

In line with continuous product improvement we reserve the right to modify or update specifications without notice.

**Your Protected Areas are:**

Master Stratos™ Protects:

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Slave Detector 2 Protects:

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Slave Detector 3 Protects:

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Slave Detector 4 Protects:

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Your Fire Officer is: \_\_\_\_\_

Your Area/location is: \_\_\_\_\_

Your Emergency/assembly area is: \_\_\_\_\_



**Stratos**  **HSSD**®  
HIGH SENSITIVITY SMOKE DETECTOR

**Mini-Guide**

This guide outlines basic detector displays and gives a brief indication of what to do when the lamps illuminate.

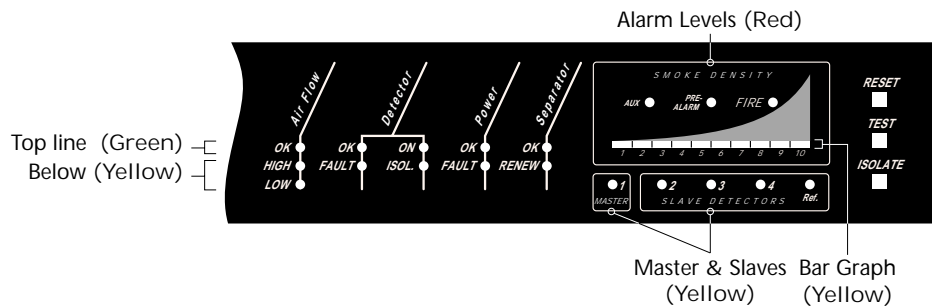
This is not a full technical or installers manual.

Equipment may vary according to specification. If there is any doubt please contact your supplier.



# What to do if...

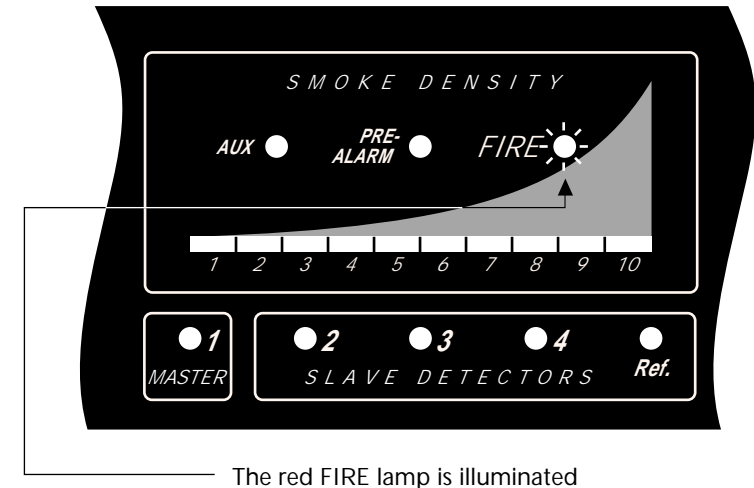
## What do the lights mean?



This display is located on the Stratos-HSSD® Master unit (and remote mimic if fitted). Its purpose is to indicate the condition of the Master and Slave detector units connected to the Master detector. If Slave detectors are installed, the detector/area being given on the display is indicated by a flashing Yellow light below the bargraph, (this light will flash for ten seconds per detector being indicated). During the interrogation/display time it will show the condition of Air Flow, Detector, Power, Dust Separator and any alarms within the area of its protection.

The Air Flow, Detector, Power and Separator should all have their respective Green lights on. If a Green light extinguishes, a yellow light will come on and a fault condition will be generated. This fault condition should normally be transmitted to the Fire Alarm Indicator Panel and a pre-selected routine will automatically be carried out.

It is important to understand that if any of the yellow Fault lamps are illuminated, then the area in question may not be protected by the Stratos® system.



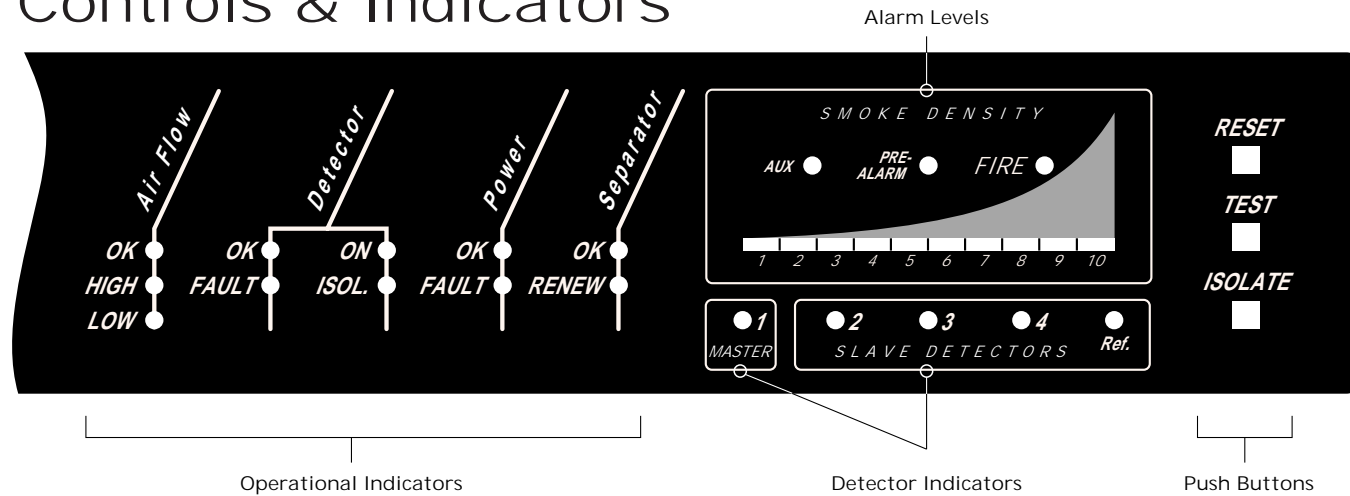
This alarm level is fixed at bargraph level 8. If the red **FIRE** light operates, this signal should always be transmitted to the Fire Indicator Panel. It is now usually time to commence evacuation procedures. Other actions in the event of the **FIRE** lamp operating will depend upon the application, but typically it would involve; power down of equipment, calling Fire Brigade and input to first leg of automatic Fire Extinguishing systems. Follow instructions given to you by your Fire Warden. Act strictly in accordance with the Emergency Plan for your building or area.

As with the PRE-ALARM level, if no obvious smoke is present in the area, it may be useful to verify if the bargraph is still illuminated for the area in which the alarm is generated. If the yellow bargraph is no longer illuminated it may mean that it was a transient burst of smoke which is no longer present. If it remains illuminated, then it is likely that an incipient fire is present in the area, or an unusual smoke producing process is taking place.

Extra audible or visual alarms will normally be sounding within the area which are driven from to the controlling Fire Indicator Panel. Urgent action is necessary.

**NOTE** - Because the Stratos® system is capable of detecting extremely low levels of smoke, The staged alarm facility may be configured so that increasing levels of alarm can signal an increasing degree of danger.

# Controls & Indicators



## DETECTOR INDICATORS

### Air Flow

|                        |   |
|------------------------|---|
| Green OK LED Steady    | <i>Normal operation, airflow within limits.</i>             |
| Green OK LED Flashing  | <i>Detector setting up airflow limits.</i>                  |
| Yellow HIGH LED Steady | <i>Airflow high, pipe may be broken</i>                     |
| Yellow LOW LED Steady  | <i>Airflow low, pipe may be blocked or aspirator faulty</i> |

### Detector

|                           |   |
|---------------------------|---|
| Green OK LED Steady       | <i>Normal operation of the detector chamber</i>               |
| Yellow FAULT LED Flashing | <i>Slave loop error rate high, check Slave comms. cable.</i>  |
| Yellow FAULT LED Steady   | <i>Detector head fault or process error has occurred.</i>     |
| Green ON LED Steady       | <i>Normal operation</i>                                       |
| Yellow ISOL LED Steady    | <i>Detector is isolated, not capable of generating alarms</i> |
| Green ON LED Flashing     | <i>Is operating in Demonstration mode.</i>                    |

### Power

|                           |                         |
|---------------------------|-------------------------|
| Green OK LED Steady       | <i>Normal operation</i> |
| Yellow FAULT LED Flashing | <i>Battery fault.</i>   |
| Yellow FAULT LED Steady   | <i>Mains fault</i>      |

### Separator

|                           |                                       |
|---------------------------|---------------------------------------|
| Green OK LED Steady       | <i>Normal operation</i>               |
| Yellow RENEW LED Flashing | <i>Dust Separator removed</i>         |
| Yellow RENEW LED Steady   | <i>Dust Separator needs replacing</i> |

## SMOKE DENSITY

This ten segment bargraph shows the current smoke density sensed by the system. This bargraph also displays other information during the TEST routine (see below) and it gives a 'rolling' single segment display during the fifteen minute duration Fastlearn™ routine.

The red **AUX**, **PRE-ALARM** & **ALARM** LEDs will operate when the bargraph display reaches the pre-set levels at which the output relays operate.

The **TEST** routine establishes the settings programmed into the detector by operating various LED's in sequence. These settings include; The position of the alarms in relation to the Bargraph, the duration of the Delays and the present sensitivity of the detector being tested.

## PUSH BUTTONS

*(only operational when enabled at programmable functions 35, 36 and 37)*

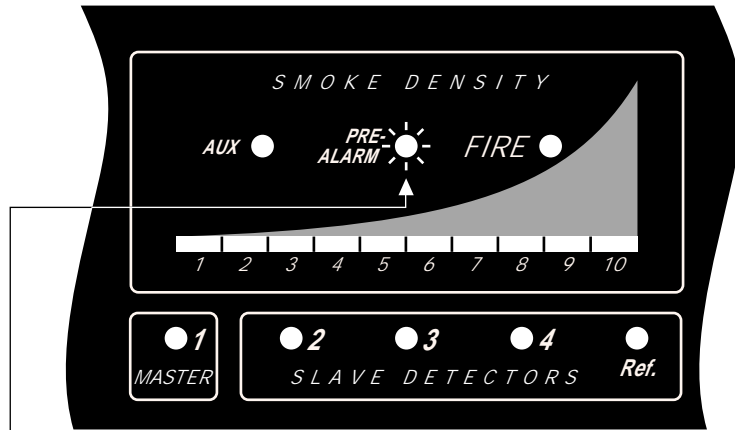
**RESET**- This button resets any **latched** Alarm or Fault relays. It also takes the unit out of programming mode.

**TEST**- This button performs a self test on the currently indicated detector as shown on the '**SLAVE DETECTORS**' display and shows; Alarm Levels, Time Delays and Detector Sensitivity.

**ISOLATE** - This button puts the detector being indicated on the '**SLAVE DETECTORS**' display off-line, whereby it is not capable of generating any alarms or faults. If operated, a fault relay output will be generated, which will normally cause a Fault condition to be indicated on the host Fire Indicator Panel.

*Operation of any of the above buttons are recorded as separate entries in the detectors event log. Entries in this log are shown with time and date of occurrence. The event log can be printed to a serial printer via Function 45 or shown on Screen via an IBM compatible PC and then printed to the PC's printer. The Event Log is capable of storing approx. 100 entries, and when it is full it over-writes the oldest event in the buffer.*

# What to do if...



The red PRE-ALARM lamp is illuminated

This alarm level can be programmed to operate between bargraph levels 4 to 8. If the red **PRE-ALARM** light operates, this signal will often be transmitted to the Fire Indicator Panel. Actions in the event of the Pre-Alarm operating will depend upon the application, but typically it will involve summoning assistance to find the source of smoke. *(see note)*

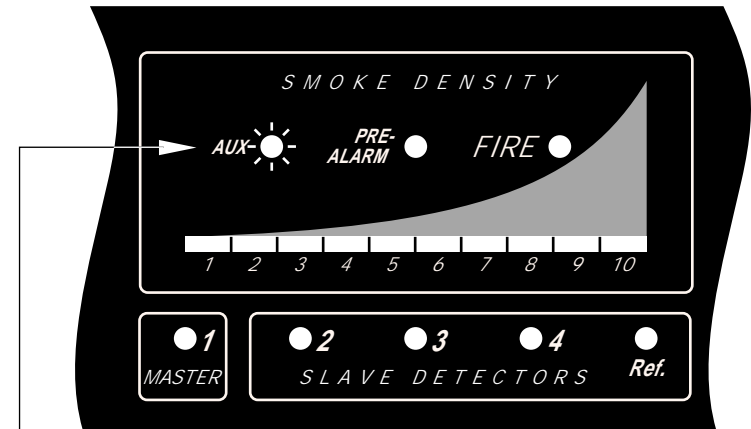
It will be useful to verify if the bargraph is still illuminated for the area in which the alarm is generated. If the yellow bargraph is no longer illuminated it may mean that it was a transient burst of smoke which is no longer present. If it remains illuminated, then it is likely that an incipient fire is present in the area, or an unusual smoke producing process is taking place.

Extra audible or visual alarms may now be sounding which are connected to the Fire Indicator Panel. Urgent action is necessary.

You should contact your Supervisor or Floor Fire Warden immediately, informing them of the problem.

**NOTE** - Because the Stratos® system is capable of detecting extremely low levels of smoke, an alarm condition need not mean that the area needs to be immediately evacuated. The staged alarm facility may be configured so that increasing levels of alarm can signal an increasing degree of danger.

# What to do if...



The Red AUX lamp is illuminated

The **AUX** alarm may be programmed to operate between bargraph level 2 to 10. It is an alarm which may be set to give a 'pre' pre-alarm, alternatively it may be used as a post FIRE warning indicator. Actions in the event of an AUX alarm will therefore vary according to the programmed setting of the AUX alarm in the protected area.

The AUX alarm is:-

USED/UNUSED

The AUX alarm is set at level No:- 2 3 4 5 6 7 8 9 10  
(Circle appropriate number)

The AUX alarm is used to:-

\_\_\_\_\_

\_\_\_\_\_