



- Reduced False Alarms
- Enhanced Performance
- Easy to Address
- Easy to Install
- On Site Flexibility
- Devices Display Address Number
- Reduced Maintenance Costs
- Digital Signalling
- Wide Range of Sensors and Interfaces

Algo-Tec™ 6000 Interactive Decision Making Algorithms - Typical Applications


Bedroom Mode



DISCRIMINATING ALGORITHM
Steam From Bathroom




DISCRIMINATING ALGORITHM
Aerosols in Bedroom




ALARM
Smouldering Fire

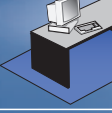
Office Mode (high Performance)



DISCRIMINATING ALGORITHM
Cigarette Smoke




ALARM
Computer Fire

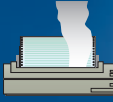


ALARM
Bin Fire


Clean Mode (Extra High Performance)



ALARM
Computer Room Fire



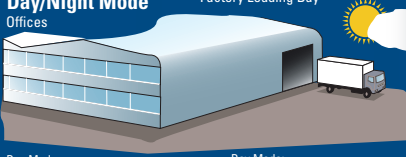
ALARM
Printer Paper Fire



ALARM
Chemical Fire


Day/Night Mode

Factory Loading Bay



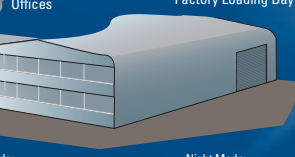
Day Mode:
Office mode (high performance)

Offices




Day Mode:
Heat detection only (6000/OPHT)

Factory Loading Bay



Night Mode:
Clean mode (Extra high performance)

Offices



Night Mode:
Smoke & Heat detection

NOTE: The above examples give an indication of system reaction to intermittent contaminants and typical fire sources in a correctly designed BS5839 system. They by no means detail the full complexity of the systems decision making algorithms. Examples are for 6000/OPHT.

The Protec Algo-Tec™ 6000 Interactive Digital Addressable System unwrapped:

The Protec Algo-Tec™ 6000 protocol developed by Protec's in-house Research and Development team is utilised by the Protec Algo-Tec™ 6300 and 6400 interactive digital addressable fire control systems. Immunity to false alarms, more responsive fire detection, and ease of use have all been improved to develop one of the most reliable systems available.

Protec Algo-Tec™ 6000

The name Algo-Tec™ is a derivative of Protec algorithms. Algorithms are logical mathematical procedures for solving problems. Protec have developed fire detection algorithms coupled with fuzzy logic specifically designed to reduce unwanted fire alarms and to enhance the sensitivity of the system to true fire phenomenon.

The Algo-Tec™ algorithms are exclusively utilised by the Protec Algo-Tec™ 6400 and 6300 Interactive Digital Addressable Fire Control Systems.

Interactive

Algo-Tec™ evaluates the data of each fire sensor and is able to learn from the information received. This may simply be to recognise that a sensor is becoming contaminated or in a dirty environment and to automatically increase the alarm threshold to compensate for the background levels (Threshold Compensation).

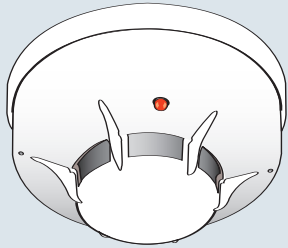
More complex Algo-Tec™ functions include the ability to discriminate between certain fire and non-fire conditions, filtering out certain environmental stimuli, such as steam from a hotel bathroom, and increasing the sensitivity of a sensor when an increase in temperature is detected.

The net effect of the interaction between the sensors and the Algo-Tec™ decision making is enhanced performance, through immunity to false alarms and more responsive fire detection.

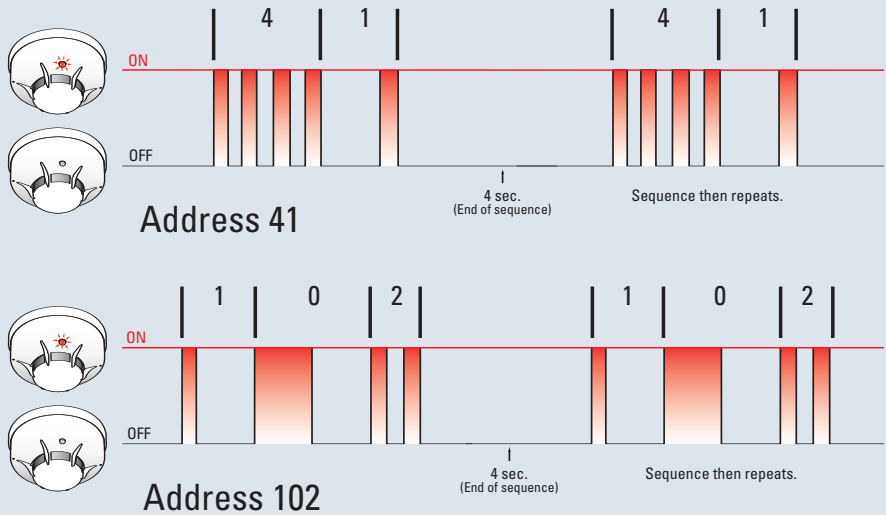
Algo-Tec 6000 Protocol

RVAV™

Remote Visual Address Verification
Easily identifies installed device address numbers.



Algo-Tec™ sensors can be set into RVAV™ mode from the control panel. Each device displays their address number via the LED indicator. The address is shown by a flash sequence, examples of which are shown here.



Digital Addressable

The data communication between the sensors and the control equipment is Digital. The Algo-Tec™ protocol utilised by the 6000 system enables high levels of data to be transferred, providing far more detailed information than was previously achievable with analogue addressable systems. It should however be noted that many analogue addressable systems use digital communication but do not transfer the high levels of data associated with the Algo-Tec™ protocol.

Speed, stability, excellent EMC and security all serve to enhance the Algo-Tec™ Digital signalling. Why go analogue addressable? when you can now choose Algo-Tec™ Digital Addressable.

FAST™ Addressing

FAST™ (Firmware Addressed Secure Technology). Each Algo-Tec™ 6000 device is manufactured with a unique serial number factory programmed (firmware embedded) and device label. The label includes the serial number on 3 bar-coded segments, 2 of which are removable by the installer (one is a spare).

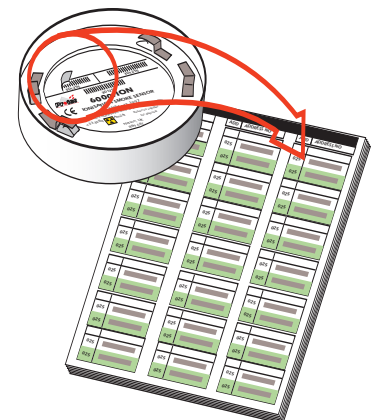
The label is attached to an address location booklet, which is handed to the engineer prior to commissioning. During commissioning the engineer scans the address location booklet to download the loop, address and serial number details. The downloaded data is then checked and stored within the secure non-volatile memory of the control panel and the addressing is complete. FAST™ and easy eliminating troublesome and time consuming setting of address cards and DIL switches. FAST™ addressing is more secure than 'SOFT ADDRESSING' and easier to extend or amend, allowing greater flexibility and reduced costs.

RVAV™

RVAV™ (Remote Visual Address Verification). Once the system has been FAST™ addressed the correct location of each Algo-Tec™ device can be easily identified, using the devices in-built LED to indicate the device address number. The LED has a simple coded pulse making it quick and easy to count.

Because the control panel sends the RVAV™ signal to each device, the RVAV™ walk test is confirming that the devices are correctly addressed and correctly communicating. As-fitted Drawings and device labels can also be checked during RVAV™ walk test, without the disruption of activating devices commonly associated with other manufactures of system.

FAST™ ADDRESSING



Peel off barcode address & place in loop commissioning manual