DynamixSm✳ke

Complete smoke control

Market-Leading Smoke Control

DynamixSmoke from Advanced gives you complete and active smoke control from the fire system. Nobody makes it simpler to set up, configure and use, thanks to our 4-step configuration process.

We've ultra-simplified programming by swapping complex data inputting for an easy-to-use matrix that saves you time and gives you a clear, at-a-glance view of all your fan and damper settings.

Simple Programming

Dynamix Tools

Matrix Programming

Designed for standalone, dedicated* and non-dedicated** systems, DynamixSmoke is easy to set up on our Axis AX and Axis EN systems as well as our MxPro 5 panels. Simply by adding a smoke control user interface and loop interface modules, you can achieve automatic and manual control of smoke control fans and dampers.

Advanced's DynamixSmoke features are:

- Approved to: **UL864 standards**.
- Designed to comply with: **ISO 7240-28**; **ISO 21927-9** and **BS7346-8 standards**.

By choosing Advanced's DynamixSmoke, you have access to all the features required by the world's most demanding smoke control standards.

Mx**Pro**⁵   Axis^EN   Axis^AX

*Dedicated systems are used for controlling smoke only - they do not function until smoke/fire conditions occur.

**Non-dedicated smoke control shares components with other building systems, typically HVAC. Under smoke/fire conditions, the systems changes mode to achieve smoke control.
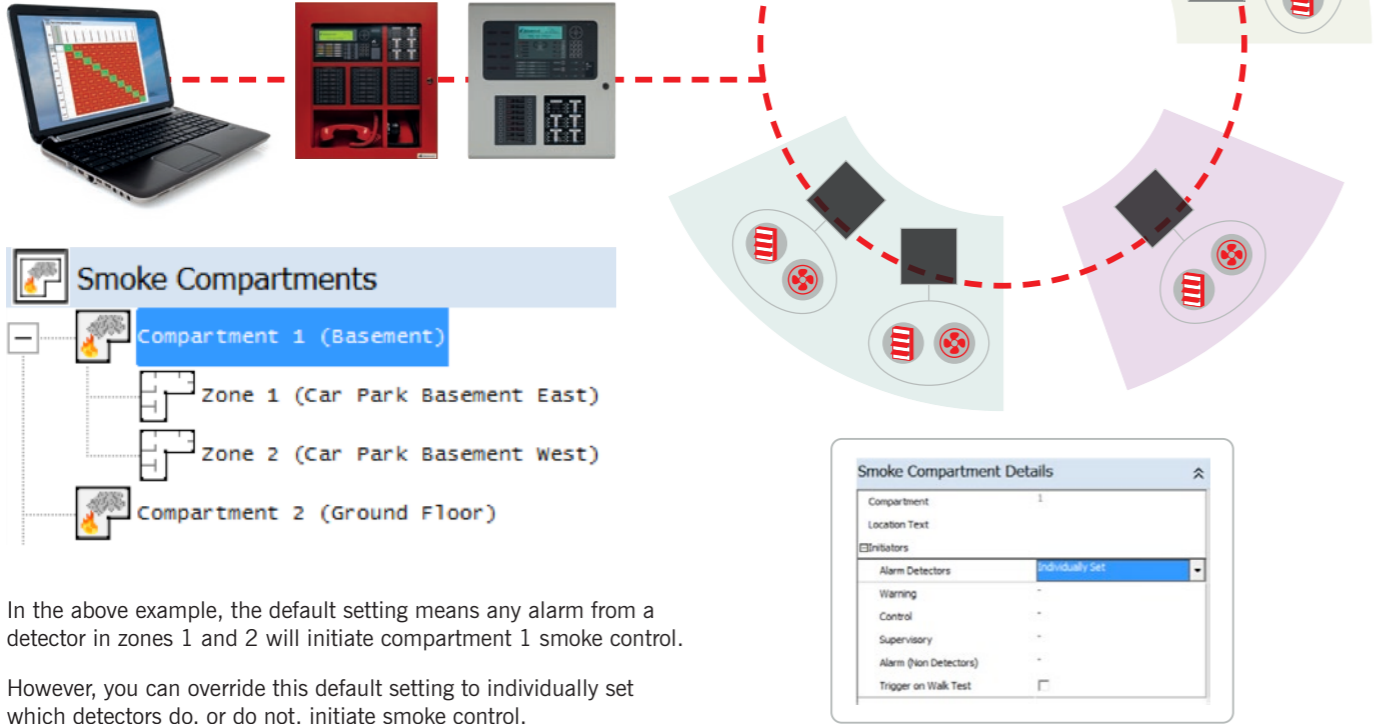
Advanced – made in the UK. Trusted around the world.

Discover more: advancedco.com | enquiries@advancedco.com | +44 (0)345 894 7000

Market-Leading 4-Step Configuration

❶ Quick, Clear Configuration of Smoke Compartments across Sites

Simply input the number of compartments you require then assign the fire detection zone(s) you want to include per compartment.

By default, any smoke detector in a zone assigned to a particular compartment will initiate smoke control.

Smoke Compartments

- Compartment 1 (Basement)
  - Zone 1 (Car Park Basement East)
  - Zone 2 (Car Park Basement West)
- Compartment 2 (Ground Floor)

In the above example, the default setting means any alarm from a detector in zones 1 and 2 will initiate compartment 1 smoke control.

However, you can override this default setting to individually set which detectors do, or do not, initiate smoke control.

Smoke Compartment Details

Compartment	1
Location Text	
Initiators	
Alarm Detectors	Individually Set
Warning	-
Control	-
Supervisory	-
Alarm (Non Detectors)	-
Trigger on Walk Test	☐

❷ Auto-Configuration of Fan and Damper Interfaces

Define which loop (SLC) devices are used for smoke control and our software will configure the system for you.

The programming 'wizard' allocates each I/O a special purpose of fan or damper and the inputs and outputs are pre-configured to run/stop or open/close. Our software even configures any required feedback delays, massively reducing configuration time.

The system also allows standard loop-powered I/O modules to be used for monitoring and controlling fans and dampers instead of expensive specialist units.

Fan/Damper Interface I/O

OR
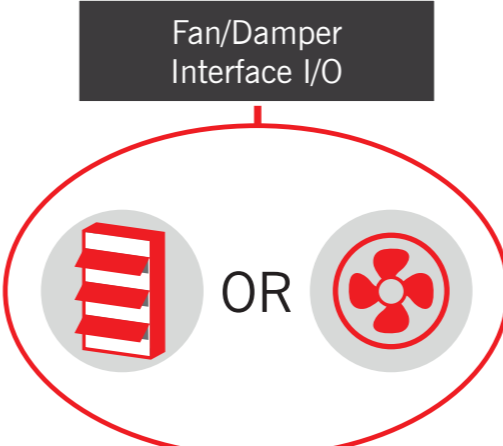
❸ The Easiest Cause and Effect (CBE) Programming in the Business

Our unique software matrix makes light work of system setup. Graphical representations of the system and a series of drop-down menus mean programming is quick and intuitive, plus there's no special coding involved.
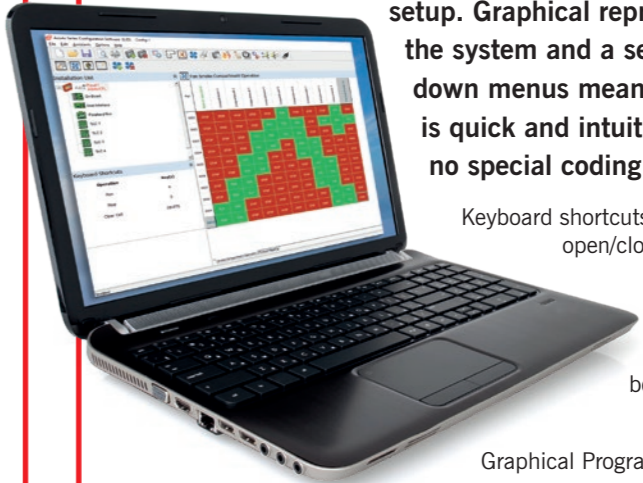
Keyboard shortcuts for run/stop and open/close make the process even faster; so what might have taken days to set up can now be done in minutes.

Graphical Programming

470 ohm
Not Used
Common

Exp-005

Break off TAB to remove 6800 ohm end-of-line resistor
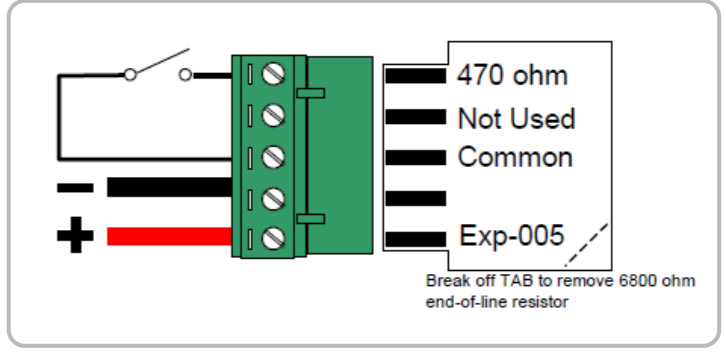
❹ Flexible Manual Control Options

Integrated Switch Cards **OR** External Switch Cards

Choose integrated or independent standalone switch cards to provide manual and automatic options. Each card can control up to six groups of, or individual, fans and dampers or fan/damper combinations.

Up to 15 fan and damper switch cards can be connected per P-Bus and for larger systems, further P-Bus modules can be added via the PENN (Peripheral Expansion Network Node) or additional panel(s).

I/O
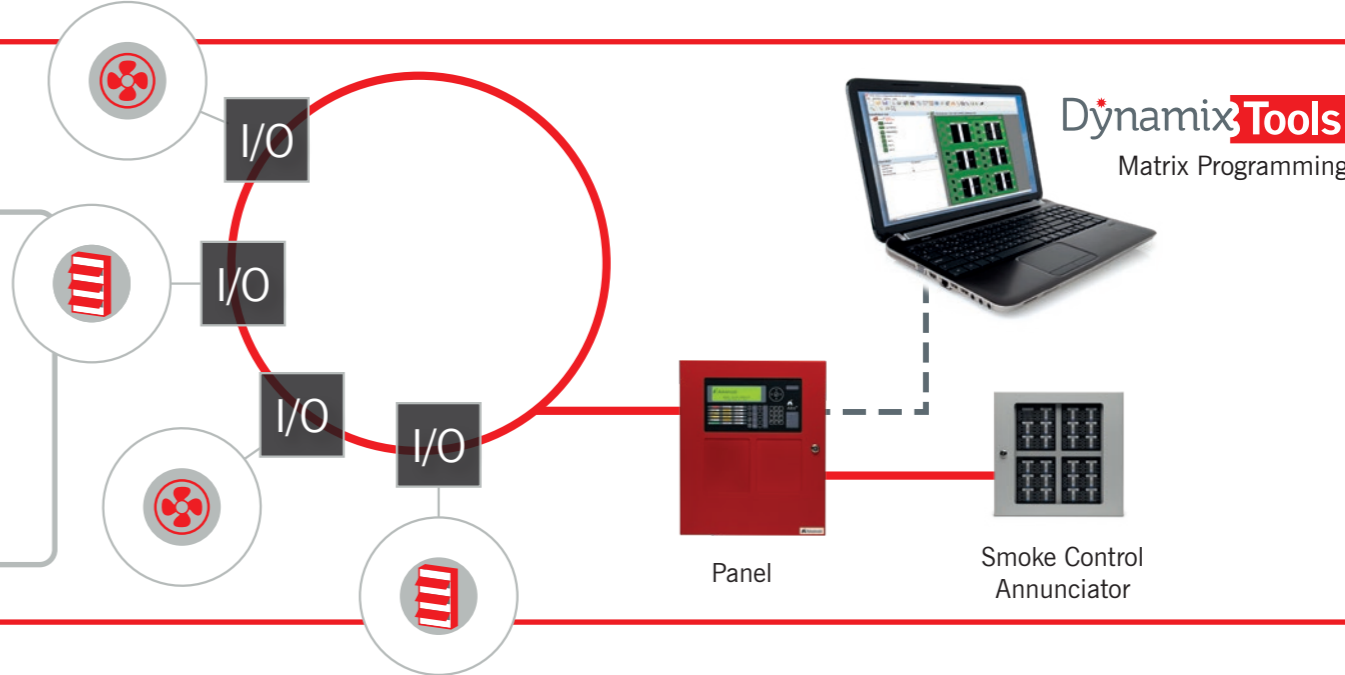
Dynamix Tools
Matrix Programming

Panel

Smoke Control Annunciator

Complete, Customised Control

Post-Alarm Purge

You can easily program DynamixSmoke to allow smoke to be manually cleared from an area of a building following a fire.

Any number of switches can be configured for different areas of the building so that they run/stop, and open/close the required combination of fans and dampers, allowing smoke to be cleared when it is permissible to do so.

An enable purge button or key switch can also be configured which has to be operated (e.g. by the fire fighter in control) before any manual controls can take place. In this way, independent purging panels can be constructed using dedicated switch cards.

Interlocks

An Interlock can be used to prevent a fan from running until certain conditions are met.

This ensures that dampers are in the correct state before any fans are allowed to run.

This important feature is invaluable in preventing over-ressurisation of ducts and is simple to set up via the DynamixSmoke software.

In this example, fan 1 is interlocked with dampers 1, 2 and 3. The fan will not attempt to run until feedback is received that all three dampers are open. The control panel will only instruct the fan to start once the interlock logic is satisfied.

Automatic Stairwell Pressurisation

It is easy to program cause and effect for stairwell pressurisation by selecting the category of device that will trigger fan and damper activation.

Cascade Option

Sometimes it is necessary to prioritize the safe containment or extraction of smoke in critical areas of buildings in the event of a spreading fire.

With DynamixSmoke set to 'no cascade', the system only responds to the first smoke compartment in alarm.

Subsequent alarms in different compartments do not cause fans and dampers to change state. Whereas using the cascade feature allows the fans and dampers to change their state according to pre-configured priorities as smoke spreads into different compartments of a building.

Simple Sequential Fan Restart

In buildings without smoke control systems, it is common for any fans (used by building HVAC systems) to be shut down in the event of an alarm to prevent the spread of smoke and fire.

When the alarm is reset, there's a risk of overloading the electrical supplies if all fans are re-started simultaneously. To prevent this issue, the DynamixSmoke software can start them sequentially using a programmable startup delay time for each individual fan.

Custom Smoke Control Annunciators

Where local codes stipulate the need for a Custom Graphic Smoke Control Annunciator, our I/O 48 module provides an ideal solution.

Customised to meet your needs, programming is easily achieved using our DynamixSmoke software giving fire fighters clear and simple manual control of the smoke control system via a series of key switches and LED indicators.

Group Manual Controls

Group manual controls allow manual override of automatic settings within a particular smoke compartment via switch cards, key switches or push buttons.

The option to manage the smoke control settings of groups of fans and dampers, rather than individual devices can save considerable time.

Automatic Testing (dedicated systems)

In systems where fans and dampers are dedicated to the purpose of smoke control, they may rarely be used; so testing is crucial in ensuring they will work as expected in an emergency.

You can program automatic tests to run weekly or monthly on specific days of the week or at certain times of day - to meet the standards required in your area. If you choose to test the entire system simultaneously, the panel automatically staggers the tests to ensure dampers are in the correct state before fans are run and to avoid excessive current draw.

Alternatively, you can program tests to run in groups so that not all fans and dampers are activated at the same time. This can help minimise disturbance to a building's occupants.

Testing only occurs if the system is in its normal, automatic state. You can also program tests not to occur - for example outside holiday periods, to avoid additional engineer call-out fees.

Fire Fighter Smoke Control Reset

Following an alarm, fans and dampers can return to their normal state as soon as the alarm is reset.

Alternatively, DynamixSmoke allows the system to be configured to have a separate independent smoke control reset button.

Advanced

Email: enquiries@advancedco.com
Web: www.advancedco.com

@advancedlive

Advanced

Advanced Fire

NBS Source
PARTNER

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the UK

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