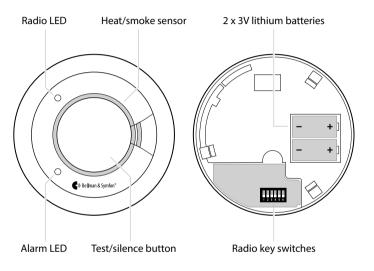


BE1284 BELLMAN & SYMFON AB ENGLISH



### **Overview**

### BE1284



**Read this first.** Read and retain this booklet carefully for as long as the product is being used. It contains vital information on the operation and installation of your alarm. This booklet should be regarded as part of the product. This apparatus should be installed by a competent person. This booklet **must** be given to the householder and any subsequent user.

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**Please note:** This smoke alarm is equipped with a radio module that transmits radio signals to one or several supplementary Visit receivers. A Visit receiver will help to ensure that the alarm is noticed throughout the property. The alert and signal pattern for the Visit receiver is explained in the product's user manual.

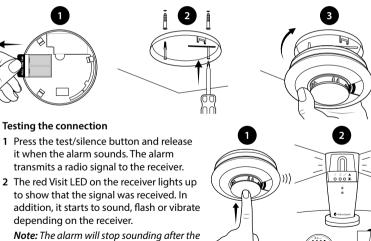
# Quick start guide

button is released and the Visit receiver will

time out in less than a minute.

Make sure to select a location complying with the advice in Location and positioning.

- 1 Lift off the mounting bracket and carefully place your thumb over the batteries and remove the pull tab to power the smoke alarm.
- 2 Taking care to avoid any electrical wiring, fix the mounting bracket to the ceiling or wall using the supplied screws and plugs. Mount it at least 305 mm (12") from walls and obstructions, ideally centrally in the room or area.
- 3 Fit the alarm to the bracket by turning it clockwise until it snaps into place.



# **Indication summary**

Normal operation	Action	LED	Sounder
Power up	Pull battery tab	1 red + 1 yellow blink	Off
Standby		Off	Off
Sensing fire		Red + green	Full sound
Silence alarm	Press test button	1 red blink / 8 s	Off for 10 mins
Fault mode	Action	Alarm LED	Sounder
Low battery		1 yellow blink / 48 s	1 beep / 48 s
Faulty smoke sensor		2 yellow blinks / 48 s	2 beeps / 48 s
Faulty heat sensor		2 yellow blinks / 48 s	2 beeps / 48 s
End of life		3 yellow blinks / 48 s	3 beeps / 48 s
Silence end of life for up to 30 days	Press test button	Off for 72 h	Off for 72 h
Contaminated chamber		4 yellow blinks / 48 s	Off
Test mode	Action	Alarm LED	Sounder
Test smoke alarm	Press test button	Red + green	Full sound
Alarm memory	Action	Alarm LED	Sounder
24 h memory*		2 red blinks / 48 s for 24 hours	Off
Memory reset*	Press & hold button	Rapid red blinking	Rapid chirping

**Note:** During test and in case of fire, the red LED on the Visit receiver lights up and it starts to sound, flash or vibrate depending on the receiver.

\* See Alarm memory on page 25.

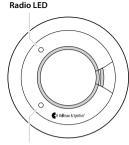
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### **Indicators** explained

### Normal operation

**Power up.** Twist off the alarm from the mounting bracket, see the 'Quick start guide'. Remove the battery tab to power the alarm. The alarm LED will blink in red and yellow once to show that the alarm has been powered up and is now in standby mode.

**Standby.** In standby mode, there are no active visible or audible indications to the occupant. To confirm that the alarm is operational, perform a weekly button test.



Alarm LED

Weekly button test. To test the alarm, see the section 'Manually testing your alarm'.

Sensing fire. As soon as the smoke alarm senses smoke or heat, it will sound the alarm, the alarm LED will blink rapidly in red and the radio LED will light up in green. In addition, the red LED on the Visit receiver lights up and it starts to sound, flash or vibrate depending on the receiver. Follow the instructions in the section 'What to do in the event of a fire' and evacuate the building.

Silence false / nuisance alarms. Occasionally smoke alarms can be activated by phenomena other than fire, such as dust, insects, cooking smoke and shower steam. Once you are sure it is a nuisance alarm, press the test/silence button to silence the alarm for 10 minutes. The alarm LED blinks in red every 8 second for 10 minutes and the Visit receiver LED will time out within 1 minute. Pressing the test/silence button will make the unit less sensitive, but if a large amount of smoke/steam/dust is observed, the unit will remain in alarm.

### **Fault conditions**

Low battery. The alarm will emit a short beep and the alarm LED will blink in yellow when it becomes partially depleted. When electronic self-testing indicates that the

battery is becoming low, the alarm will beep, and the alarm LED will blink in yellow at the same time about every 48 seconds to warn the user. This indicates that the batteries must be replaced. Also, make sure to check the smoke alarm expiration date which is given on the sidewall of the alarm.

**Contaminated chamber.** If the alarm sounds without any apparent smoke present, press the test/silence button to silence the alarm for 10 minutes as described above. If the alarm sounds again it may be dusty. Pressing the test/silence button again, within 4 minutes of the alarm re-sounding, will cause the alarm to compensate for chamber contamination. This will normally resolve the problem. If the alarm re-sounds for the third time, it is likely that the alarm may be excessively dusty and must be replaced. If it is not convenient to replace it immediately, pressing the test/silence button within 4 minutes of it going into alarm (for the third time) will silence the alarm for 8 hours – however, it will give two short beeps (second apart) every 10 minutes to remind the user it has been disabled. If the contamination clears, the alarm will return to normal operation.

Note: This does not reduce the users' fire protection, as a smoke alarm in continuous alarm due to a fault, is useless and must be silenced – by taking the alarm down or as described here. This procedure has the added benefits that the user is reminded every 10 minutes by two short beeps that the alarm needs to be replaced, and that if the problem clears the alarm will return to detecting fire. If the dust level is too high, the alarm LED blinks 4 times in yellow. Cleaning or replacing the chamber cover should only be carried out by suitably trained personnel.

**Faulty smoke chamber.** In the unlikely event of the smoke sensing chamber becoming defective, the alarm will give 2 short beeps with 2 alarm LED blinks in yellow every 48 seconds. The alarm must then be replaced. If it is not convenient to replace it immediately, pressing the test/silence button will silence the beeps and stop the alarm LED from blinking for 12 hours. This can be repeated as required.

End of Life. When the sensor has reached its end of life, the alarm will beep and the alarm LED will blink 3 times in yellow every 48 seconds.

## Using broadcast

If you want the smoke alarm radio signal to be transmitted to **all** Visit receivers within range, you can activate broadcast mode. This will override the radio key settings.

 To activate broadcast, remove the smoke alarm from the bracket and move the radio switches on the back of the alarm to the 110010 position, see the image to the right.



# Changing the radio key

If your Visit system is activated for no reason, there is probably a nearby system that triggers yours. In order to avoid radio interference, you need to change the radio key on all units. The radio key switches are located on the back of the smoke alarm, under the mounting bracket, see the image to the right.

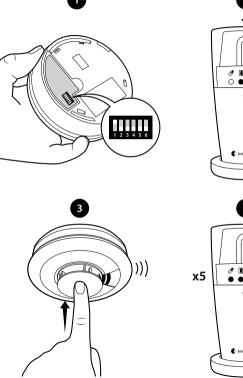
### Here is how you change the radio key:

 Remove the smoke alarm from the bracket and move any of the radio key switches 1 – 6 to the up = on position to change the radio key.



- **2** Press and hold the test/function button on the receiver until the green and yellow Visit LEDs blink alternately. Release the button.
- 3 Press the smoke alarm test/silence button until it sounds to sends the new radio key.
- 4 All Visit LEDs on the receiver blink 5 times to show that the radio key has been changed. It then returns to normal mode.

**Note:** All Visit units must be set to the same radio key in order to operate as a group. If broadcast mode is activated, all Visit receivers will respond regardless of the radio key settings.





### Location and positioning

You can easily install an alarm on each level of the property, in hallways/corridors outside any sleeping area, in each bedroom and in other rooms throughout the property to give warning of fire.

Heat alarms can be installed in kitchens, garages and other areas where smoke alarms are unsuitable.

This alarm can be connected to a supplementary Visit receiver in order to provide an additional warning.

### NATIONAL FIRE PROTECTION ASSOCIATION REQUIRED PROTECTION

**Smoke detection.** Where required by applicable laws, codes, or standards for the specified occupancy, approved single- and multiple-station smoke alarms shall be installed as follows:

- 1 In all sleeping rooms and guest rooms.
- **2** Outside of each separate dwelling unit sleeping area within 6.4 m (21 ft) of any door to a sleeping room, the distance measured along a path of travel.
- 3 On every level of a dwelling unit, including basements.
- **4** On every level of a residential board and care occupancy (small facility), including basements and excluding crawl spaces and unfinished attics).
- 5 In the living area(s) of a guest suite.
- 6 In the living area(s) of a residential board and care occupancy (small facility).

### Are more smoke alarms desirable?

The required number of smoke alarms might not provide reliable early warning protection for those areas separated by a door from the areas protected by the required smoke alarms. For this reason, it is recommended that the occupant consider the use of additional smoke alarms for those areas for increased protection. The additional areas include the basement, bedrooms, dining room, furnace room, utility room, and hallways not protected by code mandated smoke alarms. The installation of smoke alarms in bathrooms/shower rooms, kitchens, attics (finished or unfinished), or garages is not normally recommended, as these locations occasionally experience conditions that can result in improper operation.

The equipment should be installed using wiring methods in accordance with the National Fire Protection Association's Standard 72, Chapter 11. (National Fire Protection Association, Batterymarch Park, Quincy, MA 02269).

### **IMPORTANT!**

Specific requirements for smoke alarm installation vary from state to state and from region to region. Check with your local fire department for current requirements in your area.

#### Smoke and heat alarm transmitter, BE1284

Sufficient smoke must enter your smoke alarm before it will respond. Your smoke alarm needs to be within 6 m (20 ft) of the fire to respond quickly. Smoke alarms also need to be in positions where they can be heard throughout the property, so they can wake you and your family in time for everyone to escape. A single smoke alarm will give some protection if it is properly installed, but most homes will require at least two or more (preferably connected to one or several Visit receivers) to ensure that a reliable early warning is given. For recommended protection, you should install individual smoke alarms in all rooms where a fire is most likely to break out (apart from the kitchen and bathroom).

### **Multi-level dwellings**

If your home has more than one floor, at least one alarm should be fitted on each level, see **Figure 1**. Preferably the alarms should also be connected to one or several Visit receivers to give sufficient warning throughout the property.

**Figure1** illustrates where smoke and heat alarms should be located in a typical twostory house. Note the spacings in **Protection levels** which ensure the early detection of fire and that the warning will be heard. Locate heat alarms in rooms adjoining escape routes - kitchens, garages, furnace rooms, etc. where smoke alarms are unsuitable.

### Single story dwelling

If the premises are one story, you should put your first smoke alarm in a corridor or hallway between the sleeping and living areas. Place it as near to the living area as possible, but make sure that it can be heard loudly enough in the bedroom to wake someone. See **Figure 2** for placement example.

In houses with more than one sleeping area, smoke alarms should be placed between each sleeping area and the living area and it is recommended that heat alarms should be placed in the kitchen and garage.

### Checking to make sure alarms can be heard

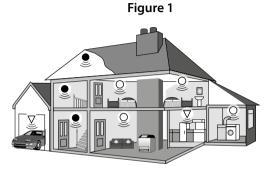
With the alarms sounding in their intended locations, check to make sure that the alarm can be heard in each bedroom with the door closed, above the sound of any TV/ audio systems. The TV/ audio systems should be set to a reasonably loud conversation level. If you cannot hear the alarm over the sound of the TV/audio system, the chances are it would not wake you. Connecting the smoke alarms to one or several Visit receivers will help to ensure that the alarm is noticed throughout the property.

### Positioning

### **Ceiling mounting**

Hot smoke rises and spreads out, so a central ceiling position is the recommended location. The air is "dead" and does not move in corners, therefore smoke alarms must be mounted away from corners. Keep at least 305 mm (12") from walls and corners, see **Figure 3**. Additionally, mount the unit at least 305 mm (12") from any light fixture or decorative object that might prevent smoke from entering into the smoke alarm.

### **Protection levels**



### Figure 2 Bedroom 0 Q Bedroom Toilet ΓC Θ Laundry Bedroom 00 Kitchen $\nabla$ ÷. Living room Dining room Q

### Minimum protection level

- smoke alarm on each level
  - in each sleeping area
  - every 6.4 m (21 ft) of hallways and rooms
  - within 3 m (10 ft) of all bedroom doors

#### **Recommended protection level**

(In addition to the above):

- smoke alarms in every room (except kitchens and bathrooms)
- heat alarms located in kitchens, garages etc.
- within 5.3 m (17 ft) of potential fire sources

### Wall mounting

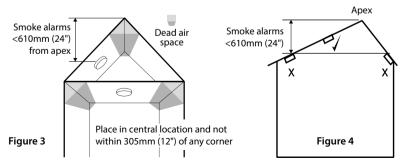
If ceiling mounting is impractical, smoke alarms may be mounted on a wall, provided that:

- 1 The top of the smoke alarm is between 150 mm (6") and 305 mm (12") below the ceiling.
- 2 The bottom of the smoke alarm is above the level of any door openings.

Wall mounting should only be considered where closely spaced beams or similar obstructions may preclude ceiling mounting. It is considered to be the responsibility of the installer/client to determine if the presence of asbestos in the ceiling material would make ceiling mounting 'impractical'.

### On a sloping ceiling

With a sloping or peaked ceiling, install a smoke alarm within 610 mm (24") of the peak, measured vertically. If this height is less than 610 mm (24"), the ceiling is regarded as being flat, see **Figure 4**.



### Locations to avoid

### DON'T place smoke alarms in any of the following areas:

- Bathrooms, kitchens, shower rooms, garages or other rooms where the smoke alarm may be triggered by steam, condensation, normal smoke or fumes. Keep at least 6 meters (20 ft) away from sources of normal smoke/fumes.
- Locate away from very dusty or dirty areas as dust build-up in the chamber can impair performance. It can also block the insect screen mesh and prevent smoke from entering the smoke detector chamber.
- Do not locate in insect infested areas. Small insects getting into the smoke detector chamber can cause intermittent alarms.
- Places where the normal can exceed 104 °F (40 °C) or be below 32°F (0 °C) (e.g. attics, furnace rooms, directly above ovens or kettles etc.) as the steam could cause nuisance alarms.
- Near a decorative object, door, light fitting, window moulding etc., that may prevent smoke from entering the smoke alarm.
- Surfaces that are normally warmer or colder than the rest of the room (e.g. attic access). Temperature differences might stop smoke from reaching the alarm.
- Next to or directly above heaters or air conditioning vents, windows, wall vents etc. that can change the direction of airflow.
- In very high or confined areas (e.g. over stairwells) where it may be difficult to reach the alarm (for testing, hushing or battery replacement).
- Locate the alarm at least 900 mm (3 ft) from dimmer controlled lights and wiring as some dimmers can cause interference.
- Locate alarm at least 1.5 m (5 ft) and route wiring at least 1 m away from fluorescent light fixtures as electrical "noise" and/or flickering may affect the unit.

# Fire safety advice

When using household protective devices, basic safety precautions should always be followed, including those listed below.

- Please read all instructions.
- Rehearse emergency escape plans so everyone at home knows what to do in case the alarm sounds.
- Use the smoke alarm test/silence button to familiarize your family with the alarm sound and to practice fire drills regularly with all family members. Draw up a floor plan that will show each member at least 2 escape routes from each room in the house. Children tend to hide when they don't know what to do. Teach children how to escape, open windows, and use roll up fire ladders and stools without adult help. Make sure they know what to do if the alarm goes off.
- Constant exposures to high or low temperatures or high humidity may reduce battery life.
- Nuisance alarms can be quickly silenced by fanning vigorously with a newspaper or similar to remove the smoke or press the test/silence button.
- Do not attempt to remove, recharge or burn the battery, as it may explode.
- If it is necessary to remove the battery for separate disposal, handle carefully to avoid possible eye damage or skin irritation if battery has leaked or corroded.
- To maintain sensitivity to smoke, do not paint or cover the smoke alarm in any manner; do not permit any accumulation of cobwebs, dust or grease.
- If the smoke alarm has been damaged in any way or does not function properly, do not attempt a repair. Get your smoke alarm serviced.
- This appliance is intended ONLY for premises having a residential type environment.
- This is not a portable product. It must be mounted following the instructions in this leaflet.
- Smoke alarms are not a substitute for insurance. The supplier or manufacturer is not your insurer.

### Fire safety hints

- Store fuel and other flammable materials in proper containers.
- Discard oily or flammable rags.

- Always use a metal fireplace screen and have chimneys cleaned regularly.
- Replace worn or damaged sockets, switches, home wiring and cracked or frayed electrical cords and plugs.
- Do not overload electrical circuits.
- Keep matches away from children.
- Never smoke in bed. In rooms where you do smoke, always check under cushions for smoldering cigarettes and ashes.
- Service central heating systems regularly.
- Be sure all electrical appliances and tools have a recognized approval label.
- Smoke alarms are not to be used with alarm guards unless the combination has been evaluated and found suitable for that purpose.

This device cannot protect all persons at all times. It may not protect against the three most common causes of fatal fires:

1 Smoking in bed.

2 Leaving children at home alone.

**3** Cleaning with flammable liquids, such as petrol.

Further information can be obtained from the fire department.

### What to do in the event of a fire

- 1 Check room doors for heat or smoke. Do not open a hot door. Use an alternate escape route. Close doors behind you as you leave.
- **2** If smoke is heavy, crawl out, staying close to the floor. Take short breaths, if possible, through a wet cloth or hold your breath. More people die from smoke inhalation than from flames.
- **3** Get out as fast as you can. Do not stop for packing. Have a prearranged meeting place outside for all family members. Check everybody is there.





- **4** Call the fire brigade from a neighbor's house or mobile phone. Remember to give your name and address.
- 5 NEVER re-enter a burning house.



#### Limitations of smoke alarms

While smoke alarms are extremely effective, independent authorities have stated that under some circumstances they may become ineffective. There are a number of reasons for this:

- Smoke alarms will not work if the batteries are depleted or if they are not correctly installed. Replace the batteries if necessary. Also, check the replace by date on the side of the alarm.
- Smoke alarms will only work when sufficient smoke reaches the alarm. Smoke may be prevented from reaching the alarm if the fire is too far away, for example, if the fire is on another floor, behind a closed door, in a chimney, in a wall cavity, or if the prevailing air drafts carry the smoke or heat away. Installing smoke alarms on both sides of closed doors and installing more than one alarm as recommended by code, may significantly improve the probability of early detection.
- The smoke alarms may not be heard due to other loud noise, hearing impairment, etc.
- A smoke alarm may not wake a person who has taken drugs or alcohol.
- Certain types of fires may be difficult to detect in time to provide sufficient early warning. Examples include; fires caused by smoking in bed, gas leaks, explosions, poor storage of flammable rags and/or liquids, for example, fuels, paint, paint thinner, etc., overloaded electrical circuits, or children playing with matches.
- Current studies have shown that smoke alarms may not awaken all sleeping individuals.

It is the responsibility of individuals in the household who are capable of assisting others, to provide assistance to those who may not be awakened by the alarm sound, or to those who may be incapable of safely escaping the area unassisted.

#### Limitations of heat alarms

There are various situations where a heat alarm may not be effective:

- Fires where the victim is directly exposed to flame for example; clothes catching fire while cooking.
- Fires where the heat is prevented from reaching the heat alarm due to a closed door or other obstruction.
- Incendiary fires where the fire grows so rapidly that an occupant's egress is blocked even with properly located heat alarms.

### Limitations of radio signals

This alarm is very reliable and is tested to high standards. However, due to its relatively low transmitting power and limited radio range there are some limitations to consider:

- Receivers may be blocked by radio signals occurring on or near their operating frequencies, regardless of the radio settings.
- Radio transceiver equipment should be tested regularly, at least weekly. This is to determine, whether there are sources of interference preventing communication, that the radio paths have not been disrupted by moving furniture or renovations, and so generally protect against these and other faults.
- This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause interference to radio and television reception. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause interference, which can be verified by turning the device on and off, the user is encouraged to eliminate it by one or more of the following measures:
- Re-orientate or re-locate the unit.
- Increase the distance between the smoke alarm and the device being affected.
- Consult the supplier or an experienced radio/television technician.

### Installation

### Installation procedure

- 1 Select a location complying with the advice in the 'Location and positioning' section.
- 2 Lift off the mounting bracket from the smoke alarm and discard the cardboard insert.
- 3 Place the mounting bracket on the ceiling exactly where you want to mount the alarm. Mark the location of the two screw holes
- 4 Taking care to avoid any electrical wiring in the ceiling, drill holes using a 5.0 mm (3/16") drill bit through the center of the marked locations. Push the plastic screw anchors provided into the drilled holes. Screw the mounting bracket to the ceiling.
- 5 Start the alarm according to "Quick start guide" on p. 3
- 6 Carefully line up the alarm on to the mounting bracket, gently press to the base and twist clockwise, see Figure 5. Install all the other alarms similarly.
- 7 Press the test button on each smoke alarm to ensure that the smoke alarm unit works, see Figure 6.
- 8 If you are using a supplementary Visit receiver, also make sure that it lights up a fire symbol in red and alerts with sound, flashes or vibrations (depending on the type of Visit receiver you are using). For more information, see the 'Quick start guide' and the Visit receiver user manual.



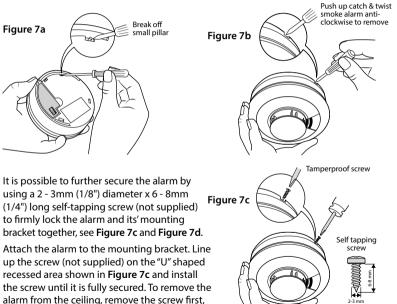
Figure 5 Rotate the unit clockwise.



### Tamper proofing the smoke alarm

The alarm can be made tamper proof to prevent unauthorized removal of the alarm.

Break off the small pillar on the base as shown in Figure 7a. To remove the alarm from the ceiling it is now necessary to use a small screwdriver. To release the catch, push the catch towards the ceiling and then twist off the alarm, see Figure 7b.



recessed area shown in Figure 7c and install the screw until it is fully secured. To remove the alarm from the ceiling, remove the screw first, and then twist it off counter clockwise.

Figure 7d

### Testing, monitoring and maintenance

Your alarm is a life-saving device and should be checked periodically.

### Manually testing your alarms

It is recommended that you test your alarms after installation and then at least weekly to ensure the units are working. It will also help you and your family to become familiar with the sound of the alarms.

- Press and hold the test/silence button until the alarm sounds and the alarm LED blinks in red, see Figure 6. The alarm will stop sounding shortly after the button is released.
- If the alarm has a connection to a supplementary Visit receiver, check that the radio LED on the smoke alarm lights up in green and that the Visit receiver responds. See the 'Quick start guide' and the Visit receiver user manual.
- The Visit receiver will time out in less than a minute.
- Repeat this procedure for all other smoke alarms in the system.

### WARNING: Do not test with flame.

This can set fire to the smoke alarm and damage the house. We do not recommend testing with smoke as the results can be misleading unless special apparatus is used.

When you press the test/silence button, it simulates the effect of smoke which it could experience in a real fire. So, there is no need to test smoke alarms with smoke or flame.

### **Controlling nuisance alarms**

The smoke alarms have a combined test/silence button to help you control nuisance and false alarms.

When the alarm sounds, if there is no sign of smoke or noise to indicate that there
is a fire, it should be assumed that it is due to an actual fire. The dwelling should be
evacuated immediately and you should contact the local fire department.

- It is possible that cooking smoke, steam, etc., may be the source of nuisance alarms.
- If there are frequent nuisance/false alarms, it may be necessary to relocate the smoke alarm away from the source (cooking smoke, shower steam, etc.)
- If your Visit system is activated for no reason, there is probably a neighbouring Visit system that triggers yours. In order to avoid radio interference, you need to change the radio key on all units, see 'Changing the radio key'.
- 1 To cancel a false alarm from a smoke alarm (which has its alarm LED blinking rapidly in red), press the test/silence button and the smoke alarm will automatically switch to a reduced sensitivity condition. The smoke alarm will be silenced for a period of approx. 10 minutes. The alarm LED will blink in red every 8 seconds to indicate that the unit has been silenced.
- **2** The smoke alarm will reset to normal sensitivity at the end of the 10-minute silenced period. If additional silenced time is required, simply push the button again.
- **3** If kitchen usage/layout is such that there is an unacceptable level of nuisance alarms, re-locate the smoke alarm further away where it will be less affected by cooking smoke, steam, etc. We recommend the use of a heat alarm in the Kitchen area to avoid such nuisance alarms.

### **Power monitoring**

### What to do when an alarm is beeping:

If the smoke alarm is beeping about every 48 seconds with the alarm LED blinking in yellow at the same time, replace the battery.

### **Battery replacement**

When the battery power is low, and replacement is necessary, the smoke alarm will "beep" and the alarm LED will blink in yellow at the same time about once every 48 s for at least 30 days. The battery must then be replaced. Also, replace the battery if the alarm does not sound when the test/silence button is pressed. When you replace the

battery, you must press the test/silence button to check that the alarm is functioning correctly. Only use Panasonic CR123A batteries.

Dispose of used batteries promptly. Keep away from children. Do not disassemble and do not dispose of in fire

#### Warning!

# CONSTANT EXPOSURES TO HIGH OR LOW TEMPERATURES OR HIGH HUMIDITY MAY REDUCE BATTERY LIFE.

- Use only specified batteries. Use of a different battery may have a detrimental effect on alarm operation.
- These batteries are intended for use at ordinary temperatures where anticipated high-temperatures are not expected to exceed 212 °F (100 °C).
- Prolonged periods of alarm will also reduce battery life.

**Caution:** The batteries used in this device may present a fire or chemical burn hazard if mishandled. Do not recharge, disassemble, expose to heat above 212 °F (100 °C)or dispose of in fire. Replace the batteries with Panasonic CR123A. Use of other battery types may present a risk of fire or explosion.

#### **Cleaning your alarm**

Clean your alarm regularly. Use a soft bristle brush or the brush attachment of your vacuum cleaner to remove dust and cobwebs from the side slots where the smoke enters. To clean the cover, wipe with a damp cloth and dry thoroughly.

### WARNING: Do not paint your alarm.

Other than the maintenance and cleaning described in this manual, no other customer servicing of this product is required. Repairs, when needed, must be performed by the manufacturer.

### Smoke alarm automatic self-test

The smoke chamber in the smoke alarm automatically tests itself every 16 seconds. If the chamber is degraded it will beep twice every 48 seconds with the alarm LED blinking in

yellow at the same time. If this happens, clean the unit. If the beeping persists and the beep does not coincide with the alarm LED blinking in yellow, return the unit for service.

### Dust and insect contamination

All smoke alarms and particularly the optical (photoelectric) type are prone to dust and insect ingress which can cause false alarms.

The latest design, materials, and manufacturing techniques have been used in the construction of our alarms to minimize the effects of contamination. However, it is impossible to completely eliminate the effect of dust and insect contamination, and therefore, to prolong the life of the alarm you must ensure that it is kept clean so that excess dust does not build up. Any insects or cobwebs in the vicinity of the smoke alarm should be promptly removed. Excessive dust may cause the unit to fault with 4 yellow blinks every 48 seconds and 4 chirps with 4 blinks when you press the test/silence button.

In certain circumstances, even with regular cleaning, contamination can build up in the smoke sensing chamber causing the alarm to sound or fail. If this happens, the smoke alarm must be returned for service or replacement. Contamination is beyond our control, it is totally unpredictable and is considered normal wear and tear. For this reason, contamination is not covered by the warranty.

### End of life

The entire alarm must be replaced if the unit is installed for over 10 years. Check the 'replace by' date marked on the side of the unit. Before the alarm is safely discarded, remove from the mounting bracket and disconnect the batteries.

#### Do not put the alarm into a fire.

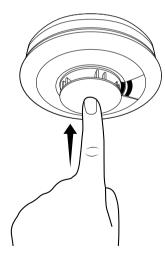
The alarm should be disposed in a safe and environmentally sound manner at your local recycling center.

### **Alarm Memory**

The Alarm memory is an important feature where even if the house is unoccupied during an alarm condition it warns the homeowner that the device has previously detected Fire and been in alarm. The device which has alarmed will flash the red led twice every 48 seconds for the next 24 hours. In addition, the next test button event after the alarm condition will give a "chirping sound pattern" and rapid flashing red led to indicate that this device has previously alarmed.

#### Memory reset

The action of pressing the test button will also reset the alarm memory.



### Troubleshooting

Most problems with the smoke alarm can be solved quickly by following the advice in this section. For additional information, visit our webpage.

lf	Try this	
The smoke alarm sounds for no apparent reason.	<ul> <li>Check for smoke, steam, etc. from the kitchen or bathroom.</li> <li>Paint and other fumes can cause nuisance alarms.</li> </ul>	
	• Check for signs of contamination such as cobwebs or dust. If necessary, clean the smoke alarm as described in the section 'Testing, monitoring and maintenance'.	
	<ul> <li>Press the test/silence button on the smoke alarm – this will silence the alarm for 10 minutes.</li> </ul>	
The alarm fails to sound when the test/silence button is pressed	<ul> <li>Check the age of the unit - see the 'replace by' label on the side of the unit.</li> <li>If necessary, replace the batteries with Panasonic CR123A.</li> </ul>	
The alarm sounds when the test button is pressed – but the Visit receiver is not activated	<ul> <li>Check the smoke alarm and Visit receiver batteries.</li> <li>Move the Visit receiver closer to the smoke alarm.</li> <li>Check that the smoke alarm and the Visit receiver are set to the same radio key. For more information, see 'Changing the radio key'.</li> </ul>	
The Visit receiver is triggered for no apparent reason.	<ul> <li>There is probably another Visit system nearby that triggers yours. Change the radio key on all units, see 'Changing the radio key'.</li> </ul>	

# **Technical specifications**

Sensor type	Multi-criteria optical smoke and heat alarm
Certification	ANSI/UL217, CAN/ULC-S531, ANSI/UL539, ULC/ORD-C539, FCC Part 15 and IC RSS-210
Batteries	2 x 3V CR123A Lithium batteries (replaceable)
Current drain	Typical 9µA standby
Battery life	Up to 10 years
Test/silence button	Checks horn circuit / silences the alarm for 10 minutes
Audible alarm	> 85dB(A) @ 3m (10ft) minimum
Operating temperature	0°C to 40°C (32°F to 104°F)
Humidity range	15% to 95% R.H. (non-condensing)
Heat sensor fixed rating	57°C +/- 2°C (135°F +/- 5°F)
Heat sensor rate of rise	> 40°C (104°F) @ 8.3°C (15°F) / min
Radio connection	Features a radio module inside the smoke alarm
Radio frequency	433.92 MHz
Coverage	80 – 200 m (87 – 219 yd), clear line of sight. The range is reduced by walls, large objects and other radio transmitters such as TVs and mobile phones.
Please note	Radio conditions and interference etc. can change over time, therefore no guarantee can be given about a spe- cific transmission range etc. Each time, place and building are unique from a radio transmission point of view.
Broadcast function	Transmits the alarm to all other Visit receivers within range, overriding the radio key settings.
Dimensions	120mm (4.7") x 45.7mm (1.8")
Weight	210g (0.46 lbs)

#### Service and support

If your smoke alarm fails to work after you have read the sections 'Installation, Testing monitoring and maintenance' and 'Troubleshooting', please contact the Bellman & Symfon Service Center for North America (see the address at the end of this leaflet) and get an RMA# (Return Merchandise Authorization). Put the smoke alarm in a padded box with the battery disconnected and state the nature of the fault, where the smoke alarm was purchased and the date of purchase. Ship to the address given at the end of this leaflet using the shipping company of your choice (UPS, USPS, FedEx).

#### Warranty conditions

Bellman & Symfon guarantees this smoke alarm (excluding the battery) for 2 years from date of purchase against any defects that are due to faulty materials or workmanship. This guarantee only applies to normal conditions of use and service, and does not include damage resulting from accident, neglect, misuse, unauthorized dismantling, or contamination howsoever caused. This guarantee excludes incidental and consequential damage. Further the warranty does not cover Acts of God, such as fire, flood, hurricanes and tornadoes. If this smoke alarm should become defective within the guarantee period, it must be returned to Bellman & Symfon, with proof of purchase, carefully packaged, with the problem clearly stated. We shall at our discretion repair or replace the faulty unit.

Bellman & Symfon shall not be liable for any incidental or consequential damages caused by the breach of any express or implied warranty. Any implied warranty of merchantability or fitness for purposes is limited to the duration of the above warranty period. This warranty gives you specific legal rights and you may also have other rights that vary from state to state. Some states or jurisdictions do not allow the limitation or exclusion of incidental or consequential damages, or limitations on how long an implied warranty last so the above limitation may not apply to you. Do not interfere with the smoke alarm or attempt to tamper with it. This will invalidate the guarantee, but more importantly may expose the user to shock or fire hazards. This guarantee is in addition to your statutory rights as a consumer. Bellman & Symfon makes no warranty, expressed or implied, written or oral, including that of merchantability or fitness for any particular purpose, with respect to the battery. The above warranty may not be altered except in writing signed by both parties hereto.

This device complies with Part 15 of the FCC Rules. 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 ID: 24PAKBE1284

Warning: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio 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 televi-



Helps Reduce Cooking Nuisance Alarms

sion 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 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/TV technician for help.

#### Industry Canada statement

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions.

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique 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;

(2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This Class B digital aparatus complies with the Canadian RSS-210. IC: 6693A-BE1284

This smoke alarm is certified to: ANSI/UL217, CAN/ULC-S531, ANSI/UL539 and ULC/ORD-C539

For a complete Declaration of Conformity, please contact the Bellman & Symfon European office.



#### Service center

Bellman & Symfon Service Center for North America 1081 West Innovation Drive Kearney, MO 64060 USA Call 1-877-720-3401 Toll Free

#### European office

Bellman & Symfon Europe AB Södra Långebergsgatan 30 436 32 Askim Sweden Phone: +46 31 68 28 20 E-mail: info@bellman.com

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