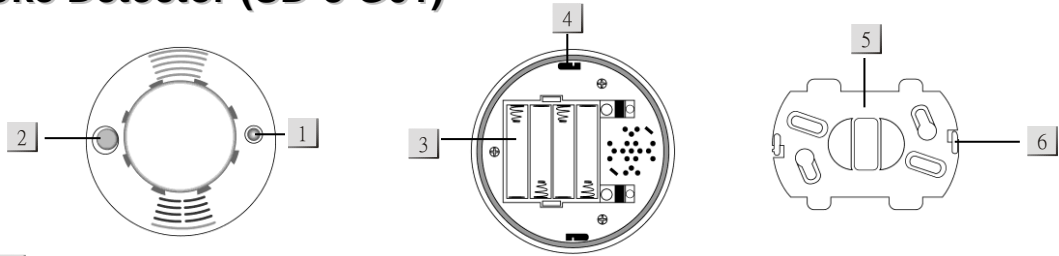


Smoke Detector (SD-8 G01)



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 on.
- While the batteries are inserted and the Smoke Detector is in warming and calibration process, the LED will flash for 8~22 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.
- 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.

<NOTE>



When changing batteries, after removing the old batteries, press the Test button twice to fully discharge before inserting new batteries.

● 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 Smoke Detector will sound 2 short beeps, LED start flashing and begin the 6-minute warming period.
- Step 3. During the 6-minute warming period, you can learn the Smoke Detector into the Panel.
To do the learning process :
- Put the Control Panel into “**Add Device**” Mode (or “**learning**” mode) to learn the ID code of the Smoke Detector. (Please refer to operation manual of the panel.)
 - 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 it’s functioning normally with successfully radio transmitting.
 - If the Control Panel successfully receives the signal, the panel will respond accordingly to indicate the completion of the learning-in process. Please refer to the manual of the panel.
- Step 4. When the 6-minute warming period is over, one short beep will sound to indicate that the Smoke Detector is starting calibration process. The process will be repeated every 100 sec and notified by a short beep respectively. The completion of calibration process will be notified by a 2-tone beep and the LED will be turned off.
Normally it takes about 2 ~ 16 minutes to do the calibration. However, after 16 minutes, if the Smoke Detector gives out continuous beeps instead, it indicates that the Smoke Detector is failed in the calibration and its battery should be removed to silence the beeps. Then, start from step 1 to try again after a pause of at least 30 seconds.

<NOTE>



During the calibration period, pressing the Test Button is prohibited. If you are not able to do the learning process (Step 3) during the 6-minute warming period, you are requested to do the learning process after the calibration period (Step 4).

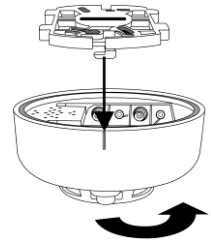
- Step 5. After the completion of the warming and calibration process, put the Control Panel into “**Walk Test**” mode.

Then, decide upon a suitable location for the Smoke Detector's installation and from there, press the Test button to confirm this location is within signal range of the Control Panel.

Step 6. Using the bracket as a template, drill two holes in the exact location, the device is to be mounted and insert the dowels.

Step 7. Screw the bracket on with the two hooks facing down by using the screws and screwing them into the dowels.

Step 8. 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 beeps, 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 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-8 then activates its buzzer with LED flashing rapidly for 10 seconds for local warning.
- After this 10-second local warning period, SD-8 proceeds to perform a follow-up smoke check. If the smoke concentration is found to be alarming still, SD-8 will repeat another 10 seconds of local warning with buzzer and rapid flashing LED.
- SD-8 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-8 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.

● **Recalibration**

As the operation condition of the smoke detector may vary after being installed for some time, you may wish to recalibrate the smoke detector to take a new smoke detection threshold value and ensure optimal performance of the smoke detector. To do this,

- Press 10 seconds on the TEST button and hold until the LED start to flash. The SD-8 will sound 2 short beeps then follow the process described in calibration process to take the new reference value
- Every time the batteries are removed and reinserted, the SD-8 will also take the new threshold value following the warning and calibration process

● **Auto-Calibration**

- After first installation, SD-8 will perform auto-calibration after 4 hours. Afterwards it will perform

auto-calibration once every month. During the auto-calibration process, SD-8 will not emit any sound. Each calibration sampling process takes 2 minutes, if the process fails, it will be retried for a maximum of 5 times. If the 5th retry fails, the LED will flash rapidly and SD-8 will send calibration failure code to control panel. The LED flashing can be cancelled by removing and reloading the batteries, or manually starting the calibration process. However if the manual calibration fails again, SD-8 will emit continuous beeps. In this case you need to remove and reload the batteries to stop the beeping sound (please wait for 30 seconds after removing batteries before reloading them.)

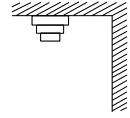
<NOTE>



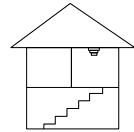
When SD-8 auto calibration fails, the smoke alarm function will still work normally using the threshold value taken from last successful calibration.

● **Installation Note**

- 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 these 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