

1. PRODUCT DESCRIPTION

Deltronic's heat alarms are approved according to BS5446-2:2003, the European standard for heat alarms.

The sensor inside the heat alarm detects fast rising temperatures or slowly rising towards and above 57 ° C.

The heat alarms has a 10-year lifetime, however their lives can be significantly reduced by adverse environments, incorrect location and a failure to regularly clean and maintain them according to the following instructions. Incorrect location and a lack of reasonable care may also cause them to malfunction and will invalidate the warranty.

Product Features

RB version has a built-in rechargeable lithium battery (not replaceable) which is automatically activated when the smoke alarm is installed on the mounting bracket (fast-fix) and switched off when taken down again.

BB version has 3pcs of replaceable alkaline batteries (LR6/AAA 1.5 V)

- Hush function - Silence the alarm by pressing the test button, ideal for non-emergency situations when an unwanted alarm is triggered. The red LED then flashes every 8 seconds to remind you that the heat alarm is in pause mode and will return to normal operation after 10 minutes.
- Green LED is constantly lit to indicate that the unit is connected to the mains supply and switched on.
- Red LED flashes approximately once a minute, confirming that the heat alarm is powered on and ready to detect high temperatures (normal operation).
- Low battery warning - The heat alarm emits one click per minute.
- Hush the low battery warning - The low battery warning signal often occurs at night and can therefore be temporarily silenced for ten hours by pressing the test button (without deactivating other vital function alerts in case of fire). The batteries or the heat alarm it selves can then later be replaced at a more convenient time, for instance the very next day.
- Extra large and comfortable test button for easy and complete function control. Tests sensitivity, circuitry, power supply and alarm sounder.
- Loud Piezo Electric alarm on 85 Decibel, automatically resets when hazardous condition has past.
- Easy to install mounting bracket "Fast-Fix", fixing screw and plugs supplied.
- The integrated interconnection function allows wired interconnection with up to 16 other smoke or heat alarms, so when a unit alarms, the other interconnected units in the same system will also sound the alarm.
- It is also possibility to connect the alarms wirelessly, this requires that each device add a radio board. Read more under section "Accessories".
- Software that maximizes detection ability and minimize the number of false alarm.

2. CHOICE & LOCATION OF ALARMS

Optical smoke alarms (ACX) this model, are considered to be most effective when it comes to detecting smouldering fires. Fires that can glow for several hours before developing into dangerous fires with open flames. For example, a cigarette lying in a piece of furniture, or an electric cable that is overheated.

Heat alarms (ACH) as an option, may sometimes be used where naturally occurring particles can create false alarms in an optical smoke alarm, for example in kitchens, garages, basements or attics. Heat alarms only respond to heat and not to particles, therefore the area of use is very limited and heat alarms should always be connected together with optical smoke detectors to fulfil a life-saving function.

NOTE! Heat alarms should never to be used in escape routes or placed on walls!

Placement and care of smoke/heat alarms shall be done in accordance with applicable rules and recommendations from eg. Boverket's Building Regulations BBR - BFS 2011: 6, MSB - SRVFS 2007: 1

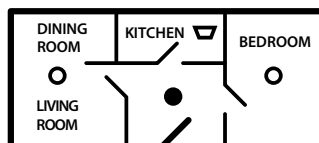
Heat alarms should preferably be mounted in the middle of the ceiling, above stairwells and the like, in the room's highest point. Simple rules are:

- When smoke alarms can't cover all situations, you may add heat alarms to your systems of smoke sensors, were the presence of particles is to high.
- Remember that the sensitivity is slow compared to normal smoke sensors.
- More sensors give increased security, make a strategic decision!

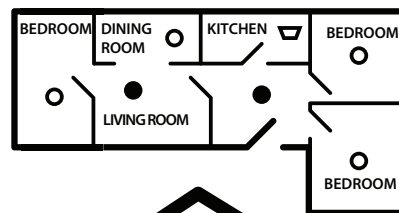
NOTE! In order to achieve a high level of safety, smoke alarms should be placed in each and every room (but not in the kitchen, bathroom and laundry areas due to dust/particle levels were heat alarms can protect).

Example of Placement:

SINGLE STOREY HOME WITH ONE SLEEPING AREA SINGLE STOREY

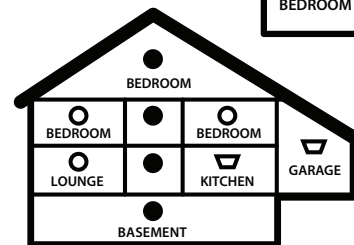


HOME WITH THREE SLEEPING AREAS



MULTIPLE STOREY HOME WITH MULTIPLE SLEEPING AREAS

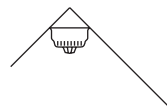
● SMOKE ALARMS FOR MINIMUM PROTECTION
● SMOKE ALARMS FOR INCREASED PROTECTION
● HEAT ALARMS ADDITIONAL PROTECTION



NOTE: Heat alarms only respond to temperatures above 57 ° C and should only be used as a supplement to optical smoke detectors!

3. AVOID THE FOLLOWING LOCATION

The life of the heat alarms may be shortened considerably when placed in unfavourable environment and by carelessness to regularly clean and maintain the heat alarm, according to the instructions below. Incorrect placement can also cause unwanted alarms and affect the function of the alert.



Heat alarms are always mounted in the highest point of the room even at a sloping roof

1. In the angle between the ceiling and the wall, the air stands still and forms a so-called "dead zone" with stationary air that prevents the heat from reaching the detector. Therefore, always place the heat detector at least 50 cm from the walls at the highest point.
2. Do not locate near fans or extractors. These can push/pull smoke and heat away from the alarms.
3. Do not install heat alarms in or near areas with high humidity such as near showers and in bathrooms where the humidity exceeds 85% or surfaces where the temperature exceeds 40° C or drops below 0° C. These conditions can cause disturbing false alarms and damage to the devices.
4. Do not install less than 50cm from walls and light fittings when mounted on the ceiling where dead air may prevent heat reaching the alarm.
5. Do not install smoke or heat alarms on poorly insulated walls and ceilings where cold air boundary layers could delay smoke or heat from reaching the alarm.
6. Do not install near objects that could prevent heat reaching the alarm.
7. Do not install close to fluorescent light fittings that could trigger nuisance alarms.
8. Do not paint the alarm, it may clog the flues.

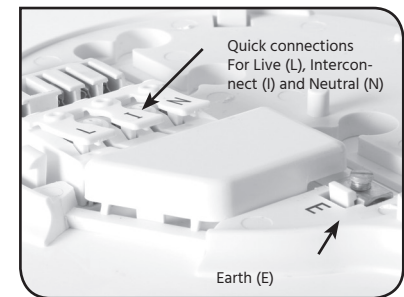
4. INSTALLATION PROCEDURE

NOTE! Mains connected heat detectors should be installed by a qualified electrician and in accordance with regulations for electrical installations. Don't mix ACX10/ACH10 with ACX11/ACH11, they don't interconnect properly!

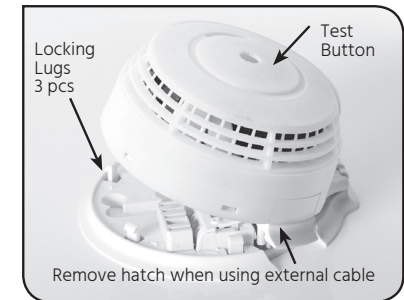
WARNING: Storage or installation of sensors in temperatures below 5°C or above 30°C and in high humidity can cause clicks and disturbing alarms during the actual start-up. These disappear after a short time when the alarm has acclimatised. Extended periods under these conditions will reduce the life of the sensors and void the warranty. Do not expose the devices to drops or splashes. Disconnect the supply to the alarm before disassembly. Connection and supply terminals must not be accessible and may only be connected to other similar devices. Do not connect smoke or heat alarms made by other manufacturers.

WARNING: Disconnect the power to the wiring from the fuse panel before starting the installation of the heating or smoke alarm.

1. Start by removing the fuse, alternative put the fuse switch in the "Off" position for the group used for the installation.
2. The smoke/heat detector should preferably be connected to a separate fuse group (at least 5 A) with no other electrical equipment is connected.
3. Pull the mains leads through the opening on the mounting bracket and then mount it over the manifold / appliance box with help of supplied screw and plug. If the installation is to take place with an external cable, the cables are instead pulled in via the removable cover shown in figure below after the fast-fix socket has been fixed on to the ceiling. The alarms can also be mounted on top of a relay base to be able to expand the alarm signal to other equipment (Sold separately).



4. Connect, Live (Brown conductor) to (L), Neutral (Blue conductor) to (N) and in the event of any interconnection (Separate conductor) to (I) "Interconnect". If necessary, connect Earth (Yellow / Green conductor) to (E) "Earth". Be careful not to mix any of the wires! Only approved cables may be used. The cable must be of at least the 3-wire type with earth where the conductors must have a cross sectional area of at least 1.5 mm².
5. In total, up to 16 Deltronic® ACX11 smoke detectors and/or ACH11 heat detectors can be connected together. When a unit alarms, all other interconnected units are also sending an alarm, which ensures an early warning regardless of where in the building the smoke/heat occurs. **When interconnecting with a cable, all units must be on the same phase, in the case of a radio, there can be different groups and phases, maximum common cable length of 250m.**
6. Install the backup batteries in accordance with the section "Battery replacement" further in the text. (Only applies to **BB** version)
7. Attach the heat device to the mounting bracket, "close" the unit and make sure that the 3 locking lugs secure properly. When the unit is to be removed from its base, use a screwdriver in the grooves to push in the locking lugs around the sides to release the device from the socket.



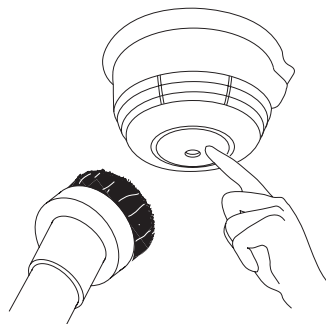
8. Test the alert with a push on the test button with the mains supply disconnected. Check that the warning signal sounds 3 times and flashes red. This test is done to secure the battery backup function.
9. Now switch on the mains supply. The heat alarm can emit one click per minute up to half an hour, while the battery is charging, but will go silent as soon as the built-in battery is charged (:**RB** version only).
10. Make sure that the green LED is constantly lit and that the red LED flashes once a minute (control lamp for mains supply or detection in operation).
11. Test the alert once again with the test button and make sure that all interconnected smoke/heat detectors in the system sound. The red LED flashes only on the device where you preform the test.

5. TEST & MAINTENANCE

- Press the test button momentarily to test individual alarms and press again immediately after the warning signal stops, to test all connected devices. Repeat the procedure for each installed device.
- Test the heat alarm every week using the test button or the remote control (accessory).
- Always test immediately after vacation or other extended stay away from the facility.
- Test the backup battery every six months by disconnecting the mains supply at the fuse panel (the green LED goes off) and test according to the instructions above. Do not forget to reconnect the mains supply after the test.
- Ensure that the green LED is lit, indicating at the unit is connected to mains supply voltage (230V AC).

Care & Maintenance

- Vacuum the heat alarm regularly with a soft brush, and wipe off the unit on the outside with a very light moistened damp cloth, to keep it clean and prevent nuisance alarms.
- Replace the heat detector after 10 years, the mounting bracket fast-fix can be reused, just swap the head unit. Discarded units shall be sent to a recycling station for electrical waste.



Don't mix ACX10/ACH10 with ACX11/ACH11 they don't interconnect!

IMPORTANT NOTE: Use only the test button to test the alarm weekly. Do not test the alarm with either a naked flame or smoke, this will damage and contaminate the alarm causing nuisance alarms in the future.

This is an mains connected product. Do not attempt to open the heat alarm. This can result in fatal electric shock, personal injury or damage to the unit.

6. CHANGING THE BATTERIES

WARNING: Risk of leakage and overheating if the batteries are installed incorrectly. Use only batteries intended for this smoke alarm.

The heat alarm will click once a minute to indicate that the batteries need to be checked or replaced.

The **ACH11RB** contains a built-in rechargeable lithium battery. Make sure the green mains connection light is on, if not, turn on/check the mains supply to the alarm and then let the battery charge. If this does not help, the entire unit must be replaced. Switch off the mains supply, release the locking lugs (3pcs), the heat alarm can then be released from the base (via the hinge) when it hangs at an angle of 70° to the base, pry the unit out of the fast-fix base which can be reused and install a new ACH11RB in reverse order.

The **ACH11BB** contains 3 replaceable LR6/AAA alkaline batteries. Switch off the mains supply, release the locking lugs, remove the old batteries and be sure to insert the new ones in the correct direction. Close the alarm again and make sure the alarm is firmly seated on the mounting bracket, switch the mains supply back on and then test the alarm according to the instructions above.



NOTE! The smoke device ACX11BB cannot be closed if the batteries are missing!

7. ALARM CODES

Full alarm indicates heat detected	Repeated series of three beeps each 4th second, with flashing red LED
Low Battery	Single click every minute and 3 red flashes every 8 seconds	. . .
Jammed test button	One click every 11 seconds
Technical issue	Double click every minute
Time to replace	Triple click every minute

If the full alarm sounds, make sure that everyone leaves the building as soon as possible and remember the following:

- Do not run.
- Do not stop to collect personal belongings.
- If it is safe to do so, close all windows and doors as you escape to prevent the spread of fire.
- Smoke is the main cause of death from fire. If trapped inside the building, cover your mouth, conserve breath and crawl to safety.

Do not silence an alarm until you know the cause of the alarm and not until all occupants are safely outside the building. On the device that detected an alarm, the red LED in the test button flashes, it is only on this device that you can silence the entire system. The LED on the other units will flash once per minute as usual, while the siren sounds. Other connected devices can be hushed/paused but only individually.

8. TROUBLESHOOTING

Problems could be indicated in several ways:

1. The alarm clicks once every minute indicating a low battery. Replace the batteries (**ACH11BB**) or replace or check the unit (**ACH11RB**) as per above.
2. The alarm clicks twice or triple every minute, indicating a technical malfunction, alternatively that the unit needs to be replaced.
3. The alarm clicks once every 11 seconds indicating the test button is jammed. Press the test button to reset/release.
4. The full alarm sounds for no reason. (A repeating series of three beeps with flashing red light). Clean the alarm as above.
5. The alarm does not sound when pressing the test button. Check connections, mains supply and batteries (**ACH11BB**).
6. The red LED remains steadily on or off. (i.e. does not flash approximately once every minute, when the unit is not in alarm). Reset mains supply.
7. The green LED is off. Inspect for obvious damage. Check that the alarm has been installed in accordance with the instructions, that the alarm is connected and that the supply is turned on.
8. In case of repeated false alarms, check if the unit is in a hot air stream. If this does not solve the problem, DO NOT try to repair the device! Apart from the replaceable batteries in the (**ACH11BB**), there are no user-serviceable parts. If the unit is within the warranty period and the conditions are met, state the nature of the problem and return the unit with proof of purchase to the address at the end of this manual. Units outside the warranty period are normally not repaired due to cost.

9. USER INFORMATION

You can do this to avoid fire.

Make sure matches are kept out of reach of children. Never leave lit candles unattended. Never empty ash in the trash or garbage bag. Make sure the stove or fireplace is properly extinguished or that the hearth of the fire is shielded so that no sparks can come out. Handle and store flammable liquids safely. Use only the correct power fuses in the electrical system. Replace defective electrical wires and connectors. Only use approved electrical appliances in the household. Place non-combustible objects in the vicinity of electric heating devices.

Always be prepared for fire

If your home starts to catch fire, your family's life can depend on seconds. Therefore, everyone in the house must be well prepared for such a situation. Make sure to have fire extinguishers available (e.g. fire blanket and fire extinguisher) and that they work and that you/your family can handle them. Make an escape plan and select the windows that are best suited for emergency evacuation if the usual path are blocked by smoke or fire. If windows is located high above ground, arrange a ladder or a supportive rope. Determine a place outside the house, where the family gathers after the alarm. Please keep the bedroom door closed during the night. A door can keep the fire away for so long that you can get out through a window. Practice evacuation with the family in a positive and calm manner.

If it catches fire

Make sure all people come out of the house. Follow the prepared evacuation plan. If possible, close doors and windows to limit the fire. Alert the emergency services (112) and meet them outside the house. If the fire is small, you can try to extinguish it yourself with a fire extinguisher, water hose or if the fire is very small with a fire blanket or carpet. Make sure you have a retreat path. If you can't extinguish yourself, get out of the house as quickly as possible. **Never go back into a building in fire!**

Especially about fire protection in apartment

If a fire starts in your apartment, warn everyone in the apartment and try to extinguish the fire. If this is not possible, close the door to the fire and escape the apartment. Don't forget to close the apartment door when you leave it. Alert the emergency services (112) and meet them outside the house at a safe distance.

If it is burning at another location in the house, it may be best to stay in the apartment and wait for assistance from the emergency services. Never go out into a smoke-filled stairwell. You are safest in your own apartment, stay there and close the doors and windows and wait for the emergency services. Alert emergency services (112) and guide them to your apartment.

10. ACCESSORIES

- Radio board** With this accessory, a total of up to 16 devices can be connected wirelessly, you can mix with cable if you want.
- Remote control** Activate the test button without being near the device hush a device for 10 minutes. Reset the device (same as turning the mains supply on and off)
- Relay socket** This accessory can activate other equipment via a potential free relay output. (Upcoming, check availability)

11. WARRANTY

Heat alarms are sensitive life-saving devices. The life of this unit can be significantly reduced by adverse environments, incorrect location and in failure to regularly clean and maintain it according to the instructions. Incorrect location and a lack of reasonable care may also cause it to malfunction and will invalidate the warranty. **Deltronic** guarantees to you, as a purchaser, that the enclosed heat alarm will be free from defects in material, workmanship or design under normal use and service for a period of **5 years** for **ACH11BB** (excluding batteries) and **5 years** for **ACH11RB** (including built-in battery). This Guarantee is not assignable. Our liability to you, under this guarantee is limited to repairing or replacing any part which we find to be defective in material, workmanship or design, free of charge to the customer, upon sending the alarm with proof of date of purchase, information regarding the fault, return address and postage paid to:

Deltronic Security AB, EA Rosengrensgata 4, 421 31 Västra Frölunda, Sweden.

The terms of this guarantee will not apply in the following circumstances: If the alarm has been modified, dismantled, contaminated, damaged, neglected or otherwise abused or altered following the date of purchase, or if it fails to operate due to incorrect siting, installation, maintenance or inadequate or poor electrical AC power, or damage caused by failure to abide by the instructions supplied. The liability of **Deltronic** arising from the sale of this alarm or under the terms of this guarantee shall not in any case exceed the cost of the heat alarm it selves. In no case, shall **Deltronic** be liable for consequential loss or damage resulting from the failure of the alarm or the breach of this or any other guarantee, express or implied or for damage caused by failure to abide by the instructions supplied. This guarantee does not affect your statutory rights.

2023-01-12

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**Approved according to BS5446-2:2003
by BSI KM654703**

Deltronic
Keeping you safe

Fast-Fix

Mains Powered 230V AC

HEAT ALARM 57°C

Manual



ACH11BB / ACH11RB



READ AND RETAIN THIS MANUAL