



MODEL: HSSA/PE/FF

220 ~ 240V AC OPERATED OPTICAL SMOKE ALARM WITH 9V BATTERY BACKUP

MAIN FEATURES:

- Optical Sensor for Slow Smouldering Fires
- 9v Battery Back Up
- Interconnectable upto 20 Hispec alarms
- Hush Feature
- Power & Alarm Test Button
- Low Battery Warning
- Loud 85db alarm signal
- Supplied with fixing kit
- Pre-warning fault signal
- Fault Signal
- Kitemark Approved: BS EN14604: 2005

This instruction leaflet contains important information on the correct installation and operation of your alarm. Read this leaflet fully before attempting installation and retain for future reference.

SPECIFICATION

Power Source:	220-240 Vac~ 50-60Hz with 9V battery Back-up (battery included)
Battery Back-up:	9V DC Carbon Zinc (Peak Power 1604E), 9V Alkaline Battery (EVE CR9V/P)
Battery Back-up Life:	In the event of a break in the mains supply the battery will give detector operation for 1 month minimum
Sensitivity to Smoke:	0.08-0.18db/m
Operation Current:	<40 mA operation (In Alarm)
Temperature Ambient:	0°C - 40°C
Ambient Humidity:	10%-90%
Recommended Spacing:	8.2m
Max. Wire interconnection:	20 units
Max Wire Interconnection Distance:	80 metres maximum
Alarm Sound Level:	85 Decibels at 3 metres
Approval:	Certified to BS EN14604:2005

PRODUCT DESCRIPTION

HSSA/PE/FF is a multiple station photoelectric smoke alarm and can be connected to other alarms of the same make and type. This interconnect feature allows up to 20 units to be connected together over 80 metres maximum, using the single white wire, and thus allowing all alarms to sound when any one is activated.

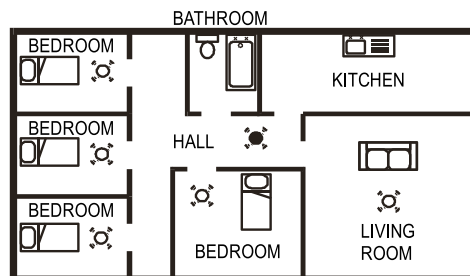
Note: This alarm cannot be connected to any other device such as a fire alarm panel.

All alarms should be interconnected to ensure the early warning will be heard, particularly by somebody sleeping. A properly designed early warning fire system ensures the alarm is given before the escape routes become blocked with smoke.

LOCATING THE SMOKE ALARM

If your dwelling is on a single story, for minimum protection you should fit an alarm in a corridor or hallway between the sleeping and living areas (incl. Kitchens). Place it as near to the living areas as possible and ensure the audible alarm can be heard when the bedrooms are occupied. See **Figure 1** for examples.

FIGURE 1 - SINGLE STORY DWELLING



If your dwelling is multi-story, 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).

POSITIONING THE SMOKE ALARM

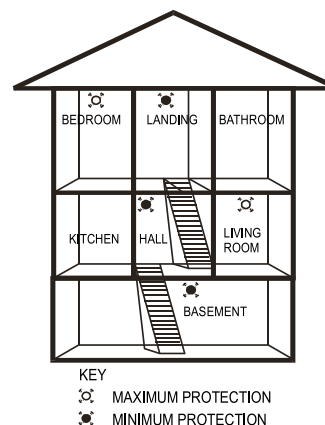
Ceiling Mounting

As hot smoke rises and spreads, 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 items which may prevent the free flow of air. Place the unit at least 300mm from any light fittings or decorative objects which might obstruct smoke entering the alarm. Keep at least 300mm away from walls. See **Figure 3i**.

Wall Mounting

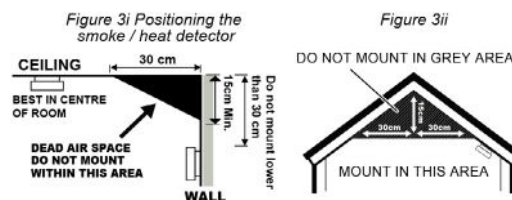
Do not mount tight into the corners. Put the top edge of your alarm between 150 and 300mm below the ceiling. Keep at least 300mm from room corners. See **Figure 3i**

FIGURE 2 - 2/3 STORY DWELLING



On a Sloping Ceiling

In areas with sloping or peaked ceilings install your Alarm in accordance with **Figure 3ii** because "dead air" at the apex may not allow smoke to adequately enter the alarm.



AREAS TO BE AVOIDED:

- Situations where the temperature may fall below 0°C or rise above 40°C for extended periods
- Humid areas such as BATHROOMS, KITCHENS, SHOWER ROOMS where the relative humidity may exceed 90% as vapour will cause false alarms.
- Near a DECORATIVE OBJECT, DOOR, LIGHT FITTING, WINDOW MOULDING etc., that may prevent smoke 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 affect the direction of air currents.
- In VERY DUSTY OR DIRTY environments such as workshops.
- Locate unit at least 1.5m and route wiring at least 1m 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 alarm sensor can increase its response time.

INSTALLING THE SMOKE ALARM



WARNING – This alarm is mains powered and requires wiring by a qualified electrician in accordance with the current IET Wiring Regulations (BS7671).

Assemble alarm unit to the mounting base

Before wiring to the mains, assemble the alarm unit onto the mounting base by sliding it in according to the direction of the arrows. Test the correct operation of the alarm (operating from the battery only) by pressing the test button on the front of the alarm. The unit should emit a loud pulsating alarm.

The circuit used to power the alarm must be a dedicated permanent supply that cannot be switched off accidentally by the normal user. Before installing ensure the electrical supply is isolated.

WARNING: To prevent injury, this alarm must be securely attached to the ceiling/wall in accordance with the installation instructions.

The alarm will function correctly either as a stand-alone alarm or interconnected. All interconnected alarms must be supplied from a single power circuit. A common neutral must be used for the interconnect to function.

WARNING: Do not connect the interconnect wire to Live, Neutral or Earth.

- Disconnect the AC main power from the circuit that is going to be used.
- Having established the mounting location install a junction box suitable for locating the termination point. Ensure that there is no other electrical wiring or pipe work in the area adjacent to the mounting surface.

To fix the mounting base into position

- Find and remove the key lock from the Mounting Base. Keep this for replacing after install. See **Figure 5**
- Use a Screw driver to remove the Wiring Cover. See **Figure 6**.
- Connect the wires to the correct terminals (on the mounting base) to incoming supply. If alarms are to be interconnected, link out the interconnection terminals. Ensure the screws are fully tightened. See **Figure 4 or 5**.
- Fix mounting base in position.
- **NEVER USE EARTH AS INTERCONNECT.**
- Insert the Lock Key into the Lock Hole at the side of mounting base. See **Figure 7**
- Restore the AC supply
- Test the correct operation of the alarm by pressing the test button on the front of the detector. The unit should emit a loud pulsating alarm.
- To lock the alarm unit onto the Mounting Base, insert the Lock Key into the key hole. See **Figure 8**.

To remove the alarm unit from the mounting base:

- Use a screwdriver to pick out the lock key from the key hole. The key hole is located at the side of Mounting Base. See **Figure 8**.
- Use a screwdriver to release the alarm unit from the mounting base by pushing up the security latch with a screw driver. See **Figure 8**
- Slide the alarm unit out from the mounting base.

FIGURE 4 – WIRING AND INTERCONNECT

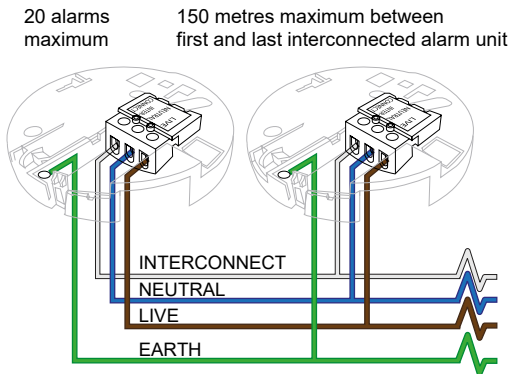


FIGURE 5 – WIRING & INTERCONNECT FACILITY

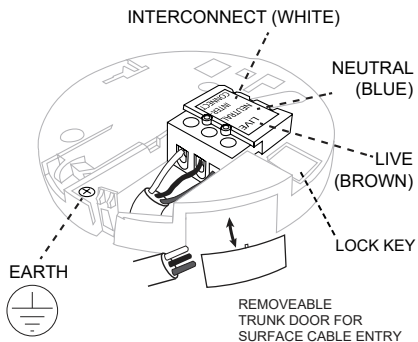


FIGURE 6 – REMOVE WIRING COVER

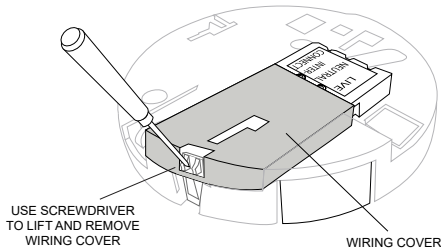


FIGURE 7 – LOCKING THE ALARM UNIT WITH THE BASE

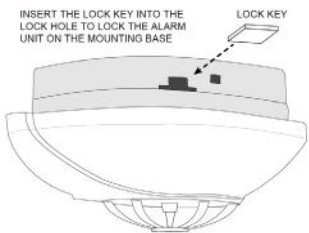
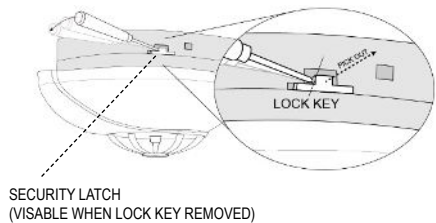


FIGURE 8 – USE SCREW TO PICK OUT THE LOCK KEY FROM THE MOUNTING BASE



OPERATING YOUR SMOKE ALARM

Once the alarm has been installed a small GREEN indicator light (LED) should be visible through the alarm grill indicating that AC supply is healthy. A RED indicator light (LED) should also flash approximately once a minute to indicate the battery is healthy and the unit is operating properly.

If smoke is detected, the unit will emit a loud pulsating alarm and a RED indicator light (LED) will be flashing quickly at the same time until the air is clear.

In normal operation, the radio link module is working under sleep mode. It will open the receiving window for a short time every 20 seconds.

TESTING YOUR SMOKE ALARM

It is recommended that you test your alarm once a week to ensure the detector is working correctly. Push and hold the test button for approximately 3 seconds (at least 20 seconds to trigger other alarms). A loud pulsating alarm should sound and a RED indicator light (LED) will flash at the same time.

NOTE: For multiple interconnected alarms, only the RED indicator light (LED) of the originating unit will flash rapidly. All other units in the interconnect system will sound an alarm but their RED indicator light (LED) will **NOT** flash. Test each alarm checking that the alarm is triggered on all other alarms installed.

HUSH OR SILENCE FEATURE

This alarm has a built-in Hush or Silence feature incorporated into the Test button. If cooking or other non-hazardous sources cause an unwanted alarm, it can be temporarily silenced by depressing the test button and holding for approximately 3 seconds. 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 reset to normal sensitivity.

NOTE – If the smoke density increase during this period (i.e. from a fire) the unit will go into alarm mode.

LOW BATTERY WARNING

If the alarm emits a short 'beep' once a minute the battery is at the end of its life. This low voltage warning will be given for at least 30 days.

In this case, the other interconnected units in the system which are not in low battery condition will chirp for a few seconds once an hour as long as the detector with the "dead" battery beeps. If the red indicator light (LED) does not flash every minute then replace the battery.

MAINTAINING YOUR SMOKE ALARM

Clean your alarm at least once every six months 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.

WARNING: The apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

BATTERY REPLACEMENT

Always TURN OFF the A.C. supply to the smoke alarm before replacing the battery. Replace the battery at least once annually or immediately when the low battery signal sounds once a minute even though the smoke alarm is receiving A.C. power.

Test the alarm for correct operation using the test facility whenever the battery is replaced.

WARNING: DANGER OF EXPLOSION IF BATTERY IS INCORRECTLY REPLACED. THE USE OF BATTERIES OTHER THAN THOSE RECOMMENDED ON THE BACK OF THE SMOKE ALARM MAY BE DETRIMENTAL TO ITS OPERATION.

- The battery should only be replaced by a qualified electrician or similarly qualified person.
- Turn off the A.C. power supply to the smoke alarm.
- Gently slide the smoke alarm out from the mounting plate.
- Remove the battery from the compartment.
- Insert a new healthy 9V battery. NOTE POLARITY OF CONNECTIONS. Ensure the metal tab is fully depressed when the battery has been fitted.
- Using the Push-to-Test button, test the smoke alarm to verify 9V DC battery back up. See "TESTING YOUR SMOKE ALARM"

ALARM AND SOUND INDICATORS

FIRE WARNING	• Alarm sounds and the red LED is blinking rapidly.
LOW BATTERY WARNING	• One audible beep every 40 to 60 seconds. • Press the silence feature button to activate the silence mode of unit itself for 10 hours
FAULT WARNING	• Two audible beeps every 40 to 60 seconds. • Press the silence feature button to activate the silence mode of unit itself for 10 hours

IMPORTANT SAFEGUARDS

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

- Install the alarm properly, following this instruction leaflet
- Test your alarm weekly
- 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. Re-enforce this awareness periodically through-out the year.
- Make sure escape routes remain free of any obstructions.
- Make sure escape routes remain free of any obstructions.

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 INVALIDATE THE WARRANTY. IF THE UNIT IS FAULTY PLEASE RETURN IT TO YOUR ORIGINAL SUPPLIER WITH YOUR PROOF OF PURCHASE.

ALARM LIMITED WARRANTY

This alarm is in warranty under normal use and service for a period of 5 years (excluding 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 alarm with proof of purchase, postage and return postage prepaid, to local distributor. The liability of the company arising from the sale of this alarm shall not in any case exceed the cost of replacement of alarm and in no case shall the company be liable for consequential loss or damages resulting from the failure of the alarm.

HISPEC ELECTRICAL PRODUCTS LTD. 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 REPAIR OR REPLACEMENT OF THE DETECTIVE PRODUCT AT HISPEC ELECTRICAL PRODUCTS LTD. OPTION. IN NO CASE SHALL HISPEC ELECTRICAL PRODUCTS LTD.'S LIABILITY UNDER ANY OTHER REMEDY PRESCRIBED BY LAW EXCEED THE PURCHASE PRICE. YOUR ALARM 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 residential dwellings and is not suitable for commercial or industrial use.

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 Directive" effective August 2005).