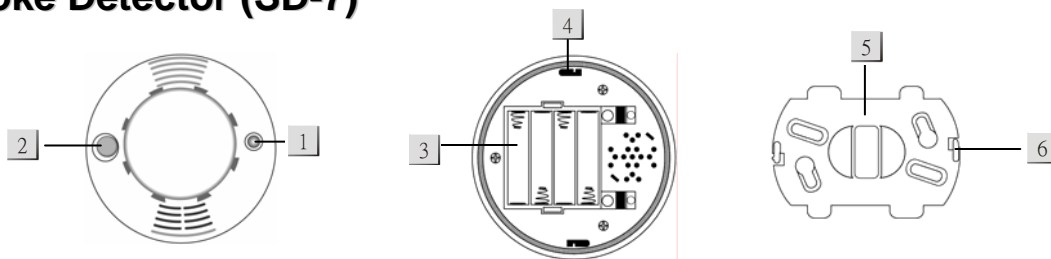


# Smoke Detector (SD-7)



## 1 LED

- When the battery voltage is low, the LED will flash every 30 sec.
- While the smoke Detector is transmitting the signal, the LED will also flash.
- While the batteries are inserted and the Smoke Detector is in warming period, the LED will flash for 5~20 min.

## 2 Test Button

The Test Button is pressed in the following situations:

- ✓ Learning-in the Smoke Detector
- ✓ To test the radio communication range.
- ✓ To test if the Smoke Detector is functioning normally.
- ✓ To silence the alarm

## 3 Battery compartment

## 4 Mounting Hole

## 5 Mounting Bracket

## 6 Hook

### ● Battery

- 4 “AAA” Alkaline batteries are used with life expectancy at over 3 years.
- In addition, the Smoke Detector can detect if the battery is low. If the battery voltage is low, LED will flash accompanied with a Low-volume beep once every 30 sec and inform the Control Panel regularly. Low Battery warning typically starts 1 month before complete exhaustion.

### ● Installation Procedures

Step 1. Insert the 4 “AAA” batteries into the battery compartment taking care that the connection respects correct polarity showing on the battery holder.

Step 2. While the 4 batteries are inserted; the SD-7 will sound 2 short beeps and LED start flashing

Step 3. After 3 minutes, one short beep sounds indicating that it is starting to take the threshold reference value. The process will be repeated every 100 sec and notified by a short beep respectively. The completion of sampling process will be notified by a musical tune and the LED will be turned off, the SD-7 is now ready for installation. Proceed to step 4.

However, after 20 minutes, if the SD-7 gives out continuous beeps instead, it indicates that the SD-7 is rejecting this sampling process and its battery should be removed to silence the beeps. Then, start from step 1 to try again after a pause at 30 seconds.

Step 4. Press the Test Button on the Smoke Detector, the LED will be on for 2 Sec. and the buzzer will sound a 2-tone beep to indicate the Smoke Detector is functioning normally and a radio signal is successfully transmitted.

Step 5. Using the bracket as a template, drill two holes in the exact location, the device is to be mounted and insert the dowels.

Step 6. Screw the bracket on with the two hooks facing down by using the screws and screwing them into the dowels.

Step 7. Locate the single line mark on the detector and line it up with one of the hook of the bracket. After both hooks fits in the two mounting holes on the detector, rotate the detector counter-clockwise to lock it in onto the bracket. The installation is now completed.

### ● Testing the Smoke Detector

By pressing the Test button on the Smoke Detector, you can test if the Smoke Detector is functioning normally.

- If the Smoke Detector functions normally, the LED will be on for 2 Sec. then it will sound a 2-tone beep.
- If the buzzer sounds 3 times of 2-tone beep, that means the “Optical Chamber” on the Smoke Detector is either dirty or out-of-order.

- If the LED doesn't light and no beep is sounded, it means the Smoke Detector is out-of-order.

## ● **Supervisory Signal**

- After installation, the Smoke Detector will automatically transmit Supervisory Signals periodically to the Control Panel at intervals of 30 min. to 50 min. randomly.
- If the Control Panel has not received the signal from the Smoke Detector for a preset period of time, the Control Panel will indicate it on its display to show that particular Smoke Detector is experiencing an out-of-signal problem.

## ● **Detecting the Smoke**

- Once the concentration of the smoke exceeds the set threshold value, the Smoke Detector lights up its LED to indicate it's sending the Smoke Alarm signal to the Control Panel. After the transmission is completed, SD-7 then activates its buzzer with LED flashing rapidly for 10 seconds for local warning.
- After this 10-second local warning period, SD-7 proceeds to perform a follow-up smoke check. If the smoke concentration is found to be alarming still, SD-7 will repeat another 10 seconds of local warning with buzzer and rapid flashing LED.
- SD-7 will repeatedly perform follow-up checks until the smoke concentration is lower than the set value, then the alarm will be stopped automatically, or the alarm can be stopped manually by using the "**Alarm Silence**" function.
- Once a Smoke Alarm Signal has been transmitted, SD-7 will continue to send alarm signals at every 2 minutes when the smoke concentration continues to be higher than allowed. This 2-minute cycle will be repeated until the smoke concentration is lower than the set value, then the alarm will be stopped automatically, or the alarm can be stopped manually by using the "**Alarm Silence**" function.

## ● **Alarm Silence**

- Once the alarm is sounding, pressing the Test button will put the Smoke Detector into Alarm Silence mode for 10 min. and the alarm will be stopped.
- During this 10-min. Alarm Silence period, the LED will flash once per second.
- After this 10-min. period is over, the Smoke Detector will sound a 2-tone beep and then returns to normal operation mode. If the Smoke concentration is still over the set threshold value, the Smoke Detector will sound the warning alarm again.

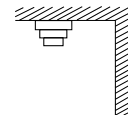
## ● **Taking New Reference Value**

As the operation condition of the smoke detector may vary after being installed for some time, you may wish to take a new reference value to ensure the best use of the smoke detector. To do this,

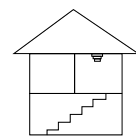
- Press 10 seconds on the TEST button and hold until the LED start to flash. The SD-7 will sounded 2 short beeps then follow the process describing in "**Step 3 of Installation procedures**" to take the new reference value.
- Every time re-insert the batteries, the SD-7 will also take the new reference value following the "**Step 1 to Step 3 of Installation procedures**".

## ● **Installation Notes.**

- It is recommended that the installation site be in the center area of the ceiling.
- **Do not locate the detector in the following locations:**
  - The Kitchen – Smoke from cooking might cause an unwanted alarm.
  - Near a ventilating fan, florescent lamp or air-conditioning equipment – air drafts from them may affect the sensitivity of the detector.
  - Near ceiling beams or over a cabinet – stagnant air in this areas may affect the sensitivity of the detector.
  - In the peak of an "A" frame type of ceiling.



At least 60 cm from the wall



At the top of a stairway

*This device complies with Part 15 of the FCC Rules and RSS-210 of Canada. Operation is subject to the following two conditions:*

- (1) This device may not cause harmful interference, and*
- (2) This device must accept any interference received, including interference that may cause undesired operation.*

### **FCC Caution :**

*To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices)*