



Thank you for purchasing the USI/SMCO/HWREP Combination Smoke/Carbon Monoxide (CO) Alarm. This model is designed with dual functions: a single-station CO detection and a multi-station smoke alarm function when interconnected with other units. It operates on 120VAC main power with a 2-AA battery backup for continued operation during power outages. This alarm can be hardwired for interconnectivity with compatible smoke alarms, creating a network of alerts for enhanced safety throughout your home. Additionally, the USI/SMCO/HWREP features a voice message system to announce specific alarms and Silence Control, allowing temporary silencing of nuisance alarms.

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

Typical installation drawing layouts for the unit(s) indicating recommended locations and wiring methods which shall be in accordance with the applicable requirements outlined in the following:

- 1.National Electrical Code, NFPA 70, Wiring Methods and Materials;
- 2.National Fire Alarm and Signaling Code, NFPA 72, Single- and Multiple-Station Alarms and Household Fire Alarm Systems for US requirement.

The National Fire Protection Association (NFPA) and the manufacturer recommend replacing this alarm ten years from the date code on back of alarm. Beyond which the device might no longer detect smoke accurately and should be immediately replaced. This instruction manual contains important information on starting operation and using the device.

ATTENTION! Please take a few minutes to thoroughly read the instruction manual and familiarize yourself and your family with its operation. And save it for future reference.

Supplier's Declaration of Conformity:
47 CFR § 2.1077 Compliance Information
Responsible Party: Felt Electric Company, Inc.
4901 Gregg Road, Pico Rivera, CA 90660, USA
www.felt.com
Unique Identifier: USI/SMCO/HWREP

Table of Contents

1. Smoke Alarm: Steps To Take When The Alarm Sounds
2. Carbon Monoxide Alarm: Steps To Take When The Alarm Sounds
3. Product Safety Information
4. Product Features and Specifications
5. Where to Install Smoke and Carbon Monoxide Alarms
6. Installation Locations To Avoid
7. Installation Instructions
8. Replaceable Battery
9. Alarm Operation And Testing
10. Alarm Visual and Audible Indicators
11. Troubleshooting
12. Carbon Monoxide (CO) Overview
13. Good Safety Habits: Develop An Escape Plan
14. How to Identify Nuisance Alarms
15. Maintenance Information
16. Warranty Information

1. Smoke Alarm: Steps To Take When The Alarm Sounds

Smoke alarm pattern is three long beeps with voice "Fire!", "Incendie!", three long beeps, 1.5 seconds pause, repeating. The red LED will flash once every second. The smoke alarm takes precedence when both smoke and carbon monoxide are present.

What to Do in Case of a Fire
Stay Calm: Don't panic. Take a deep breath and stay as calm as possible.
Exit Quickly: Leave the house right away. Before opening any door, carefully touch it to see if it's hot. If it is, use another exit. Crawl low to the ground to avoid smoke and don't stop to grab anything.
Meet Outside: Go to a pre-arranged meeting spot outside where everyone knows to gather.
Call for Help: Once you're outside, call the fire department or 911.
Stay Out: Never go back into a burning house. Wait for the fire department to arrive and help.

Note: These steps are to help keep you safe in case of a fire. However, it's equally important to prevent fires by practicing fire safety habits at home and avoiding hazardous situations.

2. Carbon Monoxide Alarm: Steps To Take When The Alarm Sounds

Carbon monoxide (CO) alarm pattern is four quick beeps with voice "Warning! Carbon Monoxide", "Attention! monoxyde de carbone!", four quick beeps, 5 seconds pause, repeating. The ALARM indicator (red) will flash the same pattern.

⚠ WARNING! Actuation of your CO alarm indicates the presence of carbon monoxide (CO) which can kill you.

IF THE ALARM SOUNDS:

- 1).Pressing the TEST/SILENCE button on the alarming unit will silence the alarm notification. If the unit re-alarms within 6 minutes, it is sensing high levels of CO which can quickly become a dangerous situation.
- 2) Call your emergency services (Telephone Number) [fire department or 911];
- 3) Immediately move to fresh air – outdoors or by an open door/window. Do a head count to check that all persons are accounted for. Do not reenter the premises nor move away from the open door/window until the emergency services responders have arrived, the premises have been aired out, and your alarm remains in its normal condition.
- 4) After following steps 1 – 3, if your alarm reactivates within a 24 hour period, repeat steps 1 – 3 and call a qualified appliance technician (Telephone Number) to investigate for sources of CO from fuel burning equipment and appliances, and inspect for proper operation of this equipment. If problems are identified during this inspection have the equipment serviced immediately. Note any combustion equipment not inspected by the technician and consult the manufacturers' instructions, or contact the manufacturers directly, for more information about CO safety and this equipment. Make sure that motor vehicles are not, and have not been, operating in an attached garage or adjacent to the residence.

NOTE: See Section HOW TO IDENTIFY NUISANCE ALARMS, for nuisance alarm situations.

3. Product Safety Information

- ⚠ **DANGER! ELECTRICAL SHOCK HAZARD.** Turn off the power to the area where the Alarm is installed before removing it from the mounting bracket. Failure to turn off the power first may result in serious electrical shock, injury or death.
 - ⚠ **WARNING!** THIS PRODUCT IS INTENDED FOR USE IN ORDINARY INDOOR RESIDENTIAL AREAS. IT IS NOT DESIGNED TO MEASURE COMPLIANCE WITH CXDMMERICALAND INDUSTRIAL STANDARDS.
 - ⚠ **CAUTION!** This Combo Smoke/CO alarm is designed to detect carbon monoxide gas from any source of combustion. It is not designed to detect any other gas.
 - ⚠ **CAUTION!** This Combo Smoke/CO alarm will not protect against the risk of smoke or carbon monoxide poisoning when the battery has drained.
 - ⚠ **WARNING!** Installation of the alarm should not be used as a substitute for proper installation, use and maintenance of fuel burning appliances including appropriate ventilation and exhaust systems.
 - ⚠ **CAUTION!** This device should be installed by a competent person.
 - ⚠ **CAUTION!** THIS DEVICE WILL ONLY INDICATE THE PRESENCE OF CARBON MONOXIDE GAS AT THE SENSOR. CARBON MONOXIDE GAS MIGHT BE PERSENT IN OTHER AREAS.
 - ⚠ **WARNING!** Individuals with medical problems may consider using warning devices which provide audible and visual signals for carbon monoxide concentrations under 30 ppm. This alarm has not been investigated for carbon monoxide detection below 70 PPM. There are situations where a smoke alarm may not be effective to protect against fire as stated in the NFPA Standard 72. For instance: a) Fires where the victim is intimate with a flaming initiated fire; for example, when a person's clothes catch fire while cooking; b) Fires where the smoke is prevented from reaching the smoke alarm due to a closed door or other obstruction; c) Incendary fires where the fire grows so rapidly that an occupants egress is blocked even with properly located smoke alarms.
 - ⚠ **WARNING!** Smoke alarms are not to be used with smoke alarm guards unless the combination has been evaluated and found suitable for that purpose.
 - ⚠ **WARNING!** This combo smoke/CO alarm requires a continuous supply of electrical power – it will not work without power.
 - ⚠ **WARNING!** THIS DEVICE IS DESIGNED TO PROTECT INDIVIDUALS FROM THE ACUTE EFFECTS OF CARBON MONOXIDE EXPOSURE. IT WILL NOT FULLY SAFEGUARD INDIVIDUALS WITH SPECIFIC MEDICAL CONDITIONS. IF IN DOUBT CONSULT A MEDICAL PRACTITIONER.
 - ⚠ **WARNING!** This product is intended for use in ordinary indoor locations of family living units. It is not designed to measure compliance with Occupational Safety and Health Administration (OSHA) commercial or industrial standards.
 - ⚠ **WARNING!** This unit must be powered by a 24-hour, 120-volt, pure sine wave, 60 Hz circuit. Be sure the circuit cannot be turned off by a switch, dimmer, or ground fault circuit interrupter. Failure to connect this unit to a 24-hour circuit may prevent it from providing constant protection. The unit may be connected to an arc-fault circuit interrupter.
 - ⚠ **WARNING!** IT IS NOT DESIGNED FOR USE IN A RECREATIONAL VEHICLE (RV) OR BOAT.
 - ⚠ **WARNING!** This device is designed to protect individuals from the acute effects of carbon monoxide exposure. It will not fully safeguard individuals with specific medical conditions. If in doubt consult a medical practitioner.
1. The TEST/SILENCE button accurately tests the device functions. Do not use any other test method. Test the device weekly to ensure proper operation. Do not install in non-residential buildings. And the device is not a substitute for a complete alarm system.
 2. If you're sure it isn't a real alarm, open windows or fan the air around the device to silence it.
 3. Observe and follow all local and national electrical and building codes for installation.
 4. This Combo Smoke/CO alarm is designed to be used inside a single family only. In multifamily homes, each individual living unit should have its own smoke alarm devices.
 5. Install a Combo Smoke/CO 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 device in time to alert household members. This Combo Smoke/CO alarm will not promptly detect a fire or CO danger except in the area or room in which it is installed.
 6. This Combo Smoke/CO alarm may not alert every household member every time. The alarm horn is loud in order to alert individuals to a potential danger. However, there may be some 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 device may not alert a household member, should install and maintain other specialty smoke alarm or/and CO alarm devices. Household member 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 other special smoke alarm and/or CO alarm with lights or vibrating devices to alert occupants.
 7. This Combo Smoke/CO alarm can only sound their alarms when they detect smoke or detect combustion particles or dangerous level of CO in the air. They do not sense heat, flame, or other gas. The device is designed to give audible warning of a developing fire. However, many fires are fast - burning, explosive, or intentional, and others are caused by carelessness or safety hazards. In these cases, smoke may not remake the unit alarm QUICKLY ENOUGH to ensure safe escape.
 8. This Combo Smoke/CO alarm have limitations. The device is not foolproof and is not warranted to protect lives or property from fire. Smoke alarm or/and CO alarm are not a substitute for insurance. Homeowners and renters should insure their lives and property. In addition, it is possible for the device to fail at any time. For this reason, you must test the device weekly and replace every 10 years.

4. Product Features and Specifications

Model: USI/SMCO/HWREP
Product standards: Conf. to UL STD 217 & 2034
Power Supply: 120VAC 60Hz, 30mA max, 2 AA batteries backup (Energizer E91,Gold peak GN15A)
Hardware Interconnection: Up to 18 interconnected devices (Maximum of 12 Smoke Alarms or Combo Alarms)
Sensor of Smoke: Multi-Criteria Optical
Smoke Alarm Sensitivity: 2.08%/ft +/-25% OBS
Smoke alarm silence: About 8 minutes
CO silence: About 5 minutes
Sensor of CO: Electrochemical
Voice message system CO alarm sensitivity Setting (Conforms to UL2034):
70PPM Between 60 to 240 minutes
150PPM Between 10 to 50 minutes
400PPM Between 4 to 15 minutes
Product life: 10 years after manufacture
Temperature Operating Range: 40°F (4.4°C) to 100°F (37.8°C)
Humidity Operating range: 10~95% RH non-condensing
Audible Alarm: ≥85dB at 10ft@ 3.0 to 3.5 KHz pulsing alarm, with voice messages "Fire!", "Incendie!" and/or "Warning! Carbon Monoxide", "Attention! monoxyde de carbone!".
Storage/Transport Ambient Condition: -20~+50°C, 10~95% RH non-condensing
Low Battery warning silence: About 10 hours
Installation Location: Ceiling or wall
Detection range: Max. 40 m² within a room.
Size: About 6.1x1.6 inches(155x41.8 mm)
Weight: 320±10g
NOTE: This Combo Smoke/CO alarm is designed to detect carbon monoxide gas from any source of combustion. It is not designed to detect any other gas.

5. Where to Install Smoke and Carbon Monoxide Alarms

The following suggestions are intended to help you with the placement and installation of your combo smoke/CO alarm.

- Smoke/CO alarms for required protection
 - Smoke/CO alarms for additional protection
 - △ Smoke alarms with silence control for additional protection
- Single floor plan
- Multiple floor plan

1. In all sleeping rooms and guest rooms.
2. Outside of each separate dwelling unit sleeping area, within 21 feet (6.4 m) of any door to a sleeping room, the distance measured along a path of travel.
3. On every level of a dwelling unit, including basements.
4. On every level of a residential board and care occupancy (small facility), including basements and excluding crawl spaces and unfinished attics.
5. In the living area(s) of a guest suite.
6. In the living area(s) of a residential board and care occupancy.
7. Smoke, heat, and combustion products rise to the ceiling and spread horizontally. Mounting the smoke alarm on the ceiling in the center of the room places it closest to all points in the room. Ceiling mounting is preferred in ordinary residential construction.
8. The device should be at least 6 feet (1.8 m) above the floor level.
9. When mounting a device on the ceiling, locate it at a minimum of 4 inch (10 cm) from the side wall.
10. When mounting the device on the wall, use an inside wall with top edge the alarm at a minimum of 4 inch (10 cm) and maximum of 12 inch (30.5 cm) below the ceiling.
11. Put the device at both ends of a bedroom hallway or large room if the hallway or room is more than 30 feet (9.1 m) long.
12. Install the device on sloped, peaked or cathedral ceilings at or within 3 feet (0.9 m) of the highest point (measured horizontally).

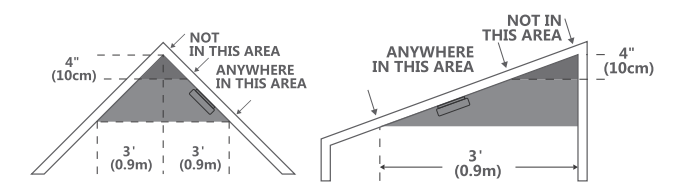
Mobile Home Installation
Modern mobile homes are built to be energy efficient. Follow the standard smoke alarm installation recommendations. However, in older mobile homes with less insulation, extreme heat or cold from the outside can transfer through poorly insulated walls and roofs. This may create a thermal barrier that prevents smoke from reaching a ceiling-mounted alarm. In such cases, install the smoke alarm on an interior wall with the top edge of the alarm no more than 12" (30.5 cm) below the ceiling. If you're unsure about the insulation quality of your mobile home or notice that the exterior walls and ceiling feel hotter or colder than the room air, place the alarm on an interior wall. NFPA 72 (National Fire Protection Association) requires smoke alarms to be installed in each sleeping area.

6. Installation Locations To Avoid

To ensure the combo smoke/CO alarm work properly and provide detection performance, do not install the device in the following places:

1. Near appliances or areas where normal combustion regularly occurs (kitchens, near furnaces, hot water heaters). Install at least 10 feet (3m) away from these areas. Use specialized smoke alarm device with unwanted alarm control for this areas.
2. In areas with high humidity, like bathrooms or areas near dishwashers or washing machines or directly above a sink. Install at least 10 feet (3m) away from these areas.
3. Avoid spraying aerosols near the device.
4. Next to a door or window, an extractor fan, air returns or heating and cooling supply vents. Install at least 3 feet(0.9m) away from these areas. The air could blow smoke away from the device, interrupting its alarm.

5. In rooms where temperatures may fall below 0°C or rise above 40°C, or in humidity higher than 95%. These conditions will reduce battery life or cause a fault alarm.
6. In extremely dusty, dirty, or insect - infested areas influence particles interfere with the device operation.
7. In the garage. Products of combustion are present when you start your automobile.
8. In an enclosed space (for example in a cupboard or behind a curtain).
9. Where it can be obstructed (for example by furniture).
10. Less than 4 inch (10 cm) from the peak of an "A" frame type ceiling.
11. Near fluorescent lights. Electronic "noise" may cause nuisance alarms.
12. Place out of the reach of children. Under no circumstance should children be allowed to handle the device.
13. Normal cooking may cause nuisance alarms. If a kitchen alarm is desired, it should have an alarm silence feature and should not be installed within 6 feet(1.8m) of cooking appliances.



7. Installation Instructions

IMPORTANT! This alarm is designed to be mounted on a UL Listed or recognized junction box, on either the ceiling or wall (if allowed by local codes). Read "Where to Install Smoke Alarms" and "Installation Locations To Avoid" before you begin installation.
Tools you will need: needle-nose pliers or utility knife, standard flathead screwdriver, wire strippers (for interconnected Alarms)

Note: A dust cover has been placed on the alarm. Keep the dust cover in place until all construction activities (such as drywall work, painting, varnishing, or installing the mounting plate) have been completed for at least 24 hours. Save the dust cover and use it again to protect the alarm during any future construction projects. Construction dust and chemicals can cause contamination and trigger false alarms

- Wiring Requirements**
- This alarm should be installed on a UL-listed or recognized junction box. All connections should be made by a qualified electrician, and the electrical wiring used shall be in accordance with Articles 210 and 300.3(B) of the U.S. National Electrical Code (ANSI/NFPA 70, NFPA 72). And/or any other codes having jurisdiction in your area. The multiple-station interconnect wiring to the alarms must be run on the same raceway or cable as the AC power wiring.
 - In addition, the resistance of the interconnect wiring shall be a maximum of 10 ohms.
 - The appropriate power source is 120 Volt AC single phase supplied from a non-switchable circuit.
 - Smoke alarms are not to be used with detector guards unless the combination (alarm and detector guard) has been evaluated and found suitable for that purpose.
 - To reduce the likelihood of nuisance alarm of the device, the accommodation spaces should be well-ventilated when household cleaning supplies or similar contaminants are used.
 - The alarm was not designed, agency tested or certified for recessed mounting and should not be installed in this manner. Recessed mounting impedes smoke entry into the smoke chamber, which may prevent the alarm from sounding in a timely manner. This could endanger the lives of occupants in the residence. The alarm was designed, tested and certified for wall (if applicable) and ceiling surface mount only.

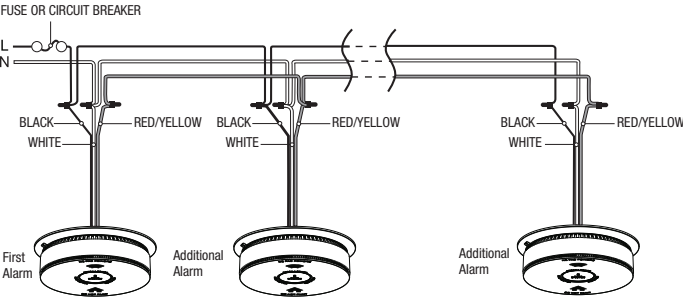
WARNING! The alarm cannot be operated with power derived from a square wave or modified square wave. Wave, or modified sine wave, inverter. These types of inverters are sometimes used to supply power to the structure in off-grid installations, such as solar or wind-derived power sources. These power sources produce high peak voltages that will damage the alarm.

Wiring instructions for AC quick Connector Hamess

CAUTION! Turn off the main power to the circuit before wiring the alarm.

DANGER! ELECTRICAL SHOCK HAZARD. Turn off the power to the circuit before wiring the alarm. Failure to turn off the power first may result in serious electrical shock, injury or death. Improper wiring of the power connector or the wiring leading to the power connector will cause damage to the Alarm and may lead to a non-functioning alarm.

- For alarms that are used as single stations, do not connect the red wire to anything. Leave the red wire insulating cap in place to make certain that the red wire cannot contact any metal parts or the electrical box.
- The wire colors are:
Black = Live
White = Neutral
Red = Interconnect
- Make certain alarms are wired to a continuous (non-switched) power line.



NOTE: Use standard UL Listed household wire (as required by local codes) available at all electrical supply stores and most hardware stores.

CAUTION! Improper wiring of the power connector or the wiring leading to the power connector will cause damage to the Alarm and may lead to a non-functioning Alarm. All power connections should be done using wire-nuts.

1. Turn off the power to the circuit before wiring the alarm.
2. Remove the mounting bracket from the base and attach it to the junction box.
3. Using wire nuts, connect the AC QUICK Connector harness to the household wiring.
4. Insert the batteries into the compartment.
5. Plug the AC QUICK CONNECTOR into the back of the unit, making sure that the locks on the connector snap into place.
6. Check all connections. Then push the excess wire back into the electrical box through the hole in the center of the mounting bracket.
7. Rotate the alarm in the clockwise direction and install the alarm completely on the mounting bracket.
8. Turn on the power. The green LED will turn on when the alarm is operating from AC power.
9. If the green power indicator light does not light, turn off power to the junction box and recheck all connections. If all connections are correct and the green power indicator still does not light when you restore the power, the unit should be replaced immediately.

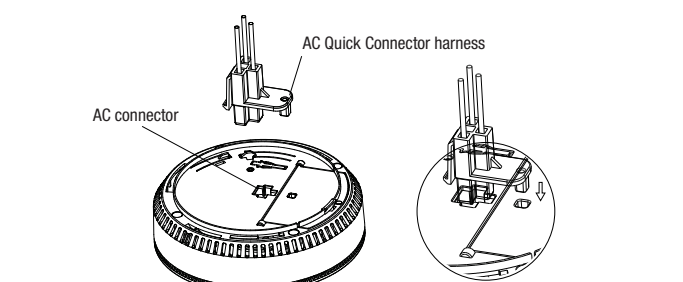
STAND-ALONE ALARM ONLY:

- If you are only installing one Smoke Alarm, restore power to the junction box.

INTERCONNECTED UNITS ONLY:

- If you are interconnecting multiple Smoke alarms, repeat steps 1–9 for each Smoke Alarm in the series. When you are finished, restore power to the junction box.

10. **Single station alarms:** Test each smoke alarm. Press and hold the test button until the unit alarms.
Interconnected alarms: Press and hold the Test/Silence button until the unit alarms. All interconnected Alarms should sound. The other Alarms sounding only tests the interconnect signal among alarms. It does not test each alarm's operation. You must test each alarm individually to check if the alarm works properly. If any unit in the series does not alarm, turn off power and recheck connections. If it does not alarm when you restore power, replace it.
11. For new construction, place supplied dust cover over alarm to prevent damage from dust and construction debris. Construction dust and chemical scan cause contamination and false alarms When construction is complete, remove dust cover.



AC Wired Interconnect Model Capability

This model has AC hardwire interconnect capability. When one hardwired interconnect unit sounds an alarm, all other compatible hardwire or interconnected units will also alarm.

NOTE: AC wiring must be completed properly, and the AC quick connector must be attached to the unit for the hard wire interconnect function to work.

Interconnected units can provide earlier warning of fire than stand-alone units, especially if a fire starts in a remote area of the dwelling. If any unit in the series senses smoke, all units will Alarm. To determine which Alarm initiated an Alarm, the red LED blinks in time with alarm pattern indicating that this is the unit initiating the alarm in an interconnected multiple alarm, system.

NOTE: It is possible for more than one unit to detect a hazard and become an initiating alarm unit.

INTERCONNECTED UNITS MUST MEET ALL OF THE FOLLOWING REQUIREMENTS:

- All interconnected alarms must be supplied from a single power circuit.
- Do not connect Interconnect wires to a line or neutral connection. An improper connection will result in damage to the alarm, failure to operate, or a shock hazard. Check the connections carefully before turning them on the main power to the circuit. Interconnect Wiring Diagram: See Diagram 4.
- A maximum of 12 smoke alarms may be interconnected in a multiple-station arrangement.
- The maximum wire run distance between the first and last unit in an interconnected system is 1000 feet.
- All wiring must conform to all local electrical codes and NFPA 70 (NEC). Refer to NFPA 72, NFPA 101, and/or your local building code for further connection requirements.

Mounting Instructions:

1. Hold the bracket against the wall in the desired location and use a pencil to mark the positions for the screw holes.
2. Drill holes at the marked points and insert the provided plastic anchors.
3. Align the bracket with the plugs and secure it by tightening the provided screws.
4. Insert the battery into the battery compartment.
5. Mount the alarm onto the bracket.
6. Press the TEST/SILENCE button to test the device.

WARNING! Make sure the alarm is not receiving excessively noisy power. Examples of noisy power could be major appliances on the same circuit, power from a generator or solar power, light dimmer on the same circuit or mounted near fluorescent lighting. Excessively noisy power may cause damage to your alarm.

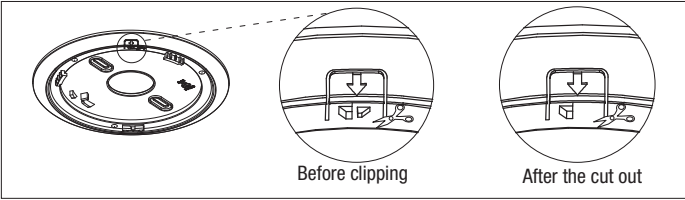
WARNING! This device should be located in an open and unobstructed area and shall not be located behind furniture, drapes, or any other object where it might not be seen or heard. The alarm will be heard from all sleeping areas. If you install only one device in your home, install it near bedrooms, not in the basement or furnace room.

CAUTION!! This device should be installed by a competent person.

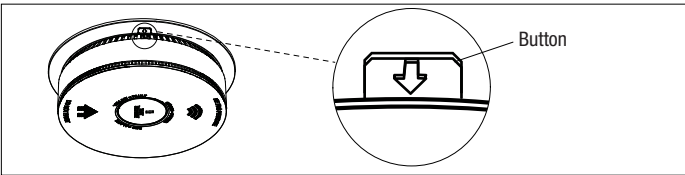
Alarm Body Installation:
To install rotate clockwise.
To uninstall rotate counterclockwise.

Optional locking feature

The locking feature is designed to discourage unauthorized removal of the Alarm. It is not necessary to activate the locks in single-family households where unauthorized battery or Alarm removal is not a concern.



1. Remove the small triangular tab from the bracket to activate the locking feature.
2. Rotate the alarm clockwise to install it securely.



3. To remove the alarm unit, press the release button on the bracket while rotating the unit counterclockwise.

8. Replaceable Battery

Battery installation

1. Remove alarm from mounting bracket and unplug the AC quick connector. Open the battery cover and remove the old battery. (See Diagram 1)
2. After you replacing the battery, close the battery cover, then test smoke alarm using TEST/SILENCE button. Plug the AC quick connector and attach to mounting bracket. (See Diagram 2-3)

CAUTION! Always test the alarm for proper operation using the test function whenever the battery is replaced.

After you installed the battery: Close the battery cover then test smoke alarm using TEST/ SILENCE button.(See Diagram 3)
Test the alarm: Press the test button for more than 1 second and the alarm enters test mode. Make sure that the alarm works normally, then proceed to the next step of installation.
Battery type: This alarm is powered by 2 replaceable 1.5V(AA) batteries located in a battery compartment. Under normal conditions, a fresh battery should last at least one year.
NOTE: Battery installation or replacement is necessary for the life of the device.
NOTE: Constant exposure to low or high temperature or high humidity may reduce battery life.
Battery deactivation: This alarm is equipped with a low battery monitor circuit. If the battery capacity is near the point where it can no longer provide adequate power for all alarm functions, the low battery condition will occur. See Troubleshooting Guide. The battery must be replaced within 7 days of the first occurrence of the "Low Battery Warning" to provide continuous alarm protection.
Replace battery with one of the following approved brands:
ENERGIZER, Alkaline battery, 1.5V, E91, Gold peak, Alkaline battery, .5V, GN15A. These batteries can be purchased at your local retailer.

WARNING! Use only the batteries specified. Use of different batteries may have a detrimental effect on the alarm.

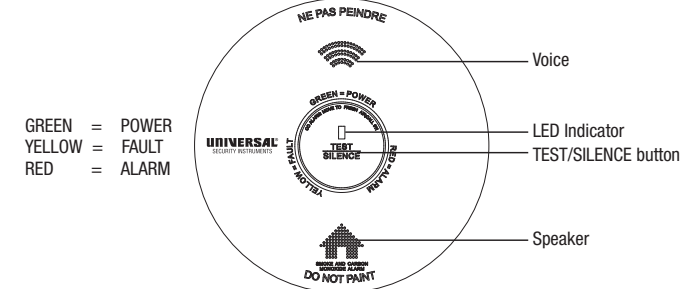
NOTE: Do not use lithium batteries in this unit. A good safety measure is to replace the battery at least once a year.

Battery Disposal

WARNING! Fire, explosion, and severe burn hazard. Do not recharge, crush disassemble, heat above 100°C, incinerate or expose contents to water.

1. Do not dispose of the battery or the device with regular household waste.
2. Dispose of the battery and device in accordance with all applicable federal, state, and local regulations.

9. Alarm Operation And Testing



LED Indicators
POWER Indicator (Green): The green LED indicates the device's power status.
FAULT Indicator (Yellow): The yellow LED signals malfunctions or low battery warnings.
ALARM Indicator (Red): The red LED lights up to indicate an alarm status for smoke or carbon monoxide detection.
Voice Alerts: The device provides voice messages in addition to audible alarms to alert you of smoke detection carbon monoxide detection.
TEST/SILENCE Button: This button allows you to test the device or silence it during an alarm. Press and hold for more than 1 second to activate the test function or press briefly to activate the silence function.
Speaker: The speaker emits the smoke alarm, carbon monoxide alarm, and abnormal warning information.
Operation: The alarm becomes fully operational once it is powered on and the initial test is

completed. When triggered, the alarm emits a loud alert accompanied by voice messages. Refer to sections 1 and 2 for details on alarm signals.
The alarm becomes fully operational once it is powered on and the initial test is completed. When triggered, the alarm emits a loud alert accompanied by voice messages. Refer to sections 1 and 2 for details on alarm signals.
Testing: The TEST/SILENCE button is used to test the device and to silence the unit during a smoke alarm/carbon monoxide alarm. Press to keep it longer than 1second to enable test function, or press to enable silence function.

WARNING! The alarm is loud. Stand at least 2.5 feet away from the unit or use ear protection when testing to prevent hearing damage.

WARNING! Never use an open flame to test the alarm. This could damage the unit or ignite nearby materials, leading to a fire hazard.

Chirping Alerts: If the unit begins to chirp due to low battery or End-of-Life mode, you can temporarily silence it by pressing the TEST/SILENCE button. See the Troubleshooting Guide for further instructions.

WARNING! Replace the unit immediately when it enters End-of-Life mode to ensure continued protection.

10. Alarm Visual and Audible Indicators

Operate Mode	Visual (Flash)	Audible (Beep / Voice)	Description Mode
Power on	Preheat 60 seconds, with POWER indicator (Green LED) flashes every 2 seconds	None	None
Normal (standby)	AC power: Green LED on continuously DC power: Green LED flashes every 40 seconds	None	None
Test	RED LED flashes in time with alarm pattern.	Long press Test/Silence button;Three long beeps, Voice "Fire!", "Incendie!" Three long beeps; Pause for 1 second, four quick beeps, Voice "Warning carbon monoxide", "Attention! monoxyde de carbone!", four quick beeps.	Press Test/Silence button once a week to verify proper alarm operation.
Smoke Alarm	RED LED flashes once a second.	Three long beeps with voice "Fire!", "Incendie!", three long beeps, 1.5 seconds pause, repeating.	None
CO Alarm	RED LED flashes in time with alarm pattern.	Four quick beeps with voice "Warning! Carbon Monoxide", "Attention! monoxyde de carbone!", four quick beeps, 5 seconds pause, repeating.	None
Smoke Alarm Silent Mode	RED LED flashes every 8 seconds.	Mute time for eight minutes	This feature is to be used only when a known alarm condition, such as smoke from cooking, activates the alarm.
High smoke levels cannot be silenced.	None	Voice"Too much smoke, cannot be silenced", "Trop de fumée, mode silencieux impossible".	None
CO Alarm Silent Mode	RED LED flashes every 8 seconds.	Mute time for 5 minutes.	This feature can help users confirm whether there is a CO leak.
Alarm memory mode	RED LED flashes every 40 seconds.	After button press,voice"Fire alarm before, The total number of historical alarms is X", "Alarme incendie avant, Le nombre total d'alarmes en mémoire est de X", "Carbon monoxide alarm before, XXX PPM", "détection de monoxyde de carbone avant, XXX PPM"	This feature will help the user determine which alarm went off. This status can maintain 72 hours. You can exit the visual indicator by pressing the button 3 times in succession. The voice will always exist.
Hardwired Interconnect Alarm mode	None	3 long beeps, loop repeat.	None
Hardwired Interconnect Alarm memory mode	RED LED flashes every 1 second		This status lasts for 3 minutes before exit. This function indicates that an interconnected alarm has occurred.

11.Troubleshooting

Trouble Condition	Visual (Flash)	Audible (Beep / Voice)	Description Mode
Low battery warning	Yellow LED flashes every 40 seconds	Voice"Low battery", "Pile faible".	Press Test/Silence button once to silence for 10h. Replace batteries as soon as possible.
Smoke Sensor Fault warning	Yellow LED flashes every 40 seconds	Voice"Smoke sensor error", "Erreur du capteur de fumée".	Review Cleaning Your Alarm section. Remove and dispose your unit, and replace as soon as possible.
CO Sensor Fault warning	Yellow LED flashes every 40 seconds	After beep,Voice "CO sensor error", "Erreur du capteur de CO".	Review Alarm section. Press Test/Silence button once to attempt to reset unit. If error continues, remove, dispose unit, and replace as soon as possible.
End-of-Life	Yellow LED flashes twice every 40 seconds	Voice "End of life", "Fin de vie".	Press Test/Silence button once to silence for 10 hours. Note:After 30 days of the first occurrence of end of life signal , can not be silenced anymore. Remove and dispose your unit, and replace as soon as possible.

To reduce the likelihood of nuisance tripping of the device's alarm circuit, the accommodation spaces should be well ventilated when household cleaning supplies or similar contaminants are used.

12. Carbon Monoxide (CO) Overview

Carbon monoxide (CO) is a colorless, odorless, and tasteless poisonous gas that can be fatal when inhaled. CO inhibits the blood's ability to carry oxygen.

Possible Sources of CO

Inside your home, appliances used for heating and cooking are the most likely sources of CO. Vehicles and other combustion engines running in an attached garage and using a charcoal/gas grill or hibachi in an enclosed area are all possible sources of CO. Generators running in enclosed areas, such as garages or living spaces, will create CO. CO can be produced when burning any fossil fuel: gasoline diesel, propane, natural gas, oil and wood. It can be produced by any fuel-burning appliance that is malfunctioning, improperly installed, or not ventilated correctly, such as: Furnaces/boilers, gas ranges stoves, gas clothes dryers, water heaters, portable fuel burning space heaters, fireplaces, wood-burning stoves and certain swimming pool heaters. Blocked chimneys or flues, back drafting and changes in air pressure, corroded or disconnected vent pipes, or a loose or cracked furnace heat exchanger can also release CO into your building.

The Following Conditions Can Result In Transient CO Situations

1. Excessive spillage or reverse venting of fuel-burning appliances may be caused by:
 - i. Outdoor ambient conditions such as wind direction and/or velocity, including high gusts of wind; heavy air in the vent pipes (cold/humid air with extended periods between cycles).
 - ii. Negative pressure differential resulting from the use of exhaust fans.
 - iii. Simultaneous operation of several fuel-burning appliances competing for limited internal air.
 - iv. Vent pipe connection vibrating loose from clothes dryers, furnaces, or water heaters.
 - v. Obstructions in or unconventional vent pipe designs which amplify the above situations.
 - vi. Poorly designed or maintained chimneys and/or vents.
2. Extended operation of unvented fuel-burning devices (such as ranges, ovens, or fireplaces).
3. Temperature inversions that can trap exhaust gases near the ground.
4. Car idling in an open or closed attached garage, or near a home.

Symptoms of CO Poisoning

Initial carbon monoxide poisoning symptoms are similar to the flu with no fever and can include dizziness, severe headaches, nausea, vomiting and disorientation. Everyone is susceptible but

experts agree that unborn babies, pregnant women, senior citizensand people with heart or respiratory problems are especially vulnerable. If symptoms of carbon monoxide poisoning are experienced seek medical attention immediately. CO poisoning can be determined by a carboxyhemoglobin test.

The following symptoms are related to CARBON MONOXIDE POISONING and should be discussed with ALL members of the household:

1. MILD EXPOSURE: Slight headache, nausea, vomiting, fatigue (often described as "Flu-like" symptoms).
2. MEDIUM EXPOSURE: Severe throbbing headache, drowsiness, confusion, rapid heart rate.
3. EXTREME EXPOSURE: Unconsciousness, convulsions, cardiorespiratory failure, and death.

The above levels of exposure relate to healthy adults. Levels may vary for those at high risk. Many cases of reported carbon monoxide poisoning indicate that while victims are aware they are not feeling well, they become so disoriented they are unable to save themselves by either exiting the building or calling for assistance. Additionally, young children and household pets may be the first to be affected.

WARNING! Exposure to high levels of carbon monoxide can be fatal or cause permanent damage or disabilities.

WARNING! This device may not prevent chronic effects of carbon monoxide exposure or fully safeguard individuals at special risk.

13 .Good Safety Habits: Develop An Escape Plan

Prepare and practice a home escape plan twice a year, including drills at night. Know two ways out of every room(door & window) and identify a meeting place outside the home where everyone will gather once they have exited the residence. When two people have reached the meeting place, one should leave to call the fire department's telephone number while the second person stay to account for additional family members. Establish a rule that once you're out, you never reenter under any circumstance!

- Make a floor plan indicating all doors and windows and least two escape routes from each room. Second story windows may need a rope or chain ladder.
- Have a family meeting and discuss your escape plan, showing everyone what to do in case of fire and where to meet after they leave the house.
- Ensure that small children hear the alarm and wake when it sounds. They must wake up on order to execute the escape plan. Practice allows all occupants to test your plan before an emergency. You may not be able to reach your children. It is important they know what to do.
- Familiarize everyone with the sound of the smoke/CO alarm and train them to leave you home when they hear it.
- Current studies have shown smoke/CO alarms may not awaken all sleeping individuals, and that it is the responsibility of individuals in the household that are capable of assisting other 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.
- Install and maintain fire extinguishers on every level of the home and in the kitchen, basement and garage. Know how to use a fire extinguisher prior to an emergency.

14. How to Identify Nuisance Alarms

Smoke Nuisance

SILENCE: If you know why the alarm is sounding, and you can verify that it is not a life threatening situation, you can push the button silence the alarm for about 8 minutes. If the smoke is not too dense, that unit will silence. After the SILENCE period, the smoke alarm will automatically reset and sound the alarm if particles of combustion are still present. You can use SILENCE repeatedly until the air has been cleared of the condition causing the alarm.

NOTE: Pressing the button on the initiating smoke unit in your system will silence the alarm notification, including all interconnected units.

NOTE: Dense smoke will override SILENCE and sound a continuous alarm. If no fire is present, check to see if one of the reasons listed in "Locations to avoid" may have caused the alarm. If a fire is discovered, get out and call the fire department or 911.

This alarm is designed to minimize nuisance alarms. Cigarette smoke will not normally cause the unit to alarm, unless the smoke is blown directly into the alarm. Combustion particles from cooking may set off the alarm if it is located too close to a cooking appliance. Large quantities of combustible particles are generated from spills or when broiling. Using the fan on a range hood which vents to the outside (non-recirculating type) will also help prevent nuisance alarms from occurring by removing these combustible products from the kitchen.

Carbon Monoxide (CO) Nuisance

RESET: Pushing the button during CO alarm allows the unit to reset calculations and double check for the presence of CO. If the unit re-alarms within 5 minutes, it is sensing high levels of CO which can quickly become a dangerous situation. Exit to fresh air and call 911.

WARNING! It is impossible to determine the source of a CO alarm using sight or smell. Always consider a CO alarm event as dangerous.

15. AC wired interconnect model capability

This model has AC hardwire interconnect capability. When one hardwired interconnect unit sounds an alarm, all other compatible hardwire or interconnected units will also alarm.
• The following models can be interconnected using the standard AC wiring interconnect: 1235, 1275, 1276, 1285,J12020, I12020A, I12040, I12040A, I12060, I 12060A, I12080, I12080A, I4618, I4618A, I4618AC, KN-SMFM-I, RF-SM-ACDC, PE1 20, P12040, P12000, P12010, KN-COSM-I, KN-COSM-IB, KN-COSM-IBA, KN-COPE-I KN-COPE-IG, KN-COB-IQ KN-COP-IC, SI 177I, SLED177I, HD135F, SM120X, CO120X,I12010S,I12010SCO P4010ACSCO-W P4010IACCS-W, P4010ACS, P4010ACS-W,2070-VASCR, 2070-VASR, P4010ACLEDs-2, P4010ACLEDSCCO-2. The alarm is now activated! After installation/activation, test your alarm as described in Operation and Testing section.

WARNING! Failure to properly install and activate this alarm will prevent proper operation of this alarm and will prevent its response to fire hazards.

Single station alarms: Test each smoke alarm. Press and hold the test button until the unit alarms.
Interconnected alarms: Press and hold the test button until the unit alarms. All interconnected Alarms should sound.

The other Alarms sounding only tests the interconnect signal among alarms. It does not test each alarm's operation. You must test each alarm individually to check if the alarm works properly. If any unit in the series does not alarm.

NOTE: Pressing the button on the initiating smoke unit in your system will silence the alarm notification, including all interconnected units.

16. Maintenance Information

To keep your Combo Smoke/CO alarm in good working order, please follow these simple steps:

1. Verify the unit's alarm sound and indicators operation by enable the TEST/SILENCE button once a week.
2. Remove the unit from the ceiling and clean the alarm cover and vents with a soft brush attachment once a month to remove dust and dirt.
3. Never use detergents or other solvents to clean the unit.
4. Avoid spraying air fresheners, hair spray, or other aerosols near the device.
5. Do not paint the device. Paint will seal the vents and interfere with the sensor's ability to detect CO. Never attempt to disassemble the unit or clean inside. This action will void your warranty.
6. As soon as possible, place the Combo Smoke/CO alarm back in its proper location to assure continuous protection from fire and carbon monoxide poisoning.
7. When household cleaning supplies or similar contaminants are used, the area should be ventilated.

WARNING! The following substances can affect the sensor and may cause false actions: methane, propane, isobutene, isopropanol, ethylene, benzene, toluene, ethyl acetate, hydrogen sulfide, sulfur dioxides, alcohol based products, paints, thinner, solvents, adhesives, hair sprays, after shaves, perfumes and some cleaning agents.

WARNING! Your combo smoke/CO alarm will not be operational and will not monitor for smoke and CO levels without power supply.

WARNING! This apparatus is designed to protect individuals from the acute effects of carbon monoxide exposure. It may not however, prevent the chronic effects of carbon monoxide exposure and will not fully safeguard individuals at special risk or with specific medical conditions. If in doubt consult a medical practitioner.

17. Warranty Information

TEN-YEAR LIMITED WARRANTY

This product is warrantied to be free from defects in material and workmanship for a period of 10 (ten) years from the date of purchase. For products containing a sealed battery, this warranty does not cover any damage that may be caused by the battery. Warranty does not apply to replaceable battery. This warranty applies only to the original consumer purchaser and only to products used in normal residential use and service. If this product is found to be defective, the only obligation, and your exclusive remedy, is the repair or replacement of the product, at the company's discretion, provided that the product has not been damaged through misuse, abuse, accident, modification, alteration, neglect, or mishandling. This Warranty shall not apply to any product which is found to have been improperly installed, set-up, or used in any way not in accordance with the instructions supplied with this product.

ALARM RETURNS

For replacement of this alarm under the terms of this Warranty, please contact customer service at **feit.com/help** for assistance. The company does not warrant, and specifically disclaims any warranty, whether express or implied, of fitness for a particular purpose, other than the warranty contained herein. No implied warranty on this product, created by state law, shall extend beyond the term of this warranty unless such law otherwise provides. The company specifically disclaims any liability and shall not be liable for any consequential or incidental loss or damage, including, but not limited to, damages to any equipment with which this product is used. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. No agent, representative, dealer, or employee of the company has the authority to increase or alter the obligations or terms of this Warranty. This Warranty gives you specific legal rights and you may also have other rights which vary from state to state. This Warranty is only valid for merchandise purchased from outlets in the United States and Canada. This warranty expires upon product end-of-service life signal.