SINGLE STATION
SMOKE ALARM
ALSO SUITABLE FOR USE IN RECREATIONAL VEHICLES (WITH ALARM MUTE)


## MODEL : SA-866



## Intertek 5007998

Conforms to:
UL STANDARD 217
This instruction leaflet contains important information on the correct installation and operation of your smoke alarm. Read this leaflet fully before attempting installation and retain for future reference.

## SPECIFICATION

Power Source
3V Lithium cells
Operation Current
<20mA operation (In Alarm)
Sensitivity to smoke
TOD
Operation Temperature : $0^{\circ} \mathrm{C}-37.8^{\circ} \mathrm{C}$
Ambient Humidity : 10\% - $90 \%$
Horn Level $: 85$ Decibels at 10 ft
Battery Life : 5 Years
Approval : Conforms to UL217

## LOCATING THE SMOKE ALARM

This smoke alarm is a single station photoelectric alarm and should NOT be connected to other smoke alarms.
If your dwelling is on a single storey, for minimum protection you should fit an alarm in the hallway between the living areas (incl. Kitchens) and sleeping areas. Place it as near to the living areas as possible and ensure the alarm is audible when the bedrooms are occupied. See Figure 1 for examples.
f your dwelling is multi-storey, for minimum protection one alarm should be fitted at the bottom of the staircase with further alarms fitted on each upstairs landing. This includes basements but excludes crawl spaces and unfinished attics. See Figure 2 for examples.
NOTE: For maximum protection an alarm should be fitted in every room (except kitchen, bathroom and garage).
OO NOT FIT AN ALARM IN THE KITCHEN or BATHROOM, as cooking fumes or steam may trigger the alarm.
DO NOT FIT ALARM IN A GARAGE, as exhaust fumes are likely to set it off.

## POSITIONING THE SMOKE ALARM

 Ceiling MountingAs hot smoke rises and spread out, it is advisable to mount on a ceiling in a central position. Avoid areas where there is no air circulation. E.g. Corners of rooms and keep away from tems which may prevent the free flow of air. Place the unit at least 300 mm ( $12^{\prime \prime}$ ) from and light fitting or decorative bject which might obstruct smoke / heat entering the alarm object which might obstruct smoke / heat entering the alarm
Keep at least 300 mm (12") away from walls. Keep at least Keep at least $300 \mathrm{~mm}(12 ")$ away from walls. Keep at least
$910 \mathrm{~mm}\left(36^{\prime \prime}\right)$ away from fans, shower and vent. See Figure 910
$3 i$.

## Wall Mounting

Do not mount tight into the corners. Put the top edge of you smoke alarm between $150\left(6^{\prime \prime}\right)$ and $300 \mathrm{~mm}\left(12^{\prime \prime}\right)$ below the ceiling. Keep at least $300 \mathrm{~mm}(12 ")$ from room corners. See Figure $3 i$

## On a Sloping Ceiling

In areas with sloping or peaked ceilings install your Smoke Alarm 100(4") - $910 \mathrm{~mm}\left(36^{\prime \prime}\right)$ from the highest point measured horizontally because "dead air" at the apex may prevent smoke from reaching the unit. See Figure 3ii.

FIGURE 1 - SINGLE STOREY DWELLING


KEY
maximum protection
MINIMUM PROTECTION

Areas to be avoided include the following :-

- Situations where the temperature may fall below $0^{\circ} \mathrm{Cor}$ rise above $37.8^{\circ} \mathrm{C}$
- Humid areas such as bathrooms, kitchens, shower rooms where the relative humidity may exceed $90 \%$
- Near a decorative object, door, light fitting, window molding etc., that may prevent smoke or heat from entering the alarm.
- Fume filled environments such as garages. Exhaust gases may cause false alarms
- Adjacent to or directly above hot components such as radiators or wall vents that can effect the direction of air currents.
- In very dusty or dirty environments such as workshops Locate unit at least 1.5 m and route wiring at least 1 m away for fluorescent light fittings as electrical "noise" and/or flickering may affect the unit. Do not wire into the same circuit as fluorescent lights or dimmers.
- Do not locate in insect infested areas. Insects and contamination on the Heat Alarm sensor can increase its response time.
Figure 3i- Positioning


INSTALLING THE SMOKE ALARM
This smoke alarm is powered by battery and requires no additional wiring

- Having established the mounting location ensure that there in no electrical wiring or pipe work in the area adjacent to the mounting surface.
- Take the mounting bracket and mark the two mounting hole locations.
- Drill holes in the positions marked.
- Insert wall plugs into the drilled holes.
- Screw mounting bracket to mounting surface. DO NOT OVER TIGHTEN.
- Assemble detector onto the mounting plate by aligning the two projections (A1) and (A2) on the mounting plate with the two keyhole slots in the detector.


Lock in position by giving a clockwise quarter turn. This clockwise turn can switch on the sealed-in battery in same time. i.e. power on the device simultaneously

- Test the alarm for correct operation using test facility


## OPERATING YOUR SMOKE ALARM

Once the smoke alarm has been installed a small indicator light (LED), positioned beside the test button, should flash approximately once a minute in normal operation.
If smoke is detected the unit will emit a load pulsating alarm until the air is clear.

## TESTING YOUR SMOKE ALARM

It is recommended that you test your smoke alarm once a week to ensure the detector is working correctly. Push and hold the test button for approximately 3 seconds. A loud pulsating alarm should sound to indicate the correct function. During the alarm condition the indicator light will flash quickly

## After installation and after reoccupation of the

 dwelling following a vacation etc, check all your alarms.COMMON CAUSES AND AVOIDANCE OF FALSE ALARMS
The Smoke Alarm may be triggered by steam, condensation normal smoke or fumes. Small insects getting into the smoke alarm chamber may cause intermittent alarms. Keep away from the sources to avoid nuisance alarms. (See "Areas to be avoided" in the "Positioning the smoke alarm" section.)

## DISTINCTIONS BETWEEN WARNING AND FAULT

 SIGNALSWARNING SIGNAL: The horn will sound for 3 beeps, pause The LED flashes RED.
FAULT SIGNAL: The horn will sound for 2 beeps, pause 40 second, 2 beeps. The LED flashes YELLOW.

## Hush or Silence Feature

This Smoke Alarm has a built-in Hush or Silence feature incorporated into the Test button.
If cooking or other non-hazardous sources cause the unwanted alarm, it can be temporarily silenced by depressing the test button and holding for approximately 1 second. The alarm will enter a dormant period for 10 minutes. The red LED will flash every 10 seconds to indicate the sensitivity is reduced. At the end of the hush period the alarm will give two short beeps, the alarm will then reset to normal sensitivity.
NOTE - If the smoke density increases during this period (i.e. from a fire) the unit will go into alarm mode

## LOW BATTERY WARNING

If the smoke detector emits a short 'beep' once every 40 seconds the battery is at the end of its life and this detector should be replaced immediately. This low voltage warning will be given for at least 7 days.
If the red indicator light (LED) does not flash every 40 seconds then replace the whole smoke alarm unit.

## BATTERY SEALED-IN NOT FOR REPLACEMENT

ACTION IN THE EVENT OF A FALSE ALARM

- If there is a false alarm, simply press the test / hush button on the cover to mute the unit for 10 minutes.
- Check the house carefully in case there is a small fire smouldering somewhere.
- Check whether there are some sources of smoke or fumes. You should get your family into a safe place before your investigation.
- If there are frequent nuisance/ false alarms it may be necessary to re-locate the device. If cleaning the alarm does not correct the problem it can be returned to the place where you bought it.

N THE EVENT OF FIRE

- Leave the building as quickly as possible. Check room doors for heat or smoke. Do not open a hot door. Use an alternate escape route. Crawl along the floor, if possible, through a wet cloth or hold your breath. Do not stop to collect anything.
- Meet at a pre-arranged meeting place outside the dwelling and check everybody is there.
- Call the Fire Department from outside the building immediately. The Fire Department should be summoned regardless of the size of the fire and regardless of whether there is a facility for transmission of alarms to a remote manned centre.
- Do not go back inside a burning building and wait for the Firefighting team to arrive.


## MAINTAINING YOUR SMOKE ALARM

Clean your smoke alarm once per week to prevent dust build up. This can be done using a vacuum cleaner with the brush attachment. Clean gently around the front grilled section and sides. Never use water, cleaners or solvents since they may damage the smoke alarm.

When the battery is low, replace with a new smoke alarm.
If the alarm fails to operate currently, please send back to the address of manufacturer shown on the back label of the detector.

NOTE: THE APPARATUS SHALL NOT BE EXPOSED TO DRIPPING OR SPLASHING

PRE-WARNING FAULT SIGNAL (YELLOW LED)
When there is no fire nor smoke accident, if the LED on fron cover lights on yellow, it means: may be dust go inside or means the unit cannot function properly. This is a prewarning signal that the user should replace the unit with a new smoke alarm.

## IMPORTANT SAFEGUARDS

Installation of your smoke alarm is only one step in your safety plan. Other important steps should be taken to further improve your safety:-

Install the smoke alarm properly, following this instruction leaflet

- Test your smoke alarm weekly
- Replace with a new smoke alarm immediately once depleted
- Do not smoke in bed
- Keep matches \& lighters away from children
- Store flammable materials in a proper manner and never use them near naked flames or sparks
- Maintain emergency equipment such as Fire Extinguishers, escape ladders etc and ensure all occupants know how to use them correctly.
- Plan an escape route/s from your building in advance and ensure all occupants are aware of them. Reenforce this awareness periodically through-out the year.
- Make sure escape routes remain free of any obstructions.
- A warning that batteries (battery pack or batteries installed) shall not be exposed to excessive heat such as sunshine, fire or the like.


## WARNING!

IF THERE IS ANY QUESTION AS TO THE CAUSE OF AN ALARM IT SHOULD BE ASSUMED THAT THE ALARM IS DUE TO AN ACTUAL FIRE AND THE DWELLING SHOULD BE EVACUATED IMMEDIATELY.

THIS PRODUCT IS A SEALED UNIT AND CANNOT BE REPAIRED - IF THE UNIT IS TAMPERED WITH IT WILL REPAIRED - IF THE UNIT IS TAMPERED WITH IT WILL
INVALIDATE THE WARRANTY. IF THE UNIT IS FAULTY INVALIDATE THE WARRANTY. IF THE UNIT IS FAULTY
PLEASE RETURN IT TO YOUR ORIGINAL SUPPLIER PLEASE RETURN IT TO YOUR ORIGIN
WITH YOUR PROOF OF PURCHASE.


Use a screw driver to push the button to "Off" position in order to deactivate the smoke alarm. This will deactivate the alarm, stop the low battery "chirp" and render the alarm safe for disposal by draining the battery.

Smoke Alarms are not to be used with detector guards unless the combination has been evaluated and found suitable for that purpose.

## Important!

IF SMOKE ALARM MAY NOT AWAKEN ALL SLEEPING INDIVIDUALS AND THAT IT IS THE RESPONSBILITY OF INDIVIDUALS IN THE HOUSEHOLD THAT ARE CAPABLE OF ASSISTING OTHERS TO PROVIDE ASISTANCE TO TOSE WHO MAY NOT BE AWAKENED BY THE ALARM SOUND, OR TO THOSE WHO MAY BE INCAPABLE OF SAFELY EVACUATING THE AREA UNASSISTED.

SMOKE ALARM MAY NOT BE EFFECTIVE FOR BELOW SITUATION:

Fire where the victims is intimate with a flaming initiated fire; fire example, when a person's clothes catch fi
Fire where the smoke is prevented from
reaching the detector due to a closed door or other obstruction
Incendiary fires where the fire grows rapidly that an occupant's egress is blocked even with properly located detectors

## AGENCY PLACEMENT

## RECOMMENDATIONS

NFPA 72 CHAPTER 29 "For your information, the National Fire Alarm and Signaling Code, NFPA 72 , reads as follows:"
and Signaing Code, NFPA
29.5.1* REQUIRED DETECTION.
29.5.1.1* Where required by other governing 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
$(6.4 \mathrm{~m})$ of any door to a sleeping room, with 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 (smal
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 (small facility)
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CALIFORNIA STATE FIRE MARSHAL (CSFM) Early warning detection is best achieved by the installation of fire detection equipment in all rooms and areas of the
household as follows: A Smoke Alarm installed in each separate sleeping area (in the vicinity, but outside bedrooms), and Heat or Smoke finished attics, furnance rooms, closets, utility and storage rooms basements, and attached garages.

TEST SMOKE ALARM OPERATION AFTER VEHICLE HAS BEEN IN STORAGE, BEFORE EACH TRIP, AND AT LEAST ONCE PER WEEK DURING USE. An identical marking is to be provided by the recreational vehicle manufacturer that shall be permanent and located, visibly, within 24inches $(610 \mathrm{~mm})$ of the smoke alarm.

## YOUR SMOKE ALARM WARRANTY

These Smoke Alarms are warranty to be free from defects in materials and workmanships under normal use and service for a period of five years (exclude battery) from date of purchase. The company will not be obligated to repair or replace parts which are found to be in need of repair because of misuse, damage or alterations occur after the date of purchase. Send the Smoke Alarm with proof of purchase, postage and return postage prepaid, to local distributor. The liability of the company arising from the sale of this Smoke Alarm shall not in any case exceed the cost of replacement of Heat Alarm and in no case shall the company be liable for consequential loss or damages resulting from the failure of the Smoke Alarm.

MTI INDUSTRIES, INC. SHALL HAVE NO LIABILITY FOR ANY PERSONAL INJURY OR PROPERTY DAMAGE, OR ANY SPECIAL INCIDENTAL, CONTINGENT OR CONSEQUENTIAL DAMAGE OF ANY KIND RESULTING FROM A FIRE. THE EXCLUSIVE REMEDY FOR BREACH OF THE LIMITED WARRANTY CONTAINED HEREIN IS THE RREACH OR TE L ACEMENT OF THE DETECTIVE PRODUCT AT MTI INDUSTRIES INC. OPTION. IN NO CASE SHALL MTI INDUSTRIES, INDUSTRIES, INC. OPTION. INNO CASE SHALL MTI INDIBSRI
INC'S LIABILITY UNDER ANY OTHER REMEDY PRESCRIBED BY LAW INC'S LIABILITY UNDER ANY OTHER REMEDY PRESCRIBED BY LAW
EXCEED THE PURCHASE PRICE. YOUR SMOKE ALARMS IS NOT A EXCEED THE PURCHASE PRICE. YOUR SMOKE ALARMS IS NOT A SUBSTITUTE FOR PROPERTY, DISABILITY, LIFE OR OTHER INSURANCE OF ANY KIND. APPROPRIATE COVERAGE IS YOUR RESPONSIBILITY. CONSULT YOUR INSURANCE AGENT

This does not affect your statutory rights
This alarm is only suitable for single occupancy private dwellings only and not intended for multi occupancy private dwellings or commercial or industrial dwellings.

Waste electrical products should not be disposed of with normal household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice. New regulation will encourage the recycling of Waste from Electrical and Electronic Equipment (European "WEEE of Waste from Electrical and Electron
Directive" effective August 2005).

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