Major breakthrough!

Introducing the world's first virtual smoke detector

AirSense Technology is proud to introduce the world's first 'Virtual smoke detector'.

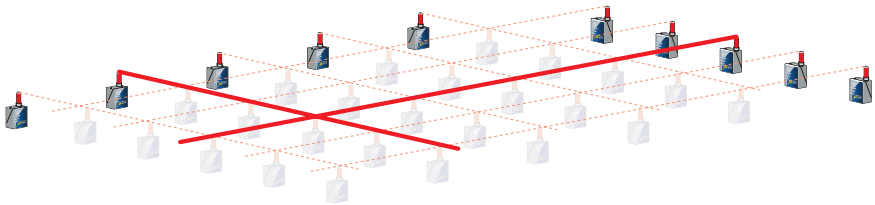
Our developments in aspirating smoke detector signalling architecture have enabled us to perfect and patent a revolutionary cross-matrix system to provide fully localised detection with relatively few physical detection units. This provides the substantial advantage of very high sensitivity and a high number of unique addresses at minimal cost.

The principle of operation is that sampling pipes are routed from multiple detectors to a multitude of 'crossover' points. Each crossover point has a unique detector address and is treated as if it were a separate device, having multiple alarm thresholds, smoke level bargraphs, address, etc.

Simple setup

MatrixScan™

Virtual detector matrix system



For further information, contact the market leader…

AirSense

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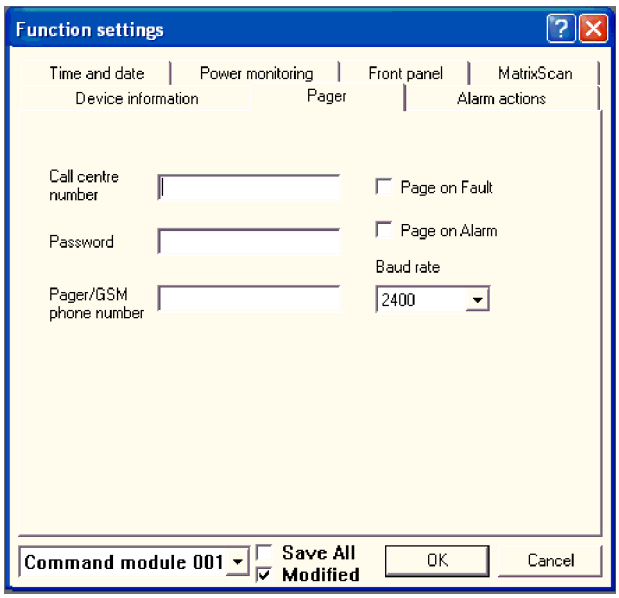
THE QUEEN'S AWARDS FOR ENTERPRISE: INTERNATIONAL TRADE 2002

1999
THE QUEEN'S AWARD FOR TECHNOLOGICAL ACHIEVEMENT

The intelligent choice for aspirating smoke detection



- **Call centre number:** this is the number of the pager's call centre. This can be obtained from the local telecom provider.
- **Password: i**n most cases a password is not required, in which case this can be left blank.
- **Pager / GSM phone number:** the number of the actual pager or phone.
- Page on Fault: alerts the relevant pager / phone if a fault occurs
- **Page on Alarm:** alerts the relevant pager / phone if a fire alarm occurs
- **Baud rate:** use this drop-down box to set the transmission Baud rate recommended by the local telecoms provider.

MatrixScan: This page only applies to a Command Module. It allows "virtual detectors" to be set up. If the sampling pipework of two detectors shares a common location (e.g. if two detectors have sampling holes in the same area), these can be assigned a "virtual" detector number. This "virtual" detector will be shown to be in alarm at the Command Module when both "real" detectors pick up smoke at the same time.
Therefore, with only two detectors, zone localisation is available from a large number of protected areas. The "virtual" detectors are assigned in the MatrixScan screen.

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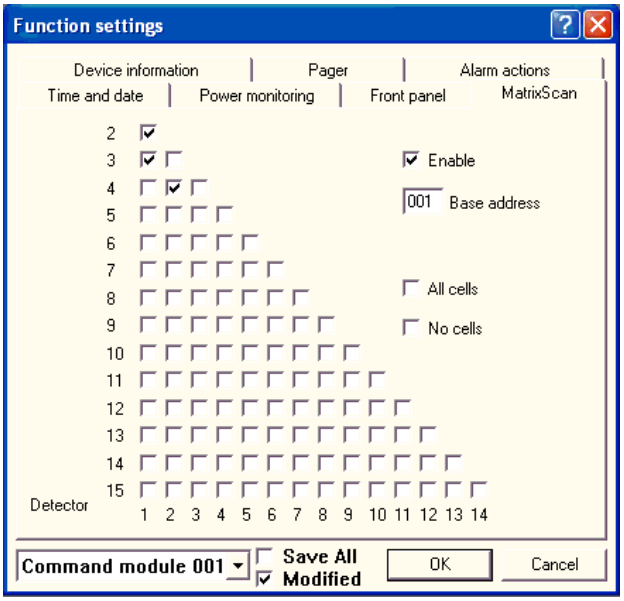

In the example shown, detector address 1 has common sampling locations with detectors 2 and 3, and detector 2 also has a common sampling location with detector 4.

“All cells” and “No cells” respectively tick and clear all the cells.

Note that only 15 “real” detectors can be used in a MatrixScan network (leaving 105 possible “virtual” detectors), and the MatrixScan screen limits the choice of detector address accordingly. The “real” detectors must have addresses in the range 001-015, since “virtual” detector addresses will be assigned in the range 016 to 105. “Real” detector addresses in this range will clash with the “virtual” detector addresses, causing problems. However, unused “virtual” addresses may be used for other “real” detectors which are not part of the MatrixScan network. Address 000 is reserved for a network’s “Command Module, and cannot be used for a detector.

“Enable” enables the virtual detectors when the box is ticked, as shown in the example above.

“Base address” is the address of the lowest-numbered “real” detector in the loop, in the example above this is entered as 001. **NB, this function must be entered for the MatrixScan function to work.**

The maximum number of virtual detectors available for a given number of real detectors is shown below:

Number of real detectors	Maximum number of virtual detectors
2	1
3	3
4	6
5	10
6	15
7	21
8	28
9	36
10	45
11	55
12	66
13	78
14	91
15	105

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