Combination Photoelectric Smoke and Carbon Monoxide Alarm

Model:AJ-730;AJ-731; AJ-732;AJ-933; AJ-938;AJ-939.



P/N 191111001-00 Rev.30

IMPORTANT!

PLEASE READ CAREFULLY AND SAVE

This user's manual contains important information about your smoke and cO alarm's operation. If you are installing this smoke and CO alarm for use by others, you must leave this manual or a copy of it with the end user. Photoelectric alarms are generally more effective at detecting slow, smoldering fires that smolder for hours before bursting into flame. Sources of these fires may include cigarettes burning in couches or bedding. Ionization alarms are generally more effective at detecting fast, flaming fires that consume combustible materials rapidly and spread quickly.Sources of these fires may include flammable liquids or paper burning in a waste container.

For maximum protection, it is recommended to install

both ionization and photoelectric alarm.

We provide two tags with important information about what to do in the case of co alerts. After installation, place one label next to the alarm and another label near a fresh air source, such as a door or window.

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1. FUNCTION DESCRIPTION

- 1.1 Normal: 1 green led flashes,1 minute pause.
- 1.2 Smoke Alarm: 3 beeps with 3 red led flashes, 1.5 seconds pause.
- 1.3 CO Alarm: 4 beeps with 4 red led flashes,5 seconds pause.
- 1.4 Low Battery: 1 chirp with 1 yellow led flash,60 seconds pause.Please replace alarm.

- 1.5 Trouble: 2 beeps with 2 red flashes,60 seconds pause, Please replace alarm.
- 1.6 End of life: 2 chirps with 1 yellow led flash,60 seconds pause.Deactivate and replace alarm.
- 1.7 Test Press and hold the test bu to.lf the alarm is normal, the simulated smoke &CO (if compound CO alarm) alarm sounds twice; If there is 1 beep or 3 beeps, the circuit may fail, replace the alarm in time; If there is 2 beeps or 4 beeps, move the alarm to fresh air. If it sill fails please replace the alarm in time.
- 1.8 Silence: When the alarm is on, press the silence button, and the alarm will be mute for 10(2 for CO alarm) minutes, lf the alarm is not canceled after 10(2 for CO alarm) minutes, the alarm sound will be resumed.Silence is not allowed when smoke or carbon monoxide levels are too high.Within 30 days after the end of life signal occurs, a single press of the silence button can mute for 24 hours.

Alarm response time of CO sensor: Alarm within 60-240 minutes at 70ppm. Alarm within 10-50 minutes at 150ppm. Alarm within 4-15 minutes at 400ppm.

2.IMPORTANT SAFETY INFORMATION



PLEASE READ AND SAVE THESE INSTRUCTIONS.

- 2.1 DO NOT remove or disconnect battery to quiet unwanted alarms. This will remove your protection. Open windows or fan the air around smoke and CO alarm to silence it.
- 2.2 The test button accurately tests all smoke and CO alarm functions. DO NOT use any other test method. Test smoke and CO alarm weekly to ensure proper operation.
- 2.3 This smoke and CO alarm should be installed only by a $\frac{-3}{-3}$

licensed, qualified electrician. Observe and follow all local and national electrical and building codes for installation.

- 2.4 This smoke and CO alarm IS NOT designed to be the PRIMARY protection for buildings that require complete fire alarm systems.Buildings of this type include hotels, motels, dormitories, hospitals, nursing homes, and group homes.This is true even if they were once single family homes. However, this smoke and CO alarm MAY be used inside individual rooms as SUPPL EMENTAL protection.
- 2.5 Install a smoke and CO alarm in every room and on every level of the home. Smoke may not reach the smoke and CO 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 and CO alarm in time to alert household members.A smoke and CO alarm will not promptly detect a fire EXCEPT in the area or room in which it is installed.
- 2.6 Smoke and CO alarms may not alert every household member every time. The alarm horn is oud in order to alert individuals to 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 and CO alarm may not alert a household member, install and maintain specialty smoke and cO alarm. 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 and CO alarm with lights or vibrating devices to alert occupants.
- 2.7 Smoke and cO alarms can sound their alarms only when they detect smoke. smoke and CO alarms

detect combustion particles in the air. They do not sense heat, flame, or gas. This smoke and CO 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 and CO alarm QUICKLY ENOUGH to ensure safe escape.smoke and CO alarms have limitations.This smoke and CO alarm is not foolproof and is not warranted to protect lives or property from fire, smoke and CO alarms are not a substitute for insurance. Homeowners and renters should insure their lives. and property. In addition, it is possible for the smoke and Co alarm to fail at any time. For this reason, you must test the smoke and CO alarm weekly and replace every 10 years.

3.WHERE TO LOCATE

3.1 As a minimum, smoke and CO alarms should be located between sleeping areas and potential sources of fire such as living rooms and kitchens. In single story homes with one sleeping area, a smoke and CO alarm should be installed in the hallway, as close as possible to the living accommodation. To ensure audibility in bedrooms, no smoke and CO alarm should be further away than 3m from any bedroom door. It may be necessary to install more than one smoke and CO alarm, particularly the hallway is more than 15m long. In single story homes with two separate sleeping areas, a minimum of two smoke and CO alarms is required, one outside each sleeping area. In multilevel or split level homes, as a minimum a smoke

and CO alarm should be installed on the ground floor between the staircase and any rooms in which a fire might start and on each story in circulation areas which form part of escape route (normally hallways and landings).

- 3.2 Additional alarms should be installed in bedrooms in anticipation of fires originating here, caused by faulty wiring, lights, appliances, smokers or other hazards.
- 3.3 For best protection, smoke and CO alarms should be installed in every room in your home, apart from those listed in the Section 4 LOCATIONS TO AVOID. Heat alarms should be used in kitchens, boiler rooms, laundry, rooms, garages and such like, where smoke and CO alarms would be unsuitable.
- 3.4 Install smoke and CO alarms in circulation areas at a distance no greater than 7.5m from the farthest wall, no greater than 7.5m from a door to any room in which a fire might start and no greater than 7.5m from the next smoke and CO alarm.
- 3.5 As it is impossible to predict the source of a fire, the best location for an alarm is usually the center of a room or hallway. If it is necessary to place a smoke and cO alarm on a wall, always locate the detection element of the alarm 150mm to 300mm(6 to 12 inches) below the ceiling and the bottom of the alarm above the level of doors and other openings.
- 3.6 In rooms with simple sloped, peaked or gabled ceilings, install smoke and CO alarms on the ceiling 900mm (3feet) from the highest point of the ceiling. "Dead air at the peak of a ceiling may prevent the smoke from reaching the alarm in time to provide an early warning.
- 3.7 Read Section 4 LOCATIONS TO AVOID and Section and 13 LIMITATIONS OF smoke and CO alarms in this manual.

CAUTION:

Research indicates that substantial increases in warning time can be obtained with each properly installed, additional alarm. It is strongly recommended that advice in 3.3 above be followed to ensure maximum protection.



Single Story one sleeping area



Single Story more than one sleeping areas



Two Story dwelling



IMPORTANT:

These alarms are intended to primarily for single-occupancy private dwellings.For use in other applications the manufacturer's advice must be sought.

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

• For your information, the National Fire Alarm and Signaling Code, NFPA72, reads as follows:

•29.5.1 *Required Detection.

•*29.5.1.1 Where required by applicable laws, codes, or standards for a specific type of occupancy, approved single- and multiple-station smoke alarms shall be installed as follows:

(1)*In all sleeping rooms and guest rooms

(2)*Outside of each separate dwelling unit sleeping area, within 21 ft(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.

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4.LOCATIONS TO AVOID

DO NOT locate smoke and CO alarms:

- 4.1 In turbulent air from fans, heaters, doors, windows, etc., which could draw smoke away from the alarm.
- 4.2 In high humidity area such as bathrooms and shower rooms, or where the temperature exceeds 37.8°C(100°F) or falls below 4.4°C(40°F), as high humidity can trigger nuisance alarm,
- 4.3 At the peal of an "A" frame ceiling. "Dead air" at the top may prevent smoke from reaching the alarm in time to provide early warning.
- 4.4 Less than 300mm (12 inches) from the wall when mounted on the ceiling.
- 4.5 In insect-infested areas. Tiny insects may affect performance.
- 4.6 In kitchens, boiler rooms, laundry rooms, garages. Combustion particles from cooking or car exhaust and dust and moisture could trigger a nuisance alarm.The alarm is not to be located within 5 feet (1.5 m) of any cooking appliance.
- 4.7 In very dusty or dirty areas. Dirt and dust can build up and impair performance.
- 4.8 Within 300mm(12 inches)of light fittings or room corners.
- 4.9 In locations which would make routine testing or maintenance hazardous (e.g.over a stairwell).
- 4.10 On Poorly insulated walls or ceilings.
- 4.11 Near objects such as ceiling decorations which might impede the path of smoke to the alarm.
- 4.12 Within 1500mm (5 feet) of fluorescent light fittings.

5.HOW TO INSTALL



- 5.1 Taking the bracket from the detector.
- 5.2 Draw a horizontal or vertical line 6 inches (10cm) long on the area of ceilings or walls where this smoke and cO alarm is intended to locate (see Section 3 WHERE TO LOCATE)
- 5.3 Locate the mounting bracket in your chosen position. Align the two longest mounting slots with the line. Draw a mark in the center of each slot.
- 5.4 Drill the holes at the marks Mountings with a 3/16-inch (5mm) dill.
- 5.5 Insert the anchor plugs and screw the mounting bracket to the chosen position. DO NOT

OVER-TIGHT THE SCREWs, this will distort the mounting bracket.

- 5.6 Attach the alarm to the mounting bracket and turn clockwise to lock into place.
- 5.7 Test the smoke and cO alarm. See Section 8

TESTING THE smoke and CO alarm. When the alarm is first installed on the mounting board, itwill automatically start the alarm.Once activated, the battery will power the alarm under normal conditions and will last for 10 years.

6.DEACTIVATION OF ALARM



Please deactivate the alarm at the end of the 10-year life. The deactivation of alarm is permanent and unrecoverable, and the smoke or co cannot be detected after it is deactivated. After the failure, the battery will be depleted.

Break the label witha screwdriver andturn the device ofdeactivation 90 degrees clockwise, then the alarm will be deactivated.



7. GENERAL CO INFORMATION

7.1The following conditions can result in transient CO situations, such as:

1)Excessive spillage or reverse venting of fuel burning appliances 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.

ii) Simultaneous operation of several fuel burming 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.

2) Extended operation of unvented fuel burning devices (range, oven, fireplace, etc.).

3)Temperature inversions which can trap exhaust gasses near the ground.

4) Car idling in an open or closed attached garage, or near a home.

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

•Mild Exposure: Slight headache.nausea,vomiting,fatigue (often described as "Flu-like' symptoms).

•Medium Exposure: Severe throbbing headache,drowsiness, confusion, fast heat rate.

•Extreme Exposure: Unconsciousness,convulsions, cardiorespiratory failure, death.

•Many cases of reported carbon monoxide poisoning indicate that while victims are aware they are not well, they become so disoriented they are unable to save themselves by either exiting the building, or calling for assistance.Also, young children and household pets may be the first effected.Familiarization with the effects of each level isimportant.

8. TESTING THE SMOKE AND CO ALARM WARNING

• Test each smoke and CO alarm to be sure it is installed correctly and operating properly.

• The test button accurately tests all functions. DO NOT use an open flame to test this smoke and CO alarm. You many ignite and damage the smoke and CO alarm or your home.

• Test smoke and CO 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 and co alarm when testing. The alarm horn is loud to alert you to an emergency and can be harmful to hearing.

Press and release the test button to test the alarm.The alarm will sound loud short beeps.

•The alarm may stop sounding once releasing the test button. NOTE: REPLACE OR RETURN THE ALARM IF THE TEST FUNCTION DOES NOT OPERATE PROPERLY AFTER FOLLOWING THE PROCEDURES OUTLINED ABOVE.

DANGER: if alarm horn sounds, and smoke and CO alarm is not being tested, the smoke and CO alarm is sensing smoke.

THE SOUND OF THE AL ARM HORN REQUIRES YOUR IMMEDIATEATTENTION AND ACTION.



9.MAINTENANCE AND CLEANING

To ensure your alarm works normally, reach the service life that predicts, safeguard your life property safety, you should undertake cleanness according to the following specification and maintain.

9.1 Test your alarm at least once a week.

9.2 Clean your alarm at least once a year; Use a vacuum cleaner to remove dust, or use a wet towel to gently wipe the alarm.Please do not use water, detergent, solvent and so on, so as not to damage the alarm.

9.3 Do not paint the alarm. This will affect the smoke and carbon monoxide into the detection room, resulting in alarm failure. If the smoke and CO alarm cannot be cleaned, replace the unit immediately.

9.4 If you often hear false alarms, See Section 4 LOCATIONS TO AVOID and check if they are installed in the wrongplace.

10.PRACTICE FIRE SAFETY

If the smoke and CO 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.

- 10.1 Expose everyone to the sound of a smoke and co alarm and explain what the sound means.
- 10.2 Determine two exits from each room and an escape route to the outside from each exit.
- 10.3 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, 10.4 Teach household members to crawl along the floor to stay below dangerous smoke, fumes, and gases. 10.5 Determine a safe meeting place for all members outside the building.

11.WHAT TO DO WHEN THE ALARM SOUNDS

11.1 WHEN THE SOMKE ALARM SOUNDS

•Don't panic; stay calm.

•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.

Meet at a pre-arranged meeting place outside the building.
Call the fire department from OUTSIDE the building.
DO NOT GO BACK INSIDEABURNING BUILDING.

Wait for the fire department to arrive.

NOTE: 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.

Current studies have shown smoke alarms may not awaken all sleeping individuals, and that it is the responsibility of individuals in the household that are capable of assisting others to provide assistance to those who may not be awakened by the alarm sound, or to those who may be incapable of safely evacuating the area unassisted.

⚠ WARNING!

Actuation of your CO alarm indicates the presence of carbon monoxide (CO) which can KILL YOU.If alarm signal sounds: 1)Operate reset/silence button; 2)Call your emergency services (Telephone Number [fire department or 911]; 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 gualified appliance technician (Telephone Number) to investigate for sources of CO from fuel burning equipment and appliances, and inspect for proper oper ation 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.

12.LIMITATIONS OF SMOKE AND CO ALARM

Smoke and CO alarms have played a key role in reducing deaths resulting from home fires worldwide. However, like any warning device, smoke and cO alarms can only work if they are properly located, installed, and maintained, and if smok ereaches the Alarms.They are not foolproof.

12.1 Smoke and CO alarms may not wake everyone up. Sleeping children or others are less likely to be awakened by the sound of a smoke/carbon monoxide alarm, or a family member with a baby or mobility problems needs someone to help them escape.Practice your escape plan every year. It is recommended that you do it while your family is asleep.Always let your child master the escape plan and practice before the fire drill at night.

12.2 Smoke and CO alarms cannot work without power. Battery operated units cannot work if the batteries are dead.Smoke alarms must be tested regularly to make sure the battery and the alarm circuits are in good operating condition.

12.3 Smoke alarms cannot provide an alarm if smoke does not reach the alarm. Smoke from fires in chimneys or walls, on roofs, or on the other side of closed doors may not reach bedroom or sleeping area-especially if bedroom or sleeping area doors are closed at night and in the hallway between them.

12.4 smoke and CO alarms may not have time to alarm before the fire itself causes damage, injury, or death, since smoke from some fires may not reach the unit immediately. Examples of this include persons smoking in bed, children playing with matches, or fires caused by violent explosions resulting from escaping gas.

12.5 smoke and CO alarms are not foolproof.Like any

electronic device, smoke and CO alarms are made of components that can wear out or fail at any time. You must test the unit weekly to ensure your continued protection. smoke and CO alarms cannot prevent or extinguish fires. They are not a substitute for property or life insurance.

12.6 smoke and cO alarms have a limited life, The unit should be replaced immediately if it is not operating properly. You should always replace a smoke and CO alarm after 10 years from date of purchase. Write the purchase date on the space provided on back of unit.

•Smoke alarms are not to be used with smoke alarm guards. The smoke alarm and the CO alarm are two separatesensors. •The CO alarm not designed to detect fire or any other gas, and it is only designed to detect carbon monoxide gas. The smoke alarm will only indicate the presence of smok ethat reaches the sensor, and it is not designed to sense gas, heat or flames.



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.

This alarm will only indicate the presence of carbon monoxide gas at the sensor. Carbon monoxide gas may be present in other areas. Individuals with medical problems may consider using warning devices which provide audible and visual signals for carbon monoxide concentrations under 30 ppm.

13.LIMITED WARRANTY

We warrants to the original consumer purchasere ach new smoke and cO alarm to be free from defects in material and workmanship under normal use and service for a period of ten years from the date of purchase. 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 APERIOD OF TEN YEARS FOR THE smoke and CO alarm FROM PURCHASE DATE.

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