION

The Wireless Combination Smoke, Heat and Carbon Monoxide Detector has a built-in tamper switch which will cause a tamper signal to be transmitted to the control panel if the detector is removed from the mounting base. The detector also includes an anti-tamper feature which prevents the detector being removed from the mounting base. To enable the anti-tamper feature cut the anti-tamper tab on the mounting base (Figure 16 and Figure 17) and install the detector on the mounting base. When the anti-tamper feature has been enabled, to remove the detector from the mounting base, a small screwdriver must be inserted in the anti-tamper release hole (Figure 18) to press on the release lever whilst turning the detector counterclockwise.

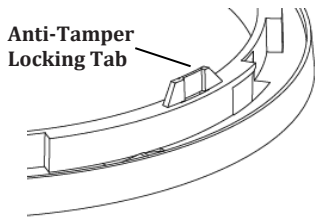


Figure 16 - Anti-Tamper locking tab

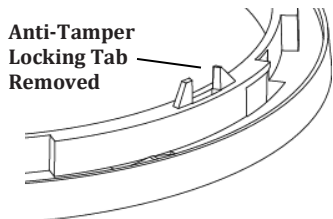


Figure 17 - Anti-Tamper locking tab removed

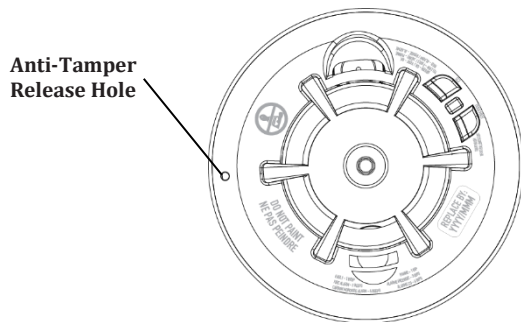


Figure 18 - Anti-Tamper release hole location

## 9. FIELD SERVICE TESTS

**NOTE:** Before testing, notify the central station that the detector system is undergoing maintenance in order to prevent unwanted alarms. Testing the detector will activate an alarm and send a signal to the panel. The test functions cannot be used if the detector has a trouble or end-of-life condition. Detectors must be tested after installation and following periodic maintenance.

The detector has two test buttons, one for smoke testing and one for CO testing (See Section 2.1 Figure 1).

### 9.1 SENSITIVITY CHECK

Examine the detector and observe the LED, if the LED is blinking GREEN once every 12 seconds the detector is operating normally and sensitivity is within the marked sensitivity range on the back of the detector. If the LED is blinking YELLOW every 8 seconds and beeping every 48 seconds it may no longer be within the marked sensitivity range and should be cleaned. Refer to Section 10.1 for cleaning your detector.

### 9.2 SMOKE ALARM TEST

Press and hold the fire test button (See Section 2.1 Figure 1) for 2 seconds, the detector will sound Temporal-3 and the LED will blink RED along with the sounder. Continue to press and hold the fire test button for up to 12 seconds to ensure the smoke alarm signal is sent to the control panel. Verify the signal was received at the control panel.

### 9.3 SMOKE ALARM FUNCTIONAL TEST

Using SDi SOLO A10, SDi Smoke Centurion or SDi Smoke Sabre canned smoke products, according to the labeled instructions, spray canned smoke at the detector. The detector will sound Temporal-3, the LED will blink RED along with the sounder and the smoke alarm signal will be sent to the control panel. Verify the signal was received at the control panel.

### 9.4 HEAT ALARM FUNCTIONAL TEST

Using a hair dryer of 1000-1500 Watts at a distance of approximately 12 inches from the detector, direct hot air at the detector. The detector will sound Temporal-3, the LED will blink RED along with the sounder and the heat alarm signal will be sent to the control panel.

### 9.5 CO ALARM TEST

Press and hold the CO test button (See Section 2.1 Figure 1) for 2 seconds, the detector will sound Temporal-4 and the LED will blink RED along with the sounder. Continue to press and hold the CO test button for up to 12 seconds to ensure the CO alarm signal will be sent to the control panel. Verify the signal was received at the control panel.

## 9.6 CO ALARM FUNCTIONAL TEST

After pressing and holding the CO test button for 12 seconds as in the previous step, the detector will enter a CO GO/NO-GO test mode and the LED will blink GREEN and BLUE for 2 minutes. While the detector is in the CO GO/NO-GO test mode, using SDi SOLO C6 CO test gas, spray a small amount of CO test gas directly into the gas entry port (See Section 2.1 Figure 1). The detector will sound Temporal-4, the LED will blink RED along with the sounder and the CO alarm signal will be sent to the control panel. Verify the signal was received at the control panel. The CO test will automatically clear after testing, or after 2 minutes if no CO test gas was used.

## 9.7 POST TESTING

If the detector fails to activate in any of the tests it should be cleaned, as outlined in Section 10.1 of this manual, and the test should be repeated. If the detector still fails to activate, return for servicing.

Once testing is complete, ensure the detector returns to normal operation mode with the LED blinking GREEN every 12 seconds. If the detector is not in normal operation, refer to Section 4.1 Table 1 - Detector Status LED & Sounder Operating Modes to determine the detector state.

## 10. MAINTENANCE

### TEST ONCE A WEEK

**WARNING:** USE ONLY BATTERIES SPECIFIED. USE OF DIFFERENT BATTERIES MAY HAVE A DETRIMENTAL EFFECT ON THE DETECTOR.

YOUR DETECTOR SHOULD BE CLEANED AT LEAST ONCE A YEAR.

### 10.1 CLEANING

Remove the detector from the mounting base. Use a vacuum cleaner to vacuum through the openings around the perimeter of the detector, or alternatively, use compressed air to blow through the openings around the perimeter of the detector. Wipe the detector clean with a damp cloth. Return the detector to the mounting base.

## 11. FIRE DETECTION

**WARNING: PLEASE READ CAREFULLY AND THOROUGHLY**

- NFPA 72 states: Fire-warning equipment for residential occupancies are capable of protecting about half of the occupants in potentially fatal fires. Victims are often intimate with the fire, too old or too young, or physically or mentally impaired such that they cannot escape even when warned early enough that escape should be possible. For these people, other strategies such as protection-in-place or assisted escape or rescue would be necessary.
- A battery powered alarm must have a battery of the specified type, in good condition and installed properly.
- Smoke alarms must be tested regularly to make sure the batteries and the alarm circuits are in good operating condition.
- Smoke alarms cannot provide an alarm if smoke does not reach the detector. Therefore, smoke alarms may not sense fires starting in chimneys, walls, on roofs, on the other side of a closed door or on a different floor.
- If the alarm is located outside the sleeping room or on a different floor, it may not wake up a sound sleeper.
- Studies have shown that smoke and heat alarms may not awaken all sleeping individuals, and that it is the responsibility of individuals in the household that are capable of assisting others to provide assistance to those who may not be awakened by the alarm sound or those who may be incapable of safely evacuating the area unassisted.
- The use of alcohol or drugs may also impair one's ability to hear the smoke alarm. For maximum protection, a smoke alarm should be installed in each sleeping area on every level of a home.
- Although smoke alarms can help save lives by providing an early warning of a fire, they are not a substitute for an insurance policy. Homeowners and renters should have adequate insurance to protect their properties.

### FAMILY ESCAPE PLAN

According to National Fire Protection Association (NFPA) there often is very little time between the detection of a fire and the time it becomes deadly. This interval can be as little as 1 or 2 minutes. Planning and practicing for fire conditions with a focus on rapid exit from the residence are important. Drills should be held so that all family members know the action to be taken.

### SAFETY TIPS

- Make a home escape plan. Draw a map of your home showing all doors and windows. Discuss the plan with everyone in your home.
- Know at least two ways out of every room, if possible. Make sure all doors and windows leading outside open easily.
- Have an outside meeting place (like a tree, light pole or mailbox) a safe distance from the home where everyone should meet.
- Practice your home fire drill at night and during the day with everyone in your home, twice a year.
- Practice using different ways out.
- Teach children how to escape on their own in case you can't help them.
- Close doors behind you as you leave.

#### IF THE ALARM SOUNDS

- If the smoke alarm sounds, get out and stay out. Never go back inside for people or pets.
- If you have to escape through smoke, get low and go under the smoke to your way out.
- Call the fire department from outside your home. FOR MORE SAFETY INFORMATION SEE THE WEBSITE: [www.nfpa.org/education](http://www.nfpa.org/education).

## 12. CARBON MONOXIDE GAS AND ITS DETECTION

**CAUTION:** This carbon monoxide detector is designed for indoor use only. Do not expose to rain or moisture. Do not knock or drop the detector. Do not open or tamper with the detector as this could cause malfunction. The detector will not protect against the risk of carbon monoxide poisoning if not properly installed.

**CAUTION:** This device will only indicate the presence of carbon monoxide gas at the sensor. Carbon monoxide gas may be present in other areas. This carbon monoxide alarming device is designed to detect carbon monoxide gas from ANY source of combustion. It is NOT designed to detect smoke, fire or other gases unless the product has been investigated and determined to comply with applicable requirements.

This device should not be installed as a substitute for proper installation, use, and maintenance of fuel burning appliances, including appropriate ventilation and exhaust systems. Carbon monoxide gas is a highly poisonous gas which is released when fuels are burned. It is invisible, has no smell and is therefore impossible to

detect with the human senses. Under normal conditions in a room where fuel burning appliances are well maintained and correctly ventilated, the amount of carbon monoxide released into the room by appliances should not be dangerous.



#### Conditions that can result in transient CO situations:

1. Excessive spillage or reverse venting of fuel-burning appliances caused by
  - outdoor ambient conditions, such as wind direction and/or velocity, including high gusts of wind, and insufficient draft in the vent pipes,
  - negative pressure differential resulting from the use of exhaust fans,
  - simultaneous operation of several fuel-burning appliances competing for limited internal air,
  - loose vent pipe connections from fuel-fired appliances,
  - obstructions, or unconventional vent pipe designs that can amplify the above situations,
  - poorly designed or maintained chimneys and/or vents,
2. Extended operation of unvented fuel-burning devices (range, oven, fireplace, etc.),
3. Temperature inversions that can trap exhaust gases near the ground,
4. Car idling in an open or closed attached garage, or near a home.

The following symptoms are related to CARBON MONOXIDE POISONING and are to be discussed with All members of the household:

1. **Mild Exposure:** Slight headache, nausea, vomiting, fatigue (often described as "Flulike" symptoms).
2. **Medium Exposure:** Severe throbbing headache, drowsiness, confusion, fast heart rate.
3. **Extreme Exposure:** Unconsciousness, convulsions, cardiorespiratory failure, death.
4. Many cases of reported CARBON MONOXIDE POISONING indicate that while victims are aware they are not well, they become so disoriented they are unable to save themselves by either exiting the building or calling for assistance. Young children and household pets are typically the first affected.

## **WARNING: IMPORTANT INFORMATION FOR THE USER**

Individuals with medical problems may consider using warning devices which provide audible and visual signals for carbon monoxide concentrations under 30 ppm.



## **WARNING**

**Actuation of your CO alarm indicates the presence of carbon monoxide (CO) which can KILL YOU.**

**If alarm signal sounds:**

- 1. Operate reset/silence button.**
- 2. Call your emergency services (fire department or 911).**
- 3. Immediately move to fresh air - outdoors or by an open door/window. Do a head count to check that all persons are accounted for. Do not reenter the premises nor move away from the open door/window until the emergency services responders have arrived, the premises have been aired out, and your alarm remains in its normal condition.**
- 4. After following steps 1 - 3, if your alarm reactivates within a 24 hour period, repeat steps 1 - 3 and call a qualified appliance technician (Telephone Number) to investigate for sources of CO from fuel burning equipment and appliances, and inspect for proper operation of this equipment. If problems are identified during this inspection have the equipment serviced immediately. Note any combustion equipment not inspected by the technician and consult the manufacturers' instructions, or contact the manufacturers directly, for more information about CO safety and this equipment. Make sure that motor vehicles are not, and have not been, operating in an attached garage or adjacent to the residence.**

The premises should be well ventilated when household cleaning supplies or similar contaminants are used.

### **DETECTOR REPLACEMENT**

This detector is manufactured with a long-life carbon monoxide sensor. Over time the sensor may lose sensitivity and may need to be replaced with a new carbon monoxide detector. The detector's lifespan is 10 years from the date of

manufacture.

**NOTE:** When the detector is removed from its base, a tamper message is sent to the central station.

The detector will also cause a trouble condition once it has reached the end of its useful life. If this occurs, it is time to replace the detector.

**NOTE:** Before replacing the detector, notify the proper authorities that maintenance is being performed and the system will be temporarily out of service. Disable the zone or system undergoing maintenance to prevent any unwanted alarms. Dispose of the detector in accordance with any local regulations.

**NOTE:** The replacement date that appears on the device is the date beyond which the device may no longer detect carbon monoxide accurately and should be immediately replaced.

### **CAUTION**

It should be noted the installation, operation, testing and maintenance of a carbon monoxide detector is different to smoke detectors. Per NFPA 720 section 5.3.7.2 a CO detector shall not be connected to a zone that signals a fire condition (i.e. smoke detectors zones). Therefore, the carbon monoxide alarm signal must be programmed as a non-fire zone. See the control's installation instructions for the appropriate carbon monoxide zone type to be programmed.

### **13. SPECIFICATIONS**

- Transmitter Frequency: 345.000 MHz (crystal controlled)
- Dimensions: Ø 5" x 2.75" high (Ø 125mm x 70mm high)
- Weight (including battery): 10.5 oz (300 g)
- Color: White
- Audible Signal (ANSI Temporal 3/Temporal 4): 85dBa min. in alarm (at 10ft / 3m)
- Sensitivity: 2.00 – 3.34%/foot obscuration
- Operating Temperature: 40°F to 100°F (4.4°C to 37.8°C)
- Operating Humidity: 15%-90% RH Non-Condensing
- Supplementary heat rating: 135°F
- Supplementary heat spacing rating: 70ft

- Battery (included): Two (2) Panasonic CR123A or Two (2) Energizer EL123AP Lithium Batteries
- Regulatory Listing: Intertek ETL listed to UL 268 with supplementary heat detection, UL 2075, ULC S529 with supplementary heat detection and ULCS588 standards
- Warranty: Two (2) years
- Included Accessories: Mounting Hardware Package

#### 14. COMPATIBLE RF EQUIPMENT

##### 14.1 MODEL 51000-600

Control Unit: Vivint CP04 (VS-SH2000-000) Doc 77-600022-001 – Rev A.2

Max Separation Range: 100 ft

##### 14.2 MODEL 51000-601

Control Unit: Honeywell Lyric LCP500-L Doc 800-18078H 11/15 Rev. H

Max Separation Range: 100 ft

In typical single level and multilevel dwelling units and apartment buildings having similar smoke alarm systems there is a possibility that signals sent by wireless sensors may be blocked or reflected by metal before they reach the alarm Control Panel, even if the signal path has been recently checked during a weekly test. Blockage can occur if a metal object has been moved into the sensor's signal path.

#### 15. REGULATORY INFORMATION NOTICE

Unauthorized changes or modifications could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules and Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation of the device. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions,

may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

"For your information, The National Fire Alarm Code, NFPA 72, reads as follows: "11.5.1 Required Detection."

"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 a 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.
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