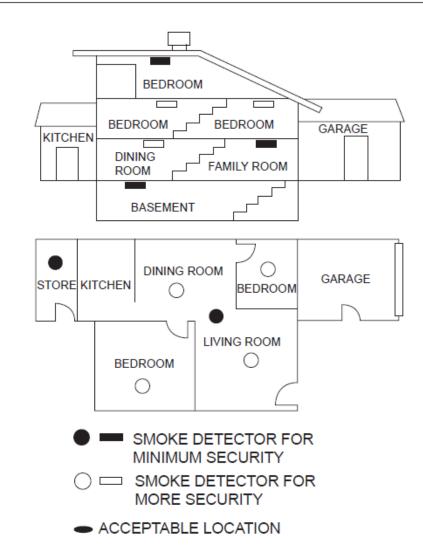
QA31 SMOKE ALARM OWNERS MANUAL

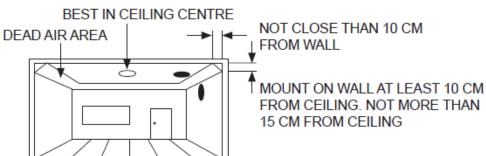
IMPORTANT: READ ALL INSTRUCTIONS BEFORE INSTALLATION

The smoke detector uses a high technology electronic chamber. Do not try to repair the smoke detector yourself. Refer to instructions for repairs.

RECOMMENDED LOCATION OF DETECTORS

- Locate the first detector in the immediate area of the bedrooms. Try to protect the exit path as the bedrooms are usually farthest from an exit. If more than one sleeping area exists, locate additional detectors in each sleeping area.
- Locate additional detectors to protect any stairway as stairways act like chimneys for smoke and heat.
- Locate at least one detector on every floor level.
- Locate a detector in every bedroom where a smoker sleeps.
- Locate a detector in every room where electrical appliances are operated (i.e. portable heaters or humidifiers).
- Locate a detector in every room where someone sleeps with the door closed. The closed door may prevent the alarm from waking the sleeper.
 Smoke, heat and other combustion products rise to the ceiling and
- spread horizontally. Mounting the detector on the ceiling in the center of the room places it close to all points in the room. Ceiling mounting is preferred in ordinary residential construction.
 - For mobile home installation select location carefully to avoid thermal
- barrier that may from at the ceiling.
- When mounting detector on the ceiling locate it at a minimum of 4"
- (10cm) from the side wall and 2 feet (60.96cm) from any corner (See Diagram).
 - If ceiling mounting is not possible and wall mounting is permitted by
- your local and state codes, put wall-mounted detectors between 4 and 6 inches (10 and 15 cm) from the ceiling (see Diagram).
- Put smoke detector at both ends of a bedroom hallway if the hallway is more than 30 feet long.





AVOID THESE LOCATIONS Do Not Locate Your Detector in :

- The kitchen-smoke from cooking might cause an unwanted alarm.
- The garage-products of combustion are present when you start your automobile.
- in front of forced air ducts used for heating and air conditioning and other high air flow areas.
- in the peak of an "A" frame type of ceiling.
- in areas where temperatures may fall below 40 F or above 100 F.
- in dusty areas, dust particles may cause smoke detector to false alarm or fail to alarm.
- in very humid areas or near a bathroom, moisture can cause false alarm.
 Near electrical lights-Electrical "Noise" from electrical lights may cause
- nuisance alarms. Put up smoke detectors at least 5 feet (1.5 meters) from such lights.

FALSE ALARMS

The smoke alarm is designed to minimize false alarms. Smoking will not normally set off the alarm unless smoke is blown directly into the detector. Combustion particles from cooking may set off the alarm if the detector is located close to the kitchen. Large quantities of combustion particles are generated from spills or boiling.

If the detector does alarm, check for fires first. If a fire is discovered, get out and call the fire department. If no fire is present, check to see if one of the reasons listed above may have caused the alarm.

INSTALLATION

- Remove the mounting base from the detector. Mount smoke alarm base onto mounting surface and drive the screws into the surface.
- Remove the plastic film from battery and reinsert battery into battery holder.
- Replace detecor head by twisting it until it latches onto base.

Signal Transfer/Relay Output: For TYPE 2 . TYPE 4

5P

1.Blue N.O
2.Orange COM
3.Brown N.C
4.Yellow S +
5.Gray S -

AC 110V/220V: For TYPE 3 \ TYPE 4

2P

1.Black AC Input 2.Red AC Input

OPERATION, TESTING & MAINTENANCE

OPERATION: The smoke alarm is operating once the battery is connected. When products of combustion are sensed, the unit sounds and indicator flashes continuously.

TESTING: Test by pushing test button on cover and holding button down. This will sound alarm if all electronic circuitry, horn, and battery are working. If no alarm sounds, the unit may has a defective battery or other failure. You can also test alarm by blowing smoke into it.

Erratic noise or low sound from alarm may indicate a defective detector. Return it for service.

Warning: Test smoke detector operation after RV or mobile home vehicle has been in storage,

MAINTENANCE: The smoke detector is virtually maintenance free. However, under dusty conditions, a vacuum hose may be used to clear the sensing chamber of duct. Do not remove smoke detector cover when vacuum is used.

BATTERY REPLACEMENT

The smoke alarm is powered by one 9V battery. The battery should provide operation for at least one year under normal operating conditions. The smoke alarm has a low battery monitoring indicator which will flash and unit beeps intermittently.

GOOD SAFETY HABITS

There are situations where a smoke detector may not be effective to protect against fire as stated in the NFPA standard 74. For instance:

- a) smoking in bed.
- b) leaving children home alone, and.
- c) cleaning with flammable liquids, such as gasoline.

THE LIMITATIONS OF SMOKE DETECTORS

Smoke detectors are devices that can provide early warning of possible developing fires at a reasonable cost. However, smoke detectors have certain limitations. For battery powered smoke detectors, the battery must be in good condition and installed properly.

Smoke detectors cannot provide an alarm if smoke does not reach the detector. Therefore smoke detector may not sense fires starting in chimneys, walls, on roofs, on the other side of a closed door, or on a different floor. For maximum protection, a smoke detector should be installed in each separate sleeping area and on every level of a home.

Although smoke detectors can help save lives by providing early warnings of a fire, they are not a substitute for an insurance policy. Home owners and renters should have adequate insurance to protect their lives and property.

NATIONAL FIRE PROTECTION ASSOCIATION REQUIRED PROTECTION

For your information, the National Fire Protection Association's Standard 74, Section 2-1 provides information regarding the smoke detection equipment required within the family living unit. Section 2-1, 1.1 reads as follows:

"Smoke detectors shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms and on each additional story of the family living unit including basements and excluding crawl spaces and unfinished attics.

The provisions of 2-1, 1.1 represent the minimum number of detectors required by this standard. It is recommended that the householder consider the use of additional smoke or heat detectors for increased protection for those areas separated by a door from the areas protected by the required smoke detectors under 2-1, 1.1 above. The recommended additional areas are living room, dining room, bedroom(s), kitchen, attic (finished or unfinished), furnace room, utility room, basement, integral or attached garage, and hallways not included in 2-1, 1.1 above. However, the use of additional detectors remains the opting of the householder."

The equipment should be installed in accordance with the National Fire Protection Association's Standard 74. (NFPA, Batterymatch Park, Quincy, Mass 02269)

NOTIFY YOUR LOCAL FIRE DEPARTMENT AND INSURANCE COMPANY OF YOUR SMOKE ALARM INSTALLATION