

1. PRODUCT DESCRIPTION

Deltronic's smoke alarms are approved according to EN14604: 2005 +AC:2008.

The x-profile optical smoke chamber makes it particularly sensitive to slow smoldering fires, which often occur in living rooms, bedrooms and corridors. The device also has advanced software to avoid unwanted false alarms.

The smoke 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 void the right to 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 smoke 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 voltage and switched on.
- Red LED flashes approximately once a minute, confirming that the smoke alarm is powered on and ready to detect smoke (normal operation).
- Low battery warning, the smoke alarm emits one click per minute. The low battery warning often occurs at night and can therefore be temporarily silenced for ten hours by pressing the test button once (this without deactivating other important functions). The batteries or the smoke alarm can then be replaced at a more convenient time, for example the next day.
- Extra large and convenient test button for simple and complete check. Tests smoke sensitivity, electrical circuits, power supply and alarm signal.
- Loud Piezo Electric alarm on 85 Decibel, automatically resets when hazardous condition has past and the chamber is clear of smoke.
- 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 possible to connect the alarms wirelessly, this requires that each device adds a radio board. Read more under section "Accessories".
- Software that maximizes detection ability and minimize the number of false alarm via the new dust compensation feature.

2. CHOICE & LOCATION OF ALARMS

Optical smoke alarms (ACX) this model, is considered to be most effective when it comes to detecting smoldering 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!

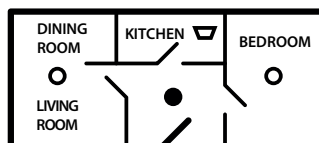
Placement and care of smoke alarms shall be done in accordance with applicable rules and recommendations from eg. Boverket's Building Regulations BBR - BFS 2011: 6, MSB - SRVFS 2007: 1

Smoke alarms should preferably be mounted in the middle of the ceiling, in stairwells and the like, in the room's highest point. Some simple rules are:

- At least one smoke alarm in or adjacent to the bedrooms, check that the alert is heard properly from the sleeping areas even with closed door.
- Are you charging things in the bedroom? Add a smoke detector in the bedroom. It won't work with a closed door and a smoke alarm in the hallway!
- At least one smoke alarm per floor and per 60 square meters
- Largest allowed distance between smoke alarms is 12 meters
- More smoke alarms give increased security, make a strategic decision!

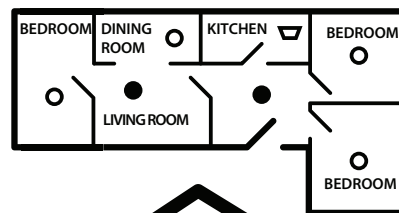
NOTE! In order to achieve a high level of safety, smoke alarms should be placed in each and every room (but not in the kitchen, bathroom and laundry areas due to dust/particle levels).

Example of Placement:

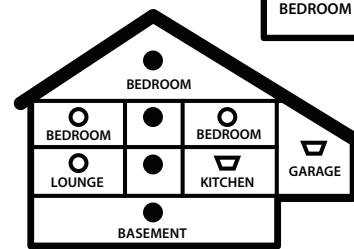


SINGLE STOREY HOME WITH ONE SLEEPING AREA

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



1. In the angle between the ceiling and the wall, a so-called "dead zone" is formed with stagnant air, this prevents the smoke from reaching the smoke alarm. Therefore, place the smoke alarm at least 50 cm from the wall.
2. Do not install in the peak of an "A" frame or sloping ceiling. This may delay smoke and heat reaching them due to the presence of dead air.
3. Do not locate near fans or extractors. These can push/pull smoke and heat away from the alarms.
4. Do not install smoke 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.
5. Do not install less than 50cm from walls and light fittings when mounted on the ceiling where heat and dead air may prevent smoke reaching the alarm.
6. Do not install smoke alarms in insect infested areas.
7. Do not install smoke alarms in areas subjected to heavy concentrations of cigarette smoke that will cause nuisance alarms and the alarm to become contaminated.
8. Do not install smoke alarms in boiler rooms and garages where fumes, soot and dust may cause nuisance alarms.
9. 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.
10. Do not install near objects that could prevent smoke reaching the alarm.
11. Do not install close to light fittings that could trigger nuisance alarms.
12. Do not paint the alarm, it may clog the flues.

4. INSTALLATION PROCEDURE

NOTE! Mains connected smoke 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!

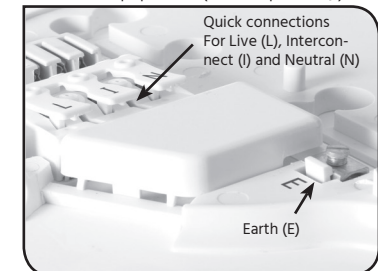
WARNING: Storage or installation of sensors in temperatures below 5°C or above 30°C and in high humidity can cause clicks and disturbing alarms during the actual start-up. These disappear after a short time when the alarm has acclimatised. Extended periods under these conditions will reduce the life of the sensors and void the warranty. Do not expose the devices to drops or splashes. Disconnect the voltage to the alarm before disassembly. Connection and voltage 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.

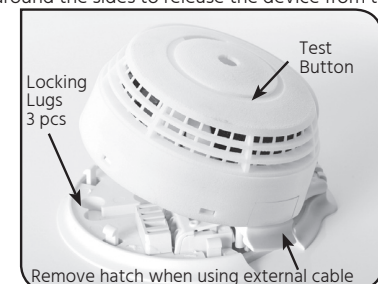
1. Start by removing the fuse, alternative put the fuse switch in the "Off" position for the group used for the installation.
2. The smoke/heat detector should preferably be connected to a separate

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 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. Remove the cover over the micro switch to connect the built-in battery. (Only applies to the **RB** version)
8. Attach the smoke 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.



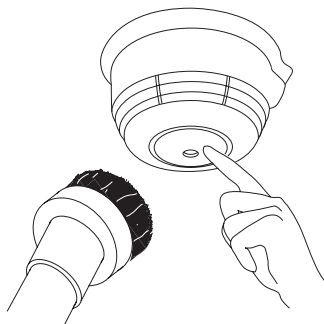
9. Test the alert with a push on the test button with the mains supply disconnected. Check that the warning signal sounds 3 times and flashes red. This test is done to secure the battery backup function.
10. Now switch on the mains supply. The smoke alarm can emit one click per minute up to half an hour,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

Care & Maintenance

- Vacuum the smoke 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 smoke alarm after 10 years. The mounting bracket can be reused, just replace the main unit. Discarded units must 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 a mains connected product. Do not attempt to open the smoke 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 smoke alarm will click once a minute to indicate that the batteries need to be checked or replaced.

The **ACX11RB** 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 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 smoke 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 ACX11RB in reverse order.

The **ACX11BB** 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 smoke 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 (**ACX11BB**) or replace or check the unit (**ACX11RB**) 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 voltage and batteries.
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 voltage.
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 the supply is turned on.
8. In case of repeated nuisance alarms, check that it is free from dust, cobwebs and external contamination, from such things as cigarette smoke, drying paint, spray from household aerosols or steam. If this does not correct the problem, do NOT attempt to repair. Other than replaceable batteries in the (**ACX11BB**), there are no user serviceable parts. If the alarm is within the warranty period and terms, indicate 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 not normally 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 voltage on and off)
- Relay socket** This accessory can activate other equipment via a potential free relay output. (Upcoming, check availability)

11. WARRANTY

Smoke 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 smoke alarm will be free from defects in material, workmanship or design under normal use and service for a period of **5 years** for **ACX11BB** (excluding batteries) and **5 years** for **ACX11RB** (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 smoke 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.

2023-01-10

**Deltronic Security AB, E A Rosengrensgata 4
421 31 Västra Frölunda, Sweden
+46 31 140 800, info@deltronic.se, www.deltronic.se**

**Approved according to EN 14604:2005+AC:2008
by TUV 1008-CPR-MC 69266079
DoP 221108-1 & 2**

Deltronic
Keeping you safe

Fast-Fix

Mains Powered 230V AC

SMOKE ALARM

Manual



ACX11BB / ACX11RB



CE 22



READ AND RETAIN THIS MANUAL