

saferalarms™ We put fire safety at the source.

saferalarms™ Safer Home Alarm System

User Manual

Thank you for choosing the saferalarms™ Safer Home Alarm System fire safety product. This User Manual will provide you with an introduction to the use and operation of the Safer Alarms, Inc. fire safety products. Before using a Safer Alarms, Inc. product, please read this manual carefully. Also, please refer to and review this manual when necessary.

General Information

This product is a well-designed portable temperature alarm which applies to household, office and other places where early fire detection is needed. Strategic placement allows the Safer Alarms, Inc. portable temperature alarm system to monitor the environment at the source, close to the fire hazard, providing an effective fire prevention tool. **It is designed for Indoor Use Only.**

A saferalarms™ portable Safer Home Alarm System consists of one receiver and one or several transmitters.

Product

saferalarms™ Safer Home Alarm System

< Remote Alarm/Receiver Device



< Fire Sensor/Transmitter Device

Function Overview

1. Fire Sensor/Transmitter

Temperature Fire Sensor Transmitter Function: Temperature monitoring and detection. The Transmitter is located at the source of potential fire hazards. Our patent pending technology recognizes when temperature hits “danger zone” (150 degrees or higher) and the Transmitter sends an alert signal to the Receiver.

2. Remote Alarm/Receiver

Remote Alarm Receiver Function: Receives Transmitter alert signal and management. When an alert signal is received from the Transmitter the Remote Alarm produces a steady alarm sound.

3. Matching Function

Several transmitters (up to four 4) may be paired with a single Receiver.

Ex. 4 Sensor/Transmitters to 1 Alarm/Receiver

4. Lower power consumption

The saferalarms™ portable Safer Home Alarm System is designed to operate with low power consumption. Theoretical power usage may be lower than 10uA/day.

5. Low battery warning

The Fire Sensor/Transmitter and the Remote Alarm/Receiver will each issue a Red LED warning when the battery power reaches low power status on each respective device.

6. Replaceable batteries

When the device indicates low power status, the user should replace the product batteries in order to prevent interruption or diminished product performance. The Safer Home Alarm System will not operate if the batteries run out.

User Servicing Instructions

Installing and Replacing Batteries

The Fire Sensor Unit: Place two thumbs on the front cover casing of the unit. Lightly press and push up. This will release the cover casing and expose the battery compartment. Properly insert 2 AA batteries (not included) into compartment and replace cover casing until it clicks into place.

The Remote Alarm Unit: Holding the unit sideways, using two thumbs, lightly press and push the left side of the front cover casing. This will release the cover casing and expose the battery compartment. Properly insert 3 AA batteries (not included) into the compartment and replace the cover casing until it clicks into place.

Operation

The proprietary saferalarms™ microprocessor system operates after the batteries are properly inserted into the device. The LED lights located on the Buttons on both the Fire Sensor/Transmitter and the Remote Alarm/Receiver devices should twinkle/pulse BLUE light for three (3) seconds and then display a GREEN light which should blink at 20 second (on the Sensor/Transmitter) and 60 second (on the Alarm/Receiver) intervals following proper battery insertion. At this initial stage, we recommend that the user successfully perform the steps detailed in the Simulation Test For Alarm and Range Scope below before using the Safer Home Alarm System.

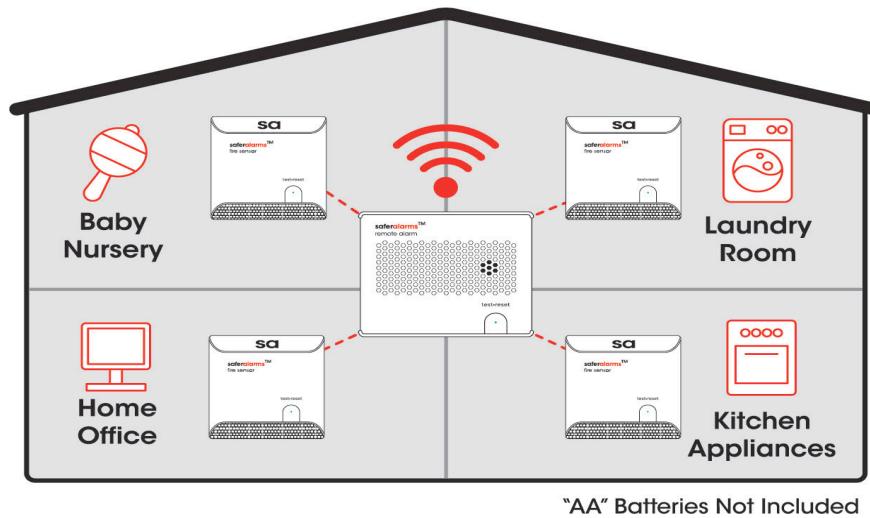
1. Fire Sensor/Transmitter. Definition of Test-Remote Button and LED Indicator light.



<- Test-Reset Button and LED indicator light

Placement/Location:

Installing saferalarms™ in the highest risk locations of a home



The Fire Sensor/Transmitter device may be placed anywhere in the home near electrical outlets. To secure the unit use the command strip provided. It is generally recommended that the Fire Sensor/Transmitter unit(s) be placed at high risk locations, i.e. kitchen, laundry room, baby nursery, home office, basement, bathrooms, etc.

The Fire Sensor/Transmitter Test-Reset Button:

Located at the bottom right on the front of the Fire Sensor/Transmitter.

Press the Test-Reset Button to activate the Fire Sensor/Transmitter which will cause the LED light to twinkle/pulse BLUE until it locates and matches with our Remote Alarm/Receiver device. Once it matches with a Remote Alarm/Receiver device the LED light will then display GREEN and blink at 20 second intervals.

The Fire Sensor/Transmitter LED Indicator Light:

Located at the bottom right on the front of the Receiver.

The LED displays three colors depending on function:

- Red:** Indicating a High Temperature Alarm or Low Power Alert.
- Blue Twinkle/Pulse:** Indicating Fire Sensor/Transmitter is searching and matching with Remote Alarm/ Receiver
- Green blink at interval:** Indicating devices are matched and system is operating.

2. Remote Alarm/Receiver. Definition of Test-Reset Button and LED Indicator light.



< - Test-Reset Button and LED indicator light

Placement/Location:

The Remote Alarm/Receiver device may be placed anywhere in the home where the consumer knows it will be heard. It is generally recommended that the Remote Alarm/Receiver unit be placed above a doorway, hallway wall next to the ceiling, near sleeping areas or in other traditional detector locations. The Remote Alarm/Receiver unit can be mounted with its bracket (included) or it can be placed next to a bedside, etc. as stand alone.

The Remote Alarm/Receiver Test-Reset Button:

Located at the bottom right on the front of the Remote Alarm/Receiver.

Long press (hold) the Button for 1 to 2 seconds to activate the Remote Alarm/Receiver. The Alarm will sound from the unit. Long press (hold) the button for 1 to 2 seconds and the alarm sound will end. The GREEN LED Light will blink at sixty (60) second intervals. The Receiver has reset.

The Remote Alarm/Receiver LED Indicator Light:

Button located on the front of the Remote Alarm/Receiver.

The LED Indicator Light displays three colors depending on function:

Red: Indicating a High Temperature Alarm or Low Power Alert.

Blue Twinkle/Pulse: Indicating Fire Sensor/Transmitter is searching and matching with Remote Alarm/Receiver

Green blink at interval: Indicating devices are matched and system is operating.

3. Simulation Test/Reset For Alarm And Range Scope.

STEP ONE: Following the proper insertion of batteries in both devices:

Press the Fire Sensor/Transmitter's Test-Reset button. A BLUE LED will twinkle/pulse quickly indicating that it is attempting to match with the Alarm/Receiver device. Once the Sensor/Transmitter has matched with the Remote Alarm/Receiver, the LED will light GREEN and flash every twenty (20) seconds while in operation.

STEP TWO:

Press the Remote Alarm/Receiver test-Reset button. A BLUE LED will twinkle/pulse quickly indicating that it is attempting to match with the Fire Sensor/transmitter device. Once the Fire Sensor/Transmitter has matched with the Remote Alarm/Receiver, the LED will light GREEN and flash every sixty (60) seconds while in operation.

STEP THREE:

Press (hold) the Fire Sensor/Transmitter Test-Reset button for 1 to 2 seconds to activate the Remote Alarm/Receiver Alarm. The Alarm will sound from the unit. The LED light will twinkle/pulse RED. Press (hold) the Test-Reset button on the Alarm/receiver unit for 1 to 2 seconds and the alarm sound will end. The GREEN LED Light will blink at sixty (60) second intervals. This indicates the system has reset.

MAXIMUM RANGE DISTANCE FOR COMMUNICATION BETWEEN THE DEVICES:

The Fire Sensor/Transmitter and the Remote Alarm/Receiver can communicate at a maximum range of 90 feet. It is recommended that the user place the Transmitter and Receiver at a distance less than the maximum range distance and to conduct a Simulation Test of the Transmitter and Receiver communication (Steps ONE-THREE above) from time to time, and every time either the Fire Sensor/Transmitter or the remote Alarm/Receiver devices are moved to a new location in order to avoid a lapse in communication between the devices.

NOTE ONE:

If after proper insertion of the batteries, the LED lights or the sound ALARM do not perform in the manner described in this USER MANUAL we suggest the following:

1. Reinsert the batteries in each device and follow all of the steps described and perform a Simulation Test;
2. Replace the batteries in each device and follow all of the steps described and perform a Simulation Test;
3. Make sure that the Fire Sensor/Transmitter and the Remote Alarm/Receiver are within a distance safely under the maximum 90 feet communication range – reduce the distance and repeat steps 1 and 2;
4. Make sure that you are conducting the Simulation Test properly.

If either device is still not performing as described after the user has followed items 1-4 above, DO NOT USE THE SAFER HOME ALARM SYSTEM. Please contact Safer Alarms, Inc. in the manner described within your product package and we will replace the Safer Home Alarm System or return your purchase price in accordance with our stated policies and warranties.

4. Normal Working Mode.

After the batteries are inserted correctly, the devices placed within a distance below the maximum communication range, the Simulation Test successfully completed so that the devices have matched and each device indicates a GREEN LED light blinking at the proper interval on each device, the Home Alarm System is active.

When the FIRE SENSOR/TRANSMITTER detects the peripheral temperature to reach greater than 149 degrees Fahrenheit (65 degrees Celsius) it will trigger an alert signal to the REMOTE ALARM/RECEIVER. The alarm will sound and the RED LED on both the FIRE SENSOR/TRANSMITTER and the REMOTE ALARM/RECEIVER will twinkle/pulse quickly.

The ALARM will continue until the user stops the signal by Pressing (hold) the RESET BUTTON on the REMOTE ALARM/RECEIVER for 1 to 2 seconds. (See STEP TWO of the Simulation Test). The ALARM sound will stop and the LED will return to GREEN. If the ALARM is not reset by the user, the alarm will sound until the batteries run out.

One REMOTE ALARM/RECEIVER device may match with up to four (4) FIRE SENSOR/TRANSMITTER devices, as long as each device is placed within the effective communication range. The Alarm/Receiver will alarm once the Receiver receives the first Transmitter's alerting signal. The Receiver does not receive additional signals from the other Transmitters once the Receiver alarms.

5. False Alarm.

If in the case the System sounds an alarm the user should take appropriate safety action. If the REMOTE ALARM/RECEIVER sounds an alarm the likely reason is that the FIRE SENSOR/TRANSMITTER has detected the temperature in the periphery of the UNIT to be at or greater than 149 degrees Fahrenheit (65 degrees Celsius). This is an indication of a fire event taking place or about to take place at or near the location of the Fire Sensor/Transmitter unit.

If upon inspection, the user makes a personal determination that no fire event is taking place, a false alarm may have occurred. To stop the alarm reset the REMOTE ALARM/RECEIVER: **Press (hold)** the FIRE SENSOR/TRANSMITTER button for 1 to 2 seconds until the Red LED light and alarm sound stop and the alert signal terminates. The GREEN LED Light will blink at sixty (60) second intervals. The Receiver has reset

In this instance, a likely cause of a False Alarm is the placement of the FIRE SENSOR/TRANSMITTER too close to a heat source that produces temperatures reaching 149 degrees Fahrenheit (65 degrees Celsius) during normal operation, for instance directly over a stove. In that case, we suggest relocating the FIRE SENSOR/TRANSMITTER device slightly farther away from that source and then repeating the Simulation Test to properly reset the Safer Home Alarm System.

In the case of any False Alarm, the user should repeat the steps listed in **NOTE ONE** above, to ascertain that the Safer Home Alarm System devices are in proper working order.

NOTE TWO:

The user should be certain that a fire event is not happening, including hidden, obscured or latent fire events (ie. inside a ceiling or wall, etc.) before manually terminating the REMOTE ALARM/RECEIVER alarm or terminating and resetting the FIRE SENSOR/TRANSMITTER signal.

6. Low Power Indication.

Fire Sensor/Transmitter: when the battery voltage in the Transmitter is lower than 2.2V, the Red LED will flash twice quickly (2x) every 40 seconds. This indicates that the battery is in low power status. This flash cycle will repeat until the batteries run out.

Remote Alarm/Receiver: when the battery voltage in the Receiver is lower than 3.3V, the Red LED will flash twice (2x) every 40 seconds and beep twice (2x) quickly at the same time. This indicates that the battery is in low power status. This flash and beep cycle will repeat until the batteries run out.

When the devices indicate Low Power Stays, the user should replace the batteries with new batteries to avoid an interruption in the product performance. The Safer Home Alarm System will not operate if the batteries run out.

NOTE THREE:

While the product is in Normal Working Mode, if you are concerned that the Fire Sensor/Transmitter and Remote Alarm/Receiver are not matched or communicating, the user should repeat a Simulation Test again to ascertain that the Safer Home Alarm System devices are in proper working order.

Low Power

If low power occurs and the product has powered off automatically, replace the battery immediately. The Safer Home Alarm System will not operate if the batteries run out.

FAQ

If after proper insertion of the batteries, the LED lights or the sound ALARM do not perform in the manner described in this USER MANUAL we suggest the following:

1. Reinsert the batteries in each device and follow all of the steps described and perform a Simulation Test;
2. Replace the batteries in each device and follow all of the steps described and perform a Simulation Test;
3. Make sure that the Fire Sensor/Transmitter and the Remote Alarm/Receiver are within a distance safely under the maximum 90 feet communication range – reduce the distance and repeat steps 1 and 2;
4. Make sure that you are conducting the Simulation Test properly.

If either device is still not performing as described after the user has followed items 1-4 above, DO NOT USE THE SAFER HOME ALARM SYSTEM. Please contact Safer Alarms, Inc. in the manner described within your product package and we will replace the Safer Home Alarm System or return your purchase price in accordance with our stated policies and warranties.

Important Safety Instructions

When using electrical products, basic precautions should always be followed including the following:

- a) READ AND FOLLOW ALL SAFETY INSTRUCTIONS.**
- b) The Safer Alarms Christmas Tree Alarm System is designed for Indoor Use Only**
- c) Do not mount or place near gas or electric heaters, fireplaces, candles or other similar sources of heat.**
- d) Do not secure the wiring of the product with staples or nails, or place on sharp hooks or nails.**
- e) Do not let lamps rest on the supply cord or on any wire.**
- f) This is an electric product – not a toy! To avoid risk of fire, burns, personal injury and electric shock it should not be played with or placed where small children can reach it.**
- g) Do not use this product for other than its intended use.**
- h) Do not hang ornaments or other objects from cord, wire, or light string.**
- i) Do not close doors or windows on the product as this may damage the wire insulation.**
- j) Do not cover the product with cloth, paper or any material not part of the product when in use.**
- k) Read and follow all instructions that are on the product or provided with the product.**
- l) SAVE THESE INSTRUCTIONS**

Use and Care Instructions

- a) Before using or reusing, inspect product carefully. Discard any products that have cut, damaged or frayed wire insulation or cords, cracks, loose connections, or exposed copper wire.**
- b) When storing the product, carefully remove the product from wherever it is placed, to avoid any undue strain or stress on the product conductors, connections, and wires.**
- c) When not in use, store neatly in a cool, dry location protected from sunlight.**

LIMITED WARRANTY AND PERIOD OF COVERAGE

Safer Alarms, Inc. ("Safer Alarms"), Stamford, CT, warrants that the within product will be free from defects in workmanship and materials for a period of one (1) year from the date of delivery following the original retail purchase (the "Warranty Period"). If the product fails to conform to this Limited Warranty during the Warranty Period, Safer Alarms will, at its sole option, either repair or replace this product or any component of the product found to be defective during the Warranty Period. Replacement will be made with a new or remanufactured product or component. If the product is no longer available, replacement may be made with a similar product of equal or greater value. This is the sole and exclusive remedy for breach of this Limited Warranty. Any product that has either been repaired or replaced under this Limited Warranty will be covered by the terms of this Limited Warranty for the longer of (a) ninety (90) days from the date of delivery of the repaired product or replacement product, or (b) the remaining Warranty Period. This Limited Warranty is transferable from the original purchaser to subsequent owners, but proof of the original purchase must be provided. The Warranty Period will not be extended in duration or expanded in coverage for any such transfer.

Technical Specification

Output Power: max for Transmitter 3mW, for receiver, 360mw

Frequency bandwidth: 350MHz-450MHz, ASK

Input Power:

For Receiver, DC 4.5V 3 cells

For Transmitter, DC 3.0V 2 cells

Average power consumption: 50uA including both Transmitter and Receiver.

Maximum Power Consumption: receiver, 80mA, Transmitter, 1mA

Accessories Included

A Fire Sensor/Transmitter with command strip

A Remote Alarm/Receiver with mount and two screws

User's Manual with Warranty Information

**** saferalarms™ Home System Sensor and Remote Alarm require "AA" batteries which are not included in this package****

TECHNICAL BULLETIN

Issued: 2/19 Revised: 2/19

TO: All Users of **saferalarms™** Heat/Fire Sensor Systems

FROM: Technical Services

SUBJECT: Inspecting, Testing, and Maintaining Heat/Fire
Sensors – NFPA 72

saferalarms™ recommends that all installations of heat/fire sensor systems comply with NFPA 72, Chapter 7, 1996 Edition. Chapter 7 describes the minimum requirements for inspection, testing, and maintenance of fire alarm systems. Section 7-2.2 states:

7-2.2 Fire alarm systems and other systems and equipment that are associated with fire alarm systems and accessory equipment shall be tested according to Table 7-2.2.

Table 7-2.2 Test Methods is summarized as follows:

1. **System Sensors** - The sensors shall be tested in place to ensure heat entry into the sensing chamber and a remote alarm response. Testing with heat or listed sources to the manufacturer, or other means acceptable to the detector manufacturer, shall be permitted as one acceptable test method. Ensure that each heat sensor is within its listed and marked sensitivity range by testing using either:
 - (a) A calibrated test method; or
 - (b) The manufacturer's calibrated sensitivity test instrument; or
 - (c) Listed control equipment arranged for the purpose; or
 - (d) A heat sensor/control unit arrangement whereby the sensor causes a signal at the control unit when its sensitivity is outside its acceptable sensitivity range; or
 - (e) Other calibrated sensitivity test method acceptable to the authority having jurisdiction.

2. **Single Station Sensors** - The sensors shall be tested in place to ensure heat entry into the sensing chamber and a remote alarm response. Testing with heat or listed sources acceptable to the manufacturer, or other means acceptable to the sensor manufacturer, shall be permitted as one acceptable test method.

3. **Safer Christmas Tree Alarm** - The sensors shall be tested in place to ensure heat entry into the sensing chamber and a remote alarm response.

Section 7-4.2 states:

- 7-4.2 Any accumulation of dust and dirt can adversely affect device and appliance performance. The frequency of cleaning depends on the type of equipment and the local ambient conditions.

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Inspecting, Testing, and Maintaining Heat/Fire Sensors

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Section 7-3.2.1 states:

7-3.2.1 Sensor sensitivity shall be checked within 1 year after installation and every alternate year thereafter. After the second required calibration test, where sensitivity tests indicate that the sensor has remained within its listed and marked sensitivity range, the length of time between calibration tests shall be permitted to be extended to a maximum of 5 years. Where the frequency is extended records of sensor-caused nuisance alarms and subsequent trends of these alarms shall be maintained. In zones or in areas where nuisance alarms show any increase over the previous year, calibration tests shall be performed.

To ensure that each heat sensor is within its listed and marked sensitivity range, it shall be tested using either:

- (a) A calibrated test method; or
- (b) The manufacturer’s calibrated sensitivity test instrument; or
- (c) Listed control equipment arranged for the purpose; or
- (d) A heat sensor/control unit arrangement whereby the sensor causes a signal at the control unit where its sensitivity is outside its acceptable sensitivity range; or
- (e) Other calibrated sensitivity test method acceptable to the authority having jurisdiction. Sensors found to have sensitivity outside the listed and marked sensitivity range shall be cleaned and recalibrated or replaced.

Visual inspection for initiating devices shall be as recorded in Table 7-3.1 which is summarized as follows:

Initiating Device	Initial Installation	Semi-Annual
Heat Sensors and Remote Alarms	Yes	Yes

Testing frequencies for initiating devices shall be as recorded in table 7-3.2 which is summarized as follows:

Initiating Device	Initial Installation	Annual
Heat Sensors and Remote Alarms	Yes	Yes

If you have any questions in regard to saferalarms™ products, or their application, please contact us: support@saferalarmsinc.com