

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

FIREX[®]

Smoke Alarm

110-762



IONIZATION MODELS AD, ADC PHOTOELECTRIC MODEL PAD

**PLEASE READ AND SAVE
THIS MANUAL**

Installer: Please leave this
manual with the product.



SMOKE ALARM DESCRIPTIONS

- Model AD and ADC — Ionization type smoke alarm. This type of smoke alarm responds fastest to fast burning fires with hot, open flame and small or invisible smoke particles.
- Model PAD — Photoelectric smoke alarm. Responds to slow burning, visible smoke caused by smoldering fires. May reduce false/nuisance alarms caused by cooking or high humidity.

SMOKE ALARM FEATURES

- Model ADC features a False Alarm Control™ which, when activated, quiets unwanted alarms for up to 15 minutes.
- This smoke alarm is powered by 120V AC and a 9-volt battery back-up source. AC/DC smoke alarms offer added protection in the event of a power failure or a drained battery.
- Unique power connector prevents interconnection with incompatible smoke alarms or security systems.
- This smoke alarm may be interconnected with as many as 11 other Firex model AD, ADC, FX1218 and PAD smoke alarms, or as many as 6 Firex model ADH heat alarms for a total of not more than 18 interconnected devices.
- Optional tamper-resist feature can safeguard against tampering.
- Unique “battery missing” signal. The smoke alarm will not attach to the mounting bracket if a battery is not in the battery pocket.
- Improperly connected or weak battery signal. The smoke alarm will sound a short beep about once a minute if the battery is weak or improperly connected.
- Separate green and red LEDs indicate whether the smoke alarm is receiving AC and DC power, working under normal operation, in alarm, or under false alarm control.
- Loud alarm horn—85 decibels at 10 feet—alerts you of an emergency.
- Test button checks smoke alarm operation.

IMPORTANT SAFETY INFORMATION

PLEASE READ AND SAVE THESE INSTRUCTIONS



W A R N I N G

- **This smoke alarm requires constant 120-volt, AC power AND a working 9-volt battery to operate properly.** This smoke alarm WILL NOT work if AC power is not connected or has failed or been interrupted for any reason AND the battery is removed, drained (a "beep" once per minute indicates a drained battery) or improperly connected. DO NOT use any other kind of battery except as specified in this manual. DO NOT connect this smoke alarm to any other type of smoke alarm or auxiliary device, except those listed in this manual.
- **DO NOT remove or disconnect battery or turn off AC power to quiet unwanted alarms.** This will remove your protection. Open windows or fan the air around smoke alarm to silence it. Model ADC smoke alarms feature a False Alarm Control™ button which, when activated, will quiet unwanted alarms for up to 15 minutes.
- **The Push-to-Test button accurately tests all smoke alarm functions.** DO NOT use any other test method. **Test smoke alarm weekly to ensure proper operation.**
- **This smoke alarm should be installed only by a licensed, qualified electrician.** Observe and follow all local and national electrical and building codes for installation.
- **This smoke alarm is designed to be used inside a single family household only.** In multi-family buildings, each individual living unit should have its own smoke alarms. Do not install in non-residential buildings or places which house many people like hotels, motels, dormitories, hospitals, nursing homes, or group homes of any kind. This smoke alarm is not a substitute for a complete alarm system.
- **Install a smoke alarm in every room and on every level of the home.** Smoke may not reach the smoke alarm for many reasons. For example, if a fire starts in a remote part of the home, on another level, in a chimney, wall, roof, or on the other side of a closed door, smoke may not reach the smoke alarm in time to alert household members. A smoke alarm will not promptly detect a fire EXCEPT in the area or room in which it is installed.
- **Interconnected smoke alarms installed in every room and on every level of the household offers maximum protection.** The National Fire Protection Agency (NFPA) recommends interconnecting smoke alarms so that when one smoke alarm senses smoke and sounds its alarm, all others will sound as well. Do not interconnect smoke alarms from one individual family living unit to another. Do not connect this smoke alarm to any other type of alarm or auxiliary device.
- **Smoke alarms may not alert every household member every time.** The alarm horn is loud in order to alert individuals of a potential danger. However, there may be limiting circumstances where a household member may not hear the alarm (i.e. 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. Household members must hear the alarm's warning sound and quickly respond to it to reduce the risk of damage, injury, or death that may result from fire. If a household member is hard of hearing, install special smoke alarms with lights or vibrating devices to alert occupants.
- **Smoke alarms can only sound their alarms when they detect smoke.** Smoke alarms detect combustion particles in the air. They do not sense heat, flame, or gas. This smoke alarm is designed to give audible warning of a developing fire. However, many fires are

fast-burning, explosive, or intentional. Others are caused by carelessness or safety hazards. Smoke may not reach the smoke alarm QUICKLY ENOUGH to ensure safe escape.

- **Smoke alarms have limitations.** This smoke alarm is not fool-proof and is not warranted to protect lives or property from fire. Smoke alarms are not a substitute for insurance. Homeowners and renters should insure their lives and property. In addition, it is possible for the smoke alarm to fail at any time. **For this reason, you must test the smoke alarm weekly and replace every 10 years.**

SMOKE ALARM PLACEMENT

Maple Chase recommends complete coverage protection achieved by installing a smoke alarm in every room of your home. The 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 smoke detector also shall be installed in each sleeping room.

Chapter 2, also reads as follows:

"2-2.2.1 In new construction, where more than one smoke detector is required by 2-2.1, they shall be so arranged that operation of any smoke detector shall cause the alarm in all smoke detectors within the dwelling to sound.

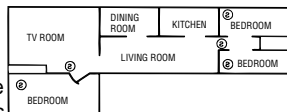
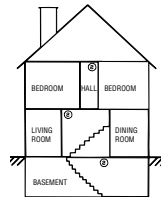
The NFPA, 1993 Edition, Appendix A further states:

"The required number of smoke detectors may not provide reliable early warning protection for those areas separated by a door from the areas protected by the required smoke detectors. For this reason, it is recommended that the householder consider the use of additional smoke detectors

for those areas for increased protection. The additional areas include: basement, bedrooms, dining room, furnace room, utility room, and hallways not protected by the required smoke detectors."

Also, as required by the California State Fire Marshal:

"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 smoke detector installed in each separate sleeping area (in the vicinity, but outside the bedrooms), and heat or smoke detectors in the living rooms, dining rooms, bedrooms, kitchens, hallways, attics, furnace rooms, closets, utility and storage rooms, basements and attached garages."

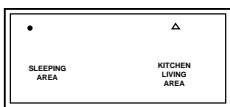


FOR BEST PROTECTION, WE RECOMMEND THAT YOU INSTALL A SMOKE ALARM IN EVERY ROOM.

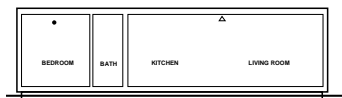
In addition, we recommend that all smoke alarms be interconnected.

Typical Efficiency Home (Apartment)

- Install a smoke alarm on the ceiling or wall closest to the sleeping area.



EFFICIENCY APARTMENT



MOBILE HOME

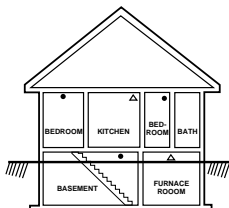
Typical Mobile Home

NOTE: For mobile homes built before 1978, install smoke alarms on an inside wall between 4 and 12 inches from the ceiling. (Older mobile homes have little or no insulation in the ceiling.) This is especially important if the ceiling is unusually hot or cold.

- Install a smoke alarm inside each bedroom and in the hallway outside each separate sleeping area.

Typical Single Story Home

- Install a smoke alarm on the ceiling or wall inside each bedroom and in the hallway outside each separate sleeping area. If a bedroom area hallway is more than 30 feet long, install a smoke alarm at each end.



SINGLE STORY

If there is a basement:

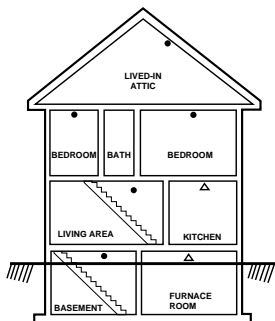
- Install a smoke alarm on the basement ceiling at the bottom of the stairwell.

Typical Two-Story or Split Level Home

- Install a smoke alarm on the ceiling or wall inside each bedroom and in the hallway outside each separate sleeping area. If a bedroom area hallway is more than 30 feet long, install a smoke alarm at each end.
- Install a smoke alarm at the top of a first-to-second floor stairwell.

If there is a basement:

- Install a smoke alarm on the basement ceiling at the bottom of the stairwell.



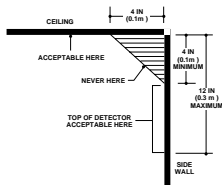
TWO STORY

Key

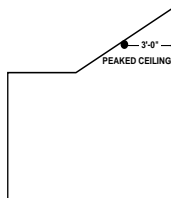
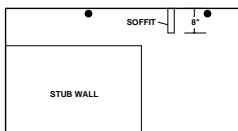
- Smoke Alarm (Ionization)
- △ Ionization Smoke Alarm with False Alarm Control™ or Photoelectric Smoke Alarm

IMPORTANT SMOKE ALARM PLACEMENT AND EXCEPTION INFORMATION:

- Install a smoke 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. Also, if local codes allow, install smoke alarms on walls, between 4 and 12 inches from ceiling/wall intersections.



- Install a minimum of two smoke alarms in every home, no matter how small the home. New construction codes require a minimum of two interconnected smoke alarms in newly built homes.
- Install a smoke alarm in each room that is divided by a partial wall (either coming down from the ceiling at least 24 inches, or coming up from the floor).
- Install smoke alarms on peaked, cathedral, or gabled ceilings 3 feet from the highest point (measured horizontally).
- Install a smoke alarm in lived-in attics or attics which house electrical equipment like furnaces, air conditioners, or heaters.



DO NOT install smoke alarm:



Near appliances or areas where normal combustion regularly occurs (kitchens, near furnaces, hot water heaters). Use specialized smoke alarms with unwanted alarm control for these areas.



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 or heating and cooling supply vents. The air could blow smoke away from the detector, interrupting its alarm.



In rooms where temperatures may fall below 40°F (4°C) or rise above 100°F (38°C).



In extremely dusty, dirty, or insect-infested areas. Loose particles interfere with smoke alarm operation.

HOW TO INSTALL THIS SMOKE ALARM

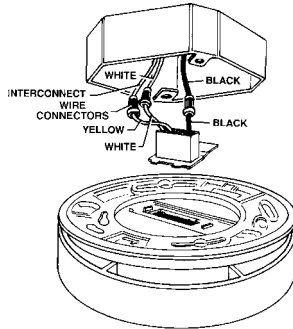
⚠ DANGER: **ELECTRICAL SHOCK HAZARD.** Turn off power at the main fuse box or circuit breaker by removing the fuse or switching the circuit breaker to the OFF position.

⚠ WARNING: This smoke alarm should be installed only by a qualified electrician. Smoke alarm installation must be in accordance with the requirements of Article 760 of the National Electrical Code and any local codes that may apply.

THIS SMOKE 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 smoke alarm on a 4-inch octagon or single gang junction box only.

1. From back of smoke alarm, remove mounting plate. (To later engage tamper-resist feature, twist out and set aside one of the pins molded into the 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 using mounting screws.

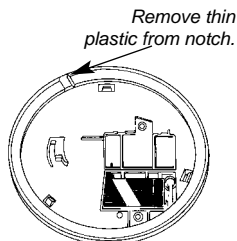


5. With a small wire connector, connect white wire from connector plug to white household wire.
6. Connect black wire from connector plug to black household wire.
7. If interconnection is desired, connect yellow wire from connector to interconnect wire between smoke alarms. See section, "Interconnecting Smoke Alarms."

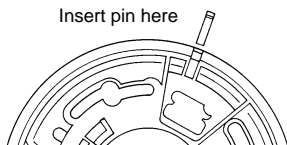
NOTE: If this will be a single-station smoke alarm, cover yellow wire with electrical tape and tuck into junction box.

8. Lift open battery pocket door.
9. Connect new 9-volt battery to battery connector inside battery pocket. **BE SURE BATTERY IS SECURELY CONNECTED.** Smoke 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 smoke alarm edge.)

11. Attach connector plug to pins on back of smoke alarm. Plug will only fit one way and will snap into place.
12. Gently tug connector to be sure it is attached securely.

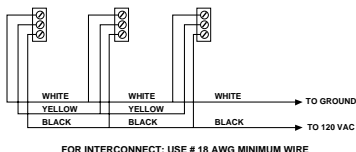


- Position smoke alarm to mounting plate and turn clockwise to lock into place. (To engage tamper resist feature, insert pin into notch on edge of smoke alarm after smoke alarm is positioned properly in base. Refer to step #10 on previous page.)



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

- Turn on power at main fuse box or circuit breaker.
- Test smoke alarm. See “TESTING THE SMOKE ALARM.”



INTERCONNECTING SMOKE ALARMS

- Use #18 AWG minimum solid or stranded wire. When interconnecting, maximum wire length between any two is 1,500 feet for #18 AWG or 4,000 feet for #14 AWG (20 OHMS loop resistance).
- This smoke alarm may be interconnected with as many as 11 other Firex model AD, ADC, FX1218 and PAD smoke alarms, or as many as 6 Firex model ADH heat alarms for a total of not more than 18 interconnected devices. DO NOT connect to any other type or model smoke alarm.
- Connect smoke 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 smoke alarm features separate red and green LED indicators. The LEDs indicate the following:

GREEN LED

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 — indicating normal operation.
- Blinks once a second — smoke alarm senses smoke and simultaneously sounds an audible alarm.
- Blinks once every 10 seconds — smoke alarm is quieting an unwanted alarm (Model ADC only—ionization with False Alarm Control™).

(Interconnected system only):

OFF — another smoke alarm in the network has sensed smoke and is signalling this alarm.

FALSE ALARM CONTROL™

Model ADC features a False Alarm Control™ that, when activated, quiets unwanted alarms for up to 15 minutes.

To use the False Alarm Control™:

Press and release the test button during an unwanted alarm. The alarm should stop within ten seconds. This means the smoke alarm is in False Alarm Control™. Just before returning to normal operation, the smoke alarm will sound two short beeps. This signals the end of False Alarm Control™.

If the smoke alarm does not go into False Alarm Control™ and continues to sound its loud, alarm horn, the smoke is too heavy and could be a possibly dangerous situation— take emergency action.

TESTING THE SMOKE ALARM



W A R N I N G

- Test each smoke alarm to be sure it is installed correctly and operating properly.
- Test all smoke alarms in an interconnected system after installation.
- The Push-to-Test button accurately tests all functions. DO NOT use an open flame to test this smoke alarm. You may ignite and damage the smoke alarm or your home.
- Test smoke alarms weekly and upon returning from vacation or when no one has been in the household for several days.
- Stand at arm's length from the smoke alarm when testing. The alarm horn is loud to alert you to an emergency and can be harmful to hearing.

Test all smoke alarms weekly by doing the following:

1. Observe the green LED. A constant green light indicates the smoke alarm is receiving 120V AC power.
2. Firmly depress the Push-to-Test button for at least five (5) seconds. The smoke alarm will sound a loud beep about four (4) times a second. The alarm may sound for up to 10 seconds after releasing the Push-to-Test button.

NOTE: If smoke alarms are interconnected, all smoke alarms should sound an alarm within three seconds after any test button is pushed and the tested smoke alarm sounds.

3. If smoke alarm does not sound, turn off power at main fuse box or circuit breaker and check wiring. Retest smoke alarm.



DANGER: If alarm horn sounds, and smoke alarm is not being tested, the smoke alarm is sensing smoke. THE SOUND OF THE ALARM HORN REQUIRES YOUR IMMEDIATE ATTENTION AND ACTION.

MAINTENANCE AND CLEANING

In addition to weekly testing, this smoke 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 smoke alarm.

BATTERY REPLACEMENT

Always turn off power to smoke alarm before replacing battery. Replace battery at least once a year, or immediately when the low battery signal sounds (a beep once per minute indicates low battery). Batteries should be replaced regularly as necessary, even when the smoke alarm is receiving AC power.

Use only the following batteries as replacements in this smoke alarm: Eveready 216, 522, 1222, Duracell MN 1604, or Ultralife U9VL-J

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

1. Turn off power to smoke alarm at main service panel.
2. Turn smoke alarm counter-clockwise to detach from mounting plate.
3. Gently pull down smoke alarm. Be careful not to separate wire connections.
4. Pull out power plug from back of smoke alarm.
5. From back of smoke 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 smoke alarm to mounting plate by turning smoke alarm clockwise until it snaps into plate.
12. Turn on power and test smoke alarm using Push-to-Test button.

CLEANING

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

- Using the soft brush or wand attachment to a vacuum cleaner, vacuum all sides and cover of smoke alarm. Be sure all the vents are free of debris.
- If necessary, turn off power and use a damp cloth to clean smoke alarm cover.
- Do not spray smoke alarm with cleaners. Always place cleaners on cloth first, then wipe smoke alarm with cloth.

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

REPAIR

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

If smoke alarm is not operating properly, see “Troubleshooting”. If necessary and if still under warranty, return smoke alarm to Maple Chase Company. Pack it in a well-padded carton, shipping prepaid, to:

Maple Chase Company
Product Service Department
2820 Thatcher Road
Downers Grove, IL 60515-4040

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

PRACTICE FIRE SAFETY

If the smoke 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 a smoke alarm and explain what the sound 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 pre-arranged 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

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

⚠ 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 smoke or dust.

| PROBLEM | SOLUTION |
|--|---|
| Smoke alarm does not sound when tested. NOTE: Push test button for at least five (5) seconds while testing! | <ul style="list-style-type: none">- Check that AC power is turned on.- Turn off power. Remove smoke alarm from mounting plate and:<ul style="list-style-type: none">a. check that connector plug is securely attached.b. check that battery is properly attached to connector.- Clean smoke alarm. |
| Smoke alarm beeps about once a minute. | <ul style="list-style-type: none">- Turn off power and replace battery. (See "Battery Replacement" in the "MAINTENANCE AND CLEANING" section.) |
| Smoke alarm sounds unwanted alarms intermittently or when residents are cooking, taking showers, etc. | <ul style="list-style-type: none">- Hire an electrician to move smoke alarm to a new location. See "SMOKE ALARM PLACEMENT"- Clean smoke alarm. See "Cleaning" in the "MAINTENANCE AND CLEANING" section. |
| Interconnected smoke alarms do not sound when system is tested. | <ul style="list-style-type: none">- Press and hold test button for at least three seconds after the first unit sounds. |
| The alarm sounds different than I'm used to. It starts and stops. | <ul style="list-style-type: none">- The alarm is operating correctly. This alarm features the internationally recognized horn signal for evacuation. The horn pattern is 3 short beeps followed by a 2 second pause and then repeats. |

WARRANTY INFORMATION

5-YEAR LIMITED SMOKE ALARM WARRANTY AND 10-YEAR LIMITED ULTRALIFE U9VL-J LITHIUM BATTERY WARRANTY (WHEN SOLD WITH MAPLE CHASE COMPANY SMOKE ALARM)

Maple Chase Company warrants to the original consumer purchaser each new smoke alarm 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. For Maple Chase Company smoke alarms sold with an Ultralife U9VL-J 9-volt battery, Maple Chase Company warrants to the original consumer purchaser each new Ultralife U9VL-J 9-volt battery to be free from defects in material and workmanship under normal use and service for a period of ten (10) years from the date of purchase. Maple Chase Company agrees to repair or replace, at its option, any defective smoke alarm or Ultralife U9VL-J 9-volt battery (when sold with Maple Chase smoke alarm) provided that it is returned with postage prepaid and with proof of purchase date to Maple Chase Company. 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 FOR THE SMOKE ALARM AND TEN (10) YEARS FOR THE ULTRALIFE LITHIUM U9VL-J 9-VOLT BATTERY (WHEN SOLD WITH MAPLE CHASE SMOKE ALARM) 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 MAPLE CHASE COMPANY 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.

This smoke alarm's manufacture and distribution are licensed by the U.S. Nuclear Regulatory Commission.

This product meets all the requirements of U.L. Standard 217.

WHERE TO SEND YOUR SMOKE ALARM FOR SERVICE

To return smoke alarms under warranty, send the smoke alarm with postage prepaid, a note describing the nature of the difficulty, and proof of date of purchase to:

Maple Chase Company
2820 Thatcher Road
Downers Grove, Illinois 60515
United States of America

An Invensys company

To return Ultralife 10-year lithium batteries under warranty, include the lithium battery, a note describing the nature of the difficulty, with proof of date of purchase, postage and return postage prepaid to:

ULTRALIFE BATTERIES, INC.
c/o MAPLE CHASE COMPANY
P.O. Box 622
1350 Route 88 South
Newark, NY 14513