

120V AC
Heat Alarm
with 9V
Battery
Back-up

FIREX®

Heat Alarm

110-609F



MODEL ADH

**PLEASE READ AND SAVE
THIS MANUAL**

Installer: Please leave this
manual with the product.



WARNING! Heat alarms are not life safety devices and are not designed to detect smoke or fire. Heat alarms detect temperatures of 135°F or greater, and are intended to be used as supplements to smoke alarms by providing early warning. See the IMPORTANT SAFETY INFORMATION section of this manual.

Printed information describing proper installation, operation, testing, maintenance, evacuation planning, and repair service is provided with this equipment in this manual.

HEAT ALARM FEATURES

- This heat alarm is powered by 120V AC and a 9-volt battery back-up source. AC/DC heat alarms offer added protection in the event of a power failure or a drained battery.
- Unique power connector prevents interconnection with incompatible heat alarms, smoke alarms, or security systems.
- This heat alarm is interconnectable to a maximum of 12 Firex devices. It is compatible with Firex smoke alarm models AD, ADC, and FADC. It can be interconnected with Firex heat alarm model ADH (6 maximum).
- Optional tamper-resist feature.
- Unique “battery missing” lockout – heat alarm will not attach to the mounting bracket if a battery is not in the battery pocket.
- Improperly connected or weak battery signal – heat alarm will sound a short beep once a minute if the battery is weak or improperly connected.
- Green LED indicates that the heat alarm is receiving AC power, working under normal operation, or in alarm.
- Loud alarm horn—85 decibels at 10 feet—sounds to alert you to an emergency.
- Test button checks heat alarm operation.

SPECIFICATIONS

Model Number:	ADH
Electrical Rating:	120 VAC, 60 HZ, 80mA, max, 9 volt battery back-up
Interconnect Quantity:	12 units maximum
U.L. temperature rating:	135°F (58°C) fixed temperature
U.L. Maximum ambient temperature at unit:	100°F
Operating temperature:	-10°F to 158°F (-23°C to 70°C)
U.L. Recommended coverage:	2500 square feet (see Note A)
U.L. Recommended spacing:	50 feet
Maximum distance from wall:	25 feet (see Note B)

NOTE A: Maximum alarm coverage has been determined by UL to provide detection time equal to sprinkler devices spaced at 10-ft intervals (100 square foot area) on a smooth ceiling 15 ft 9 in. high. Higher ceilings can adversely affect detection time. In some instances, earlier detection may be obtained by reducing the distance between detectors. See the latest edition of the NFPA 72E, Automatic Fire Detectors.

NOTE B: Maximum distance is measured from any wall partition or ceiling projection extending down more than 12 inches.

IMPORTANT SAFETY INFORMATION

PLEASE READ AND SAVE THESE INSTRUCTIONS



W A R N I N G

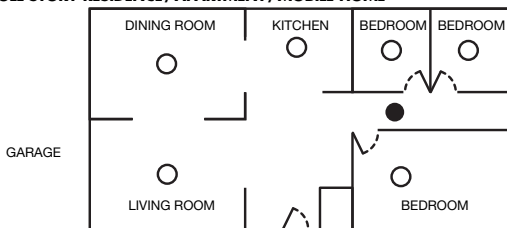
- **This heat alarm requires constant 120-volt, AC power AND a working 9-volt battery to operate properly.** This heat alarm WILL NOT work if AC power is not connected, has failed, or has been interrupted for any reason AND if the battery is removed, drained or improperly connected. DO NOT use any other kind of battery except as specified in this manual. DO NOT connect this heat alarm to any smoke alarm, heat alarm, or auxiliary device, except those listed in this manual.
- **The Push-to-Test button accurately tests all heat alarm functions.** For temperatures that are below -10°F use a hand held hair dryer and blow hot air into heat alarm to test. DO NOT use any other test method. **Test heat alarm weekly to ensure proper operation.**
- **This heat alarm should be installed only by a licensed, qualified electrician.** Observe and follow all local and national electrical and building codes for installation.

- **This heat alarm IS NOT designed to be the PRIMARY protection for buildings that require complete fire alarm systems.** Buildings of this type include hotels, motels, dormitories, hospitals, nursing homes, and group homes. This is true even if they were once single family homes. **However, this heat alarm MAY be used inside individual rooms as SUPPLEMENTAL protection.**
- **Heat alarms should be interconnected with smoke alarms in order to provide early warning of heat, smoke or fire.** In addition, smoke alarms should be installed in every bedroom and on every level of the home.
- **Interconnected heat alarms and smoke alarms offer maximum protection.** The National Fire Protection Agency (NFPA) recommends interconnecting heat alarms and smoke alarms so that when one unit senses heat, smoke, or fire and sounds its alarm, all others will sound as well. Do not interconnect heat alarms and smoke alarms from one individual living unit to another. Do not connect this heat alarm to any other type of alarm (except those listed in this manual) or auxiliary device.
- **Heat alarms may not alert every household member every time.** There may be limiting circumstances where a household member may not hear the alarm (e.g., outdoor or indoor noise, sound sleepers, drug or alcohol usage, the hard of hearing, etc.). If you suspect that this smoke alarm may not alert a household member, install and maintain specialty smoke alarms. Current studies have shown smoke alarms may not awaken all sleeping individuals, and that it is the responsibility of individuals in the household that 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 evacuating the area unassisted.
- **This heat alarm can only sound its alarm when it detects temperatures of 135°F or greater.** Heat alarms do not detect smoke, flame, or gas. In some fires, hazardous levels of toxic chemicals and smoke can build up before a heat alarm will operate. Temperatures may not reach 135°F to activate the heat alarm QUICKLY ENOUGH to ensure safe escape.
- **Heat alarms should be used to supplement smoke alarms.** This alarm may not always detect slow, smoldering, low heat producing fires, and fires that are in a different room than the heat alarm. In addition, heat from a nearby fire may bypass the heat alarm.
- **Heat alarms have limitations.** This heat alarm is not foolproof and is not warranted to protect lives or property from fire. Heat alarms are not a substitute for insurance. Homeowners and renters should insure their life and property. In addition, it is possible for the heat alarm to fail at any time.

HEAT ALARM PLACEMENT

Heat alarms give an audible warning when the temperature at the alarm reaches 135°F. Heat alarms are ideal for kitchens, garages, basements, boilers rooms, attics, and other areas where there are normally high levels of fumes, smoke, or dust which are also areas where smoke alarms should not be installed due to risk of false nuisance alarms.

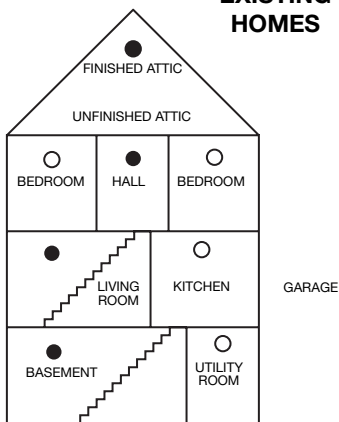
SINGLE STORY RESIDENCE / APARTMENT / MOBILE HOME



National Fire Protection Association's (NFPA) minimum requirement, as stated in Standard 72, Chapter 2, reads as follows:

"2-2.1.1.1 Smoke detectors shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms and on each additional story of the family living unit including basements and excluding crawl spaces and unfinished attics. In new construction a heat detector also shall be installed in each sleeping room."

The EXISTING HOMES



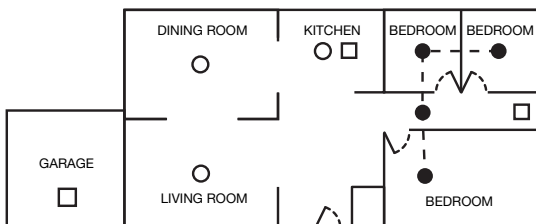
TWO STORY RESIDENCE

“11.5.1.1 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 *Exception: Smoke alarms shall not be required in sleeping rooms in existing one- and two-family dwelling units.*
2. Outside each separate sleeping area, in the immediate vicinity of the sleeping rooms.
3. On each level of the dwelling unit, including basements *Exception: In existing one- and two-family dwelling units, approved smoke alarms powered by batteries shall be permitted.*”

In addition, the California State Fire Marshal states: “Early warning fire detection is best achieved by the installation of fire detection equipment in all rooms and areas of the household as follows: A heat detector installed in each separate sleeping area (in the vicinity, but outside the bedrooms) and heat or smoke alarms in the living rooms, dining rooms, bedrooms, kitchens, hallways, attics, furnace rooms, closets, utility and storage rooms, basements and attached garages.”

SINGLE STORY RESIDENCE / APARTMENT / MOBILE HOME

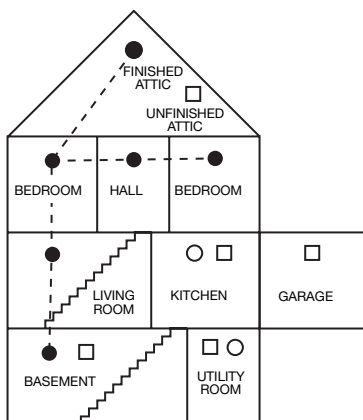


NEW CONSTRUCTION HOMES

TWO STORY RESIDENCE

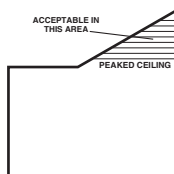
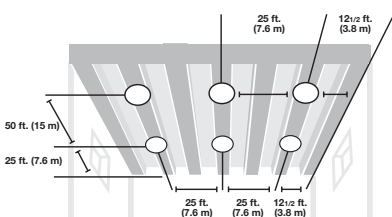
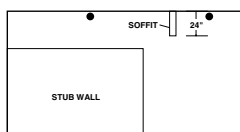
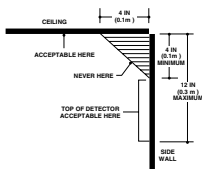
KEY:

- NFPA minimum REQUIRED smoke alarm locations
- NFPA RECOMMENDED additional smoke alarm locations
- Recommended heat alarm locations



HEAT ALARM LOCATIONS

- Install a heat alarm as close to the center of the ceiling as possible. If this is not practical, mount no closer than 4 inches from a wall or corner.
- If ceiling mounting is not practical or the mounting surface becomes considerably warmer or cooler than the room (such as a poorly insulated ceiling, below an unfinished attic or an exterior wall) and if local codes allow, install heat alarms on walls, between 4 and 12 inches from ceiling/wall intersections.
- Install heat alarms on peaked, cathedral, or gabled ceilings 3 feet from the highest point (measured horizontally).
- In a room with open joists or beams, all ceiling mounted heat alarms shall be located on the bottom of joists or beams – not in joist channels.
- Heat alarms installed on an open-joisted ceiling shall have their smooth ceiling spacing reduced to no more than half of the listed spacing when measured at right angles to solid joist.



DO NOT install heat alarms:

- In areas with high humidity, like bathrooms or areas near dishwashers or washing machines. Install at least 10 feet (3 meters) away from these areas, if possible.
- Near air returns, heating and cooling supply vents, fans, decorative objects, window molding etc. that may prevent heat from entering the unit thus interrupting its alarm.
- In rooms where temperatures may fall below -10°F (23°C) or rise above 100°F (38°C).
- Near fluorescent lights - electrical noise and flickering may affect the alarm's operations.

Mobile home installation

For mobile homes built after 1978, install heat alarms as directed above. For mobile homes built before 1978, install heat alarms on an inside wall between 4 and 12 inches from the ceiling. (Older mobile homes have little or no insulation in the ceiling which may affect the heat alarm's ability to detect heat properly.) This is especially important if the ceiling is unusually hot or cold.

HOW TO INSTALL THIS HEAT ALARM

⚠ DANGER: **ELECTRICAL SHOCK HAZARD.** Turn off power at the main fuse box or circuit breaker by removing the fuse or switching the circuit breaker to the OFF position.

⚠ WARNING: This heat alarm should be installed only by a qualified electrician. Heat alarm wiring to be used shall be in accordance with the provisions of Article 210 and 760 of the National Electrical Code, ANSI/NFPA 70, and any local codes that may apply. Interconnect wire location shall be in accordance with NEC Article 300.3b.

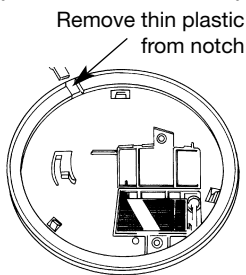
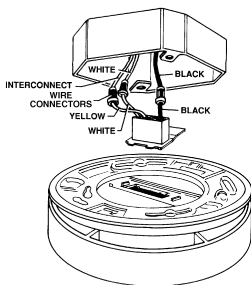
THIS HEAT ALARM SHOULD BE INSTALLED IN ACCORDANCE WITH THE NATIONAL FIRE PROTECTION ASSOCIATION'S STANDARD 72 (National Fire Protection Association, Batterymarch Park, Quincy, MA 02269).

Install heat alarm on a 4-inch octagon or single gang junction box only.

1. From back of heat alarm, remove mounting plate. (To deter a person from tampering with or removing the unit from the trim ring once installed, you may wish to later engage tamper-resist feature. To do this, twist out and set aside one of the pins molded into plate. Both pins are exactly the same.)
2. Align recessed slots on plate with mounting holes of a 4-inch octagon or single gang junction box.
3. Gently pull household wires through center hole of plate.
4. Secure plate to junction box with mounting screws.
5. With a small wire connector, connect white wire from connector plug to white household wire.
6. Connect black wire from connector plug to black household wire.
7. If interconnection is desired, connect yellow wire from connector to interconnect wire between heat alarms and/or smoke alarm. See INTERCONNECTING HEAT ALARMS.

NOTE: If this will be a single-station heat alarm, cover yellow wire with electrical tape and tuck into junction box.

8. Lift open battery pocket door.
9. Connect new 9-volt battery to battery connector inside battery pocket. **BE SURE BATTERY IS SECURELY CONNECTED.** Heat alarm may beep briefly when battery is installed.
10. Close battery pocket door, snapping it into place. (For tamper-resist, use long-nosed pliers to remove thin plastic from notch on heat alarm edge.)
11. Attach connector plug to pins on back of heat alarm. Plug will only fit one way and will snap into place.



12. Gently tug connector to be sure it is attached securely.

13. Position heat alarm to mounting plate and turn clockwise to lock into place. To engage tamper-resist feature, insert pin into notch on edge of heat alarm after alarm is properly positioned in base. See instruction #10 on the previous page. **NOTE:** The tamper-resist pin must be removed to change the batteries and replaced when done.



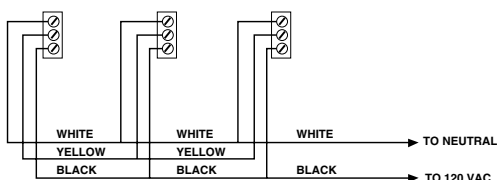
NOTE: Heat alarm will not mount to plate if battery is not installed.

14. Turn on power at main fuse box or circuit breaker.

15. Test heat alarm. See TESTING THE HEAT ALARM.

INTERCONNECTING HEAT ALARMS

- This heat alarm is interconnectable to a maximum of 12 Firex devices. It is compatible with Firex smoke alarm models AD, ADC, and FADC. It can be interconnected with Firex heat alarm model ADH (6 maximum).
- Connect heat alarms to a single AC branch circuit. If local codes do not permit, be sure the neutral wire is common to both phases.



RED AND GREEN LED INDICATORS

This heat alarm features separate red and green LED indicators. The LEDs indicate the following:

GREEN LED

Constant on — AC power is present.

OFF — AC power is not present.

RED LED can be seen through the Push-to-Test button.

Blinks once a minute — indicates presence of a working battery.

Blinks once a second — heat alarm senses heat and simultaneously sounds an audible alarm.

OFF — DC power is not present.

OFF and unit is sounding alarm — An interconnected smoke/heat alarm in the network has sensed smoke or heat.

TESTING THE HEAT ALARM



W A R N I N G

- Test each heat alarm and smoke alarm in the network to be sure it is installed correctly and operating properly.
- Stand at arm's length from the heat alarm when testing. The alarm horn is loud to alert you to an emergency and can be harmful to hearing.
- Test heat alarms weekly and upon returning from vacation or when no one has been in the household for several days.

Test all heat alarms weekly by doing the following:

1. Observe the green LED. A constant green light indicates the heat alarm is receiving 120V AC power.
2. Firmly depress the Push-to-Test button for at least five (5) seconds. The heat alarm will sound a loud beep about 4 times a second. The alarm may sound for up to 10 seconds after releasing the Push-to-Test button. **NOTE:** If heat alarms are interconnected, all heat alarms should sound an alarm within three seconds after any test button is pushed and the tested heat alarm sounds.
3. If heat alarm does not sound, turn off power at main fuse box or circuit breaker and check wiring. Retest heat alarm.

REPLACE OR RETURN THE ALARM IF THE PUSH-TO-TEST FUNCTION DOES NOT OPERATE PROPERLY AFTER FOLLOWING THE PROCEDURES OUTLINED ABOVE (see REPAIR on page 6).

▲ DANGER: If alarm horn sounds, and heat alarm is not being tested, the heat alarm is sensing 135° F or greater temperature. THE SOUND OF THE ALARM HORN REQUIRES YOUR IMMEDIATE ATTENTION AND ACTION.

MAINTENANCE AND CLEANING

In addition to weekly testing, this heat alarm requires yearly battery replacement and periodic cleaning to remove dust, dirt, and debris.

▲ DANGER: ELECTRICAL SHOCK HAZARD. Turn off power at main service panel by removing fuse or switching appropriate circuit breaker to OFF position before replacing battery or cleaning heat alarm.

BATTERY REPLACEMENT

Always turn off power to heat alarm before replacing battery. Replace battery at least once a year or immediately when the low battery signal sounds once a minute, even though the heat alarm is receiving AC power. Batteries should be replaced regularly, even when the heat alarm is receiving AC power

Use only the following batteries as replacements in this heat alarm: Eveready 522 or 1222, or Duracell MN 1604.

▲ WARNING: DO NOT USE ANY OTHER TYPE OF BATTERY, EXCEPT AS SPECIFIED IN THIS MANUAL. DO NOT USE RECHARGE-ABLE BATTERIES.

1. Turn off power to heat alarm at main service panel.
2. Turn heat alarm counterclockwise to detach from mounting plate.
3. Gently pull down heat alarm. Be careful not to separate wire connections.
4. Pull out power plug from back of heat alarm.
5. From back of heat alarm, lift tab to open battery pocket door.
6. Remove battery from pocket. Disconnect and discard drained battery from battery connector.
7. Connect a fresh, 9-volt battery to connector. The battery will fit only one way. Be sure battery connector is securely attached to battery terminals.
8. Place battery into battery pocket.
9. Close battery pocket door. **Push down until it snaps into place.**
10. Replace connector plug. Connector will snap into place. Gently tug connector to be sure it is attached properly.
11. Reattach heat alarm to mounting plate by turning heat alarm clockwise until it snaps into plate.
12. Turn on power and test heat alarm using Push-to-Test button.

CLEANING

Clean the heat alarm at least once a month to remove dust, dirt, or debris. Always turn off power to heat alarm before cleaning.

- Using the soft brush or wand attachment to a vacuum cleaner, vacuum all sides and cover of heat alarm. Be sure all the vents are free of debris.
- If necessary, turn off power and use a damp cloth to clean heat alarm cover.

IMPORTANT: Do not attempt to remove the cover or clean inside the heat alarm. THIS WILL VOID YOUR WARRANTY.

REPAIR

▲ CAUTION: Do not attempt to repair this heat alarm. Doing so will void your warranty.

If heat alarm is not operating properly, see TROUBLESHOOTING. If necessary, and if still under warranty, return heat alarm to Invensys Controls Americas. Pack it in a well-padded carton, shipping prepaid with a note describing the nature of the problem and proof of purchase date, to:

Invensys Controls Americas
Product Service Department
28C Leigh Fisher Blvd.
El Paso, TX 79906

If the heat alarm is no longer under warranty, have a licensed electrician replace the heat alarm immediately with a comparable Firex brand heat alarm.

PRACTICE FIRE SAFETY

If the heat alarm sounds its alarm horn, and you have not pushed the test button, it is warning of a dangerous situation. Your immediate response is necessary. To prepare for such occurrences, develop family escape plans, discuss them with ALL household members, and practice them regularly.

- Expose everyone to the sound of the smoke alarm and heat alarm and explain what the sounds means.
- Determine TWO exits from each room and an escape route to the outside from each exit.
- Teach all household members to touch the door and use an alternate exit if the door is hot. **INSTRUCT THEM NOT TO OPEN THE DOOR IF THE DOOR IS HOT.**
- Teach household members to crawl along the floor to stay below dangerous smoke, fumes, and gases.
- Determine a safe meeting place for all members outside the building.

WHAT TO DO IN CASE OF A FIRE

1. Don’t panic; stay calm.
2. Leave the building as quickly as possible. Touch doors to feel if they are hot before opening them. Use an alternate exit if necessary. Crawl along the floor, and **DO NOT** stop to collect anything.
3. Meet at a prearranged meeting place outside the building.
4. Call the fire department from **OUTSIDE** the building.
5. **DO NOT GO BACK INSIDE A BURNING BUILDING. Wait for the fire department to arrive.**

These guidelines will assist you in the event of a fire. However, to reduce the chance that fires will start, practice fire safety rules and prevent hazardous situations.

TROUBLESHOOTING

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DANGER:

Always turn off power at main fuse box or circuit breaker before taking troubleshooting action.
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WARNING:

DO NOT disconnect battery or AC power to quiet an unwanted alarm. This will remove your protection. Fan the air or open a window to remove heat or dust.

PROBLEM	SOLUTION
Heat alarm does not sound when tested. NOTE: Push test button for at least five (5) seconds while testing!	1. Check that AC power is turned on. 2. Turn off power. Remove heat alarm from mounting plate mounting plate and: a. check that connector plug is securely attached. b. check that battery is properly attached to connector. 3. Clean heat alarm.
Heat alarm beeps about once a minute.	Turn off power and replace battery See “Battery Replacement” in the MAINTENANCE AND CLEANING section.
Heat alarm sounds unwanted alarms.	1. Clean heat alarm. See “Cleaning” in the MAINTENANCE AND CLEANING section. 2. Hire an electrician to move heat alarm to a new location. See HEAT ALARM PLACEMENT.
Interconnected heat alarms do not sound when system is tested.	1. Press and hold test button for at least three seconds after after the first unit sounds. 2. Turn off main power or circuit breaker and check the inter-connect wiring. See INTERCONNECTING HEAT ALARMS section of this manual.

REPLACE OR RETURN THE ALARM IF THE PUSH-TO-TEST FUNCTION DOES NOT OPERATE PROPERLY AFTER FOLLOWING THE PROCEDURES OUTLINED ABOVE (see REPAIR on page 6).

WARRANTY INFORMATION

Invensys Controls Americas warrants to the original consumer purchaser each new heat alarm, excluding battery, to be free from defects in material and workmanship under normal use and service for a period of five (5) years from the date of purchase. Invensys Controls Americas agrees to repair or replace, at its option, any defective heat alarm provided that it is returned with postage prepaid and with proof of purchase date to Invensys Controls Americas. This warranty does not cover damage resulting from accident, misuse or abuse, or lack of reasonable care of the product. This warranty is in lieu of all other express warranties, obligations or liabilities. THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED TO A PERIOD OF FIVE (5) YEARS FROM PURCHASE DATE. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you. IN NO CASE SHALL INVENSYS CONTROLS AMERICAS BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, WHATSOEVER, EVEN IF THE LOSS OR DAMAGE IS CAUSED BY ITS NEGLIGENCE OR FAULT. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other legal rights which vary from state to state.