

**ACTUACION ADMINISTRATIVA N° 201/2024**

**CONTRATACIÓN DIRECTA N° 11/2024**

**OBJETO: “ADQUISICIÓN DE DETECTORES PARA CENTRAL DE INCENDIO”**

**CIRCULAR ACLARATORIA N° 1**

Nos dirigimos a ustedes en relación al proceso de adquisición citado en el epígrafe, a fin de comunicarles la Circular Aclaratoria n° 1 dispuesta por el comprador:

**CONSULTA N° 1**

“Para garantizar una integración adecuada y eficiente, agradeceríamos que nos envíen información detallada sobre la central de incendios actualmente en uso, incluyendo la marca, el modelo, la versión y las especificaciones técnicas. Esta información es esencial para adaptar los dispositivos de manera precisa y garantizar su correcto funcionamiento”.

**RESPUESTA N° 1**

Provisión e instalación de paneles de alarma para el reemplazo de los existentes.

Se reutilizan todos los elementos de campo existente.

Se considera:

1 Panel de 4 lazos (Principal) AX-CTL-4

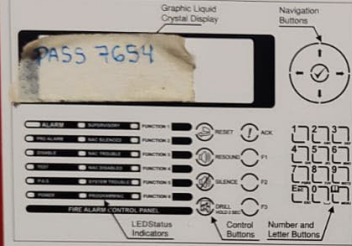
1 Panel de 2 lazos (Secundario) AX-CTL-2

2 Placas de red AX-NEX-4

1 Placa de comunicación para BMS por Bacnet / Modbus MXP-642



## Controls & Indications [AX SERIES FIRE PANELS]



The panels may be fitted with separate zone fire indicators comprising of 100 or 200 red indicators – these show the zones in a fire alarm condition. In addition, the panels may be fitted with separate indications showing the location of fire alarms in a pictorial display (graphic diagram).

### Graphic Display

The graphical display provides detailed information of the source of fire alarm, supervisory, trouble and warning conditions.

Under normal conditions the panel display shows the Time, Date and "Normal Panel Operation". It also shows menus for use when inspecting or programming the operation of the panel. Level 2 Access is required for Ack, Reset, Silence, Re-sound & Drill buttons and for User Menu Functions. Refer to Installation and Operating Manual (982-001 or 982-010) for full operating instructions.

The system shall be inspected, tested and maintained in accordance with the recommendations outlined in NFPA72. The recommendations provide for weekly, monthly, quarterly, bi-annual and annual inspections/tests.

For service and maintenance contact:

NAME: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
TEL: \_\_\_\_\_

### Navigation Buttons

- Press to scroll through Menu Options.
- Press to display more information.
- Press to scroll through menu Options.
- Press to scroll through lists of zones or devices.
- Press to confirm entry of numeric or letter information entry.
- Press to confirm selection of a menu option.
- Press to change some of the configuration options.

### Number Buttons

- Used to enter numbers or letters.
- Press to return to a previous menu.
- Press to exit the menu functions and return to the normal display.
- Press to show or return to Level 1 or Level 2 Menu Functions.
- Main User functions are VIEW, TEST, DISABLE & ENABLE.

### LED Status Indicators

Flash then turn on steady when event is acknowledged.

- RED: Separate LED Indicators show the presence of a fire alarm condition.
- YELLOW: Indicate other system operating conditions including Supervisory, Trouble, Test and Disarmament conditions.
- GREEN: Indicates the presence of power to the system – if flashing, indicates that the panel is running on battery standby power.

### Control Buttons Level 2 operation can be enabled using a key switch (if fitted) or by entry of a pass-code.

- Reset: Press to reset the panel from a latched condition.
- Ack: Press to acknowledge an event and silence the internal buzzer.
- Silence: Press to silence the bells.
- Resound: Press to re-sound the bells.
- Drill: Press to initiate a manual evacuation and sound the alarms.

### Function Buttons write configured operation in the box for each function.

- F1
- F2
- F3

### User Function Indicators

Write configured operation in the box for each function.

- FUNCTION 1
- FUNCTION 2
- FUNCTION 3
- FUNCTION 4
- FUNCTION 5
- FUNCTION 6

PN 875-1242 (02)





## Whatever your fire protection challenge, Advanced brings you unrivalled solutions

Effectively protecting people and property from fire can be complex. Advanced simplifies the challenge without compromising on safety.

Whether you need powerful networking, smoke control and fire audio for large-scale UL projects; extinguishing control and fire system redundancy for critical sites; or fast, fuss-free EN solutions for smaller, wireless installations, Advanced brings you fire safety peace of mind.

Creating a safer future



Advanced – made in the UK. Trusted around the world.  
Contact Sasi Kumar, Commercial Manager, to discuss your needs:  
skumar@advancedco.com | +44 (0)345 894 7000



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# Advanced – Made in the UK. Trusted around the world

At Advanced, we're committed to creating a safer future. We deliver fire protection and life safety solutions that protect people and property in more than 80 countries across the globe.

Our products are shaped by decades of research and development expertise as well as ongoing investment in new technologies. This ensures they provide years of high performance and reliability – for ultimate peace of mind.

Everything we deliver is rigorously tested and approved to exacting quality standards – which is why Advanced products are trusted by customers the world over and synonymous with quality, performance and ease of use.



Advanced Headquarters, Newcastle, UK



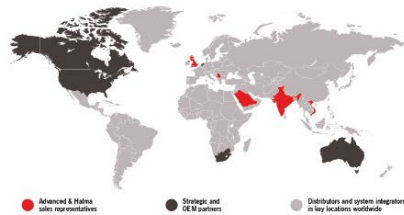
We understand that few fire protection challenges are the same, so as well as our mass-customised ranges, we also offer fully-customised solutions. This flexibility gives you complete control over the functions, format and finish of products to suit your site's unique specification.

We are dedicated to providing excellent service and have an international network of offices and agents to help you access sales support with ease – wherever you are in the world.

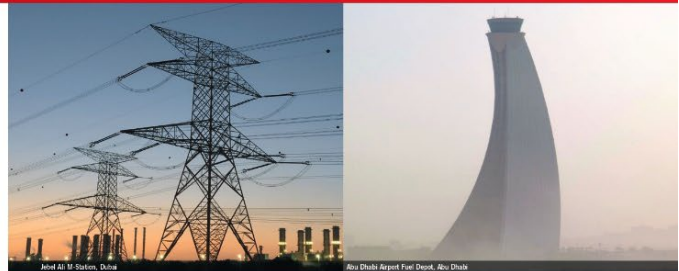


In addition, our training and technical services are free of charge to all our direct customers and consistently rated as excellent.

For added reassurance, Advanced is part of the safety sector of FISE 100 company Halma plc. This global group of life-saving technology companies has a clear purpose to grow a safer, cleaner, healthier future for everyone, every day.



A Halma company



Jeddah Station, Dubai

Abu Dhabi Airport Fuel Depot, Abu Dhabi

Axis<sup>AX</sup> protects...



Marina Al Buhayr Resort, Kingdom of Bahrain



Senda Pointe Miami, Florida



# The High-Performance UL Fire System

## Axis<sup>AX</sup>

- is our complete solution for customers demanding a versatile, high-performing fire system that's fully approved to UL 864 10th edition
- combines addressable panels with audio systems, command centres and a versatile and comprehensive range of wired devices including CO detectors to bring you performance, quality and ease of use
- includes intuitive programming, powerful networking, comprehensive cause and effect and unique diagnostic features that put you in complete control of your fire protection and provide that all-important peace of mind
- can be manufactured with either red or grey fire panels to suit your needs
- is a modular system, offering a wide variety of configurations and applications
- is designed to go anywhere you need high quality, reliable and easy-to-use fire detection and control, from mass transportation and industrial complexes to landmark developments, historic buildings and public services.



### Easy to install and use

Axis AX is built on Advanced's outstanding pedigree of fire alarm and detection experience to bring you a range of UL 864-approved fire panels that are simple to install, configure and use.

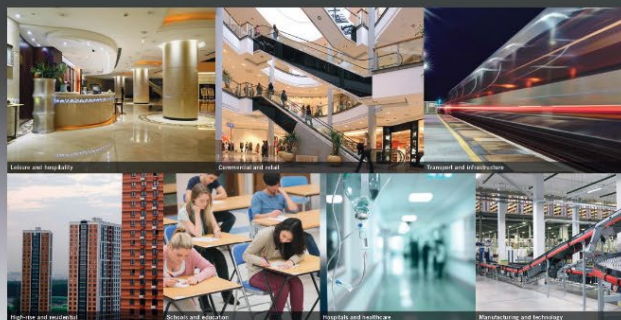
- Easy-fix removable chassis and in-built software make Axis AX fire panels quick and easy to set up
- Powerful networking, extensive configuration options and comprehensive cause and effect put you in complete control
- Intuitive controls and menus, with simple click-and-select programming for simple and easy commissioning
- The panels support intelligent annunciators, I/O drivers and BMS interface for integration with building management systems
- All panels and control centres are manufactured in the UK
- Our highly rated technical support team can help with advice, tips and training.



### Versatility and choice

We know that sites can expand, and fire protection requirements change and evolve over time. That's why we've designed Axis AX to be scalable and flexible, able to adapt as required with minimal fuss or disruption.

- Standalone control panels in one, two and four SLC formats so you can choose the panel size that meets your requirements and budget
- Command centres in modular format, offering a wide variety of configurations and applications
- Remote annunciators available
- Each 500mA digital signalling line circuit supports up to 126 intelligent devices
- Up to 200 zones per panel and 25,000 devices per network.





### Powerful, flexible service reporting

Every Axis AX panel includes an inbuilt easy-to-use, windows-based service tool which saves you time and money by providing easy, instant access to historic and real-time device data, and shows proof of servicing at a glance.

- Demonstrate proof of servicing, download service reports, inspect the device history and keep track of service schedules
- Customisable data filters make it easy to focus on potential trouble spots and ensure they're checked and tested during servicing
- Predict which devices are becoming contaminated so you can clean/replace them before they cause a false alarm
- Customise reports to show the data you need and export it as PDF, Excel or HTML files to prove compliance simply and efficiently.



### Packed with premium features

Every Axis AX panel and command centre comes with a host of advanced features built in as standard, giving you peace of mind that you won't need to buy expensive add-ons in the future.

- Unique diagnostic features include 'scope on board' to provide readings on the panel from any loop, making it easy to identify and investigate any issues
- Comprehensive network diagnostic tool prevents fires and faults from being transmitted across the network
- Built-in multimeter measures all voltages and currents across the system, so you can speed up the commissioning process by identifying voltage/current levels in real time
- Standard peripherals include direct USB and RS232 PC connections, and peripheral expansion is built in for added peace of mind
- Modular in construction, with the ability to program your own company logo to appear on the fire panel screen
- 19 built-in LEDs as standard, 5 of which are freely programmable
- Unique auto-test of battery cell integrity
- Easy to synchronise audio and strobes
- Command centres are intuitive and easy for firefighters to operate
- Integrated control of fans and dampers, with unique spreadsheet-style programming matrix
- Built-in false alarm management technology.



## Axis<sup>AX</sup>

### Axis AX – 1 SLC Compact



- 1 SLC – Class A (Style 6,7) or Class B (Style 4)
- 126 addressable intelligent points
- Available in a compact enclosure
- 2 x 2 Amp Class A or Class B programmable NAC circuits
- 3 x on-board relays, 1 trouble, 2 programmable
- System keys for reset, acknowledge, silence, resound and drill
- 3 freely programmable system keys
- 19 on-board LED indicators, 5 of which are freely programmable

### Axis AX 1, 2 or 4 SLC



- Choose from 1 2 or 4 SLC:
- Class A (Style 6,7) or Class B (Style 4)
  - 126, 252 or 504 intelligent addressable points SLC dependent
  - 2 x 2 Amp Class A or Class B programmable NAC circuits as standard, expandable to a total of 4 NAC circuits, 2 Amps each
  - 3 x on-board relays, 1 trouble, 2 programmable
  - System keys for reset, acknowledge, silence, resound and drill
  - 3 freely programmable system keys
  - 19 on-board LED indicators, 5 of which are freely programmable
  - 5 to 16 Amp system power

### Axis AX – Remote Annunciators



- Class B or Class X network interface
- C version has annunciation and programmable control
- D version annunciation only
- On-board USB programming port
- Peer-to-peer, cross-node operation
- Monitored external trouble input
- Info displayed fully configurable to any combination of fires, troubles, supervisory or other alarms
- Both models include programmable status LEDs
- Model ANN-C provides 3 freely programmable function keys
- Optional tamper-proof and weather-proof enclosures
- Surface or flush mount

### Axis AX – with voice evacuation



- Axis AX network node
- Local annunciation, system and audio controls
- Add a local amplifier (optional)
- Remote microphone only option
- User-friendly annunciation and control, identical to FACP
- Installation configurable operations and control
- Ad-hoc IP+UD network compatible
- Supports up to 32 peripheral bus modules
- Multi-channel audio configurations

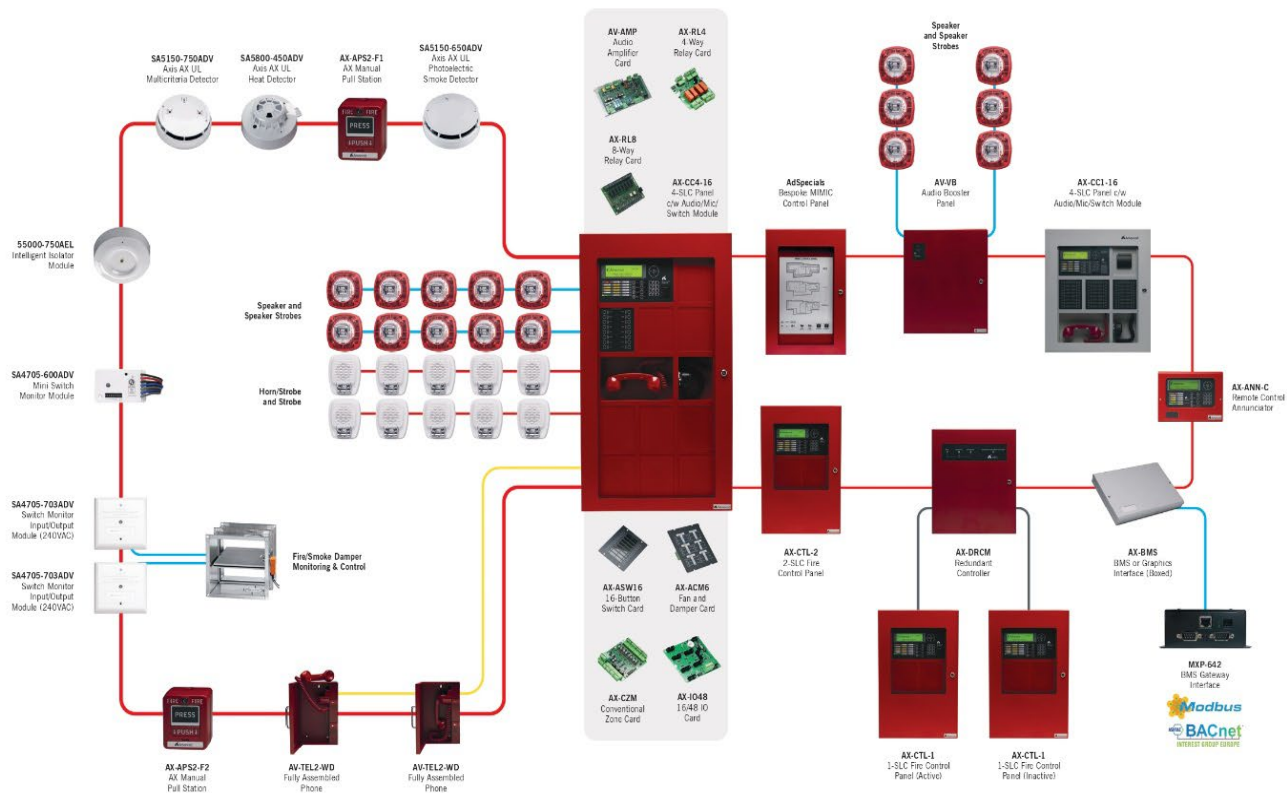
### PENN



Axis AX panels can be customised with a large range of peripheral cards wired directly to the panel, or via the PENN network device, anywhere on the network:

- Integrated and/or networked audio options (see following pages)
- Conventional zone module (8 Class B or 4 Class A) – up to 16 modules per panel
- 4- or 8-way high-current relay modules
- Dual NAC expander
- Class B or Class X network modules
- Fibre optic network converter module
- 48-way I/O switch/LED driver
- Panel-mounted printer
- 16-way switch/48 LED module

## Axis<sup>AX</sup> Sample System Diagram



## Integrated Audio and Firefighter Telephones

Axis AX comes ready for complete audio configuration. With the addition of an Advanced audio module (AV-AMP-80), any Axis AX control panel or command centre becomes fully audio capable.

A variety of firefighter telephones and telephone accessories are compatible with all Axis AX command centre panels. Addressable telephones make control, supervision and identification superior to older technological solutions. Command centres come with easy-to-operate LED or LCD telephone switchboard monitoring and control displays.



### Audio Booster Panel

- Easy and fast configuration with audio configuration wizard
- Designed to operate as a node on the Axis AX network
- Provides increased digital audio signalling during an emergency situation
- Each amplifier has two independent 40W, 250ms outputs
- Each amplifier contains an independent 16 channel digital message tone generator
- Unique amplifier booster/cascading option
- Superb sound quality
- Simple programming via USB
- Two (2) Class A or B speaker circuits
- External AC power and trouble LEDs
- Internal service diagnostic and status indicators
- Each amplifier may be programmed for 1 to 1 backup
- Powerful CPU logic programming
- All amplifier audio output signals are synchronised across the AX network



### Firefighter/Warden Page Telephone

- Magnetic, keylock or glass break door options
- Standard or coil cord phone cable
- Background noise cancellation module (optional)
- Integrated dial, ring, busy and hold tones with connected LED indication



### Command Centre Firefighter Phone

- Compatible with Axis AX command centres
- Class A or B riser
- Background noise cancellation module (optional)
- Easy installation
- Supports up to 500 field phones

### Telephone Riser Module

- Each riser supports up to 250 phones (two risers max)
- Live analogue audio, no digitisation
- Up to 5 telephones per riser may be active simultaneously
- Easy to configure with DynamixTools telephone wizard
- May be located remotely in separate enclosure or integrated into command centre enclosure
- Supports fire warden remote paging feature
- Class A or B configuration

### All-Call Remote Microphone

- Lockable enclosure with microphone
- Completely supervised with interfaced audio amplifier
- Microphone supervised for opens and disconnection
- Advanced CAT30 key access
- Removable timer and outer doors for servicing
- Visible power and trouble LEDs
- PCB service/diagnostic status LEDs
- Plexiglass window
- Surface or semi flush mountable

### Conventional Firefighter Phone Jack

- A conventional firefighter phone jack for use with portable firefighter handsets
- Interfaced to a portable firefighter handset to a master addressable firefighter emergency phone
- Up to four (4) AV-CJACKS can be connected to a single master addressable firefighter emergency phone
- Requires AV-TEL2-MWPB module (primary firefighter phone interface PCB) to communicate to the master addressable firefighter emergency phone



### Portable Firefighter Phone Handset

- Used with any Axis AX addressable telephone jack
- Tip and sleeve connection
- Built-in noise filter
- Background noise cancellation module (optional)

## Command Centres

Axis AX command centres are built on the backbone of our Axis intelligent fire panels to support a wide variety of configurations and applications.

All command centres are supplied in modular format for easy expansion and customisation. Our smaller command centres can be ordered as fully configured. All of our command centres are fully compatible with Axis AX audio and telephone options. The Advanced telephone riser module can be mounted inside the command centre or remotely within a separate telephone node for added security.

### Axis AX Command Centres



- Order fully factory configured or in modular format for configuration on installation
- 1, 2 or 4 SLC
- 126, 252 or 504 addressable points SLC dependent

### 2 Cabinet Sizes

- 2 cabinet sizes (3'x3' and 3'x5')

### Network Nodes and Accessories:

- AX-BMS module – provides interface to building automation system
- Ad-View graphics
- AX-UDCs – local operating consoles
- Smoke control panel
- Graphic annunciator(s)
- AX-VB distributed audio panels
- Telephone node
- Fibre converters

### Features

- PerfectSync synchronisation of audio and strobes across entire 200-node network
- DynamixSmoke dedicated non-dedicated smoke control
- 520Hz audio support
- Failsafe operation if loss of master command centre
- Supports multiple true peer-to-peer command centre operations
- Intuitive and easy for firefighters to operate
- Supports request/control/deny command centre operation
- Audio confirmation LEDs indicate when speaker zones are active
- All call, page evacuate, page alert and page inactive and selective paging features
- Manual activation of any message to any zone or group of zones
- No performance degradation as the number of network nodes expands
- DynamixSmoke smoke control
- Multiple emergency and non-emergency messages
- Integrated telephone announcement (LED or LCD) and controls
- Software wizard provides default telephone and audio options making set-up easy and fast
- Powerful control-by-event programming with intelligent system test facilities provides superior system diagnostic and test functions
- Built-in network, AC power, aux power, battery and field wiring diagnostics
- Colour-coded slide-in labels with large text to identify system functions
- Fire warden page
- PWS, 2-stage, alarm verification and event mode
- Zone and point disable/enable
- 1,000 system zones



PerfectSync

DynamixSm•ke



## Intelligent Detectors

### Axis AX Enhanced Range

The new Axis AX range of detectors has been specifically developed to meet the demanding requirements of the latest UL standard. Fully compliant with UL 268 7th Edition, they offer swift and accurate fire detection using Purelight® sensing technology and high immunity to false alarms. The integrated smart isolator provides the exact location of any wiring faults and in-built drift compensation monitors the long-term drift of smoke sensors and automatically adjusts to maintain detector sensitivity. The new range is backwardly compatible with existing Discovery protocol installations.



**Axis AX UL Enhanced Photoelectric Smoke Detector**

- Approved to UL268 7th edition
- Built-in isolator
- Purelight® optical technology for enhanced smoke detection and false alarm management
- Drift compensation
- Base locking mechanism
- In-built self test
- XPERT card addressing
- Backwards compatible



**Axis AX UL Enhanced Multi-Criteria Detector (Smoke & Heat)**

- Approved to UL268 7th edition
- Built-in isolator
- Purelight® optical technology for enhanced smoke detection and false alarm management
- Drift compensation
- Base locking mechanism
- In-built self test
- XPERT card addressing
- Dual heat sensors

### Advanced XP95A Range

For XP95 protocol users, the latest range of detectors is fully compliant with UL 268 7th Edition.

The detectors are simple to install, easy to use and backwardly compatible with existing XP95A installations. They offer complete peace of mind with fast and accurate fire detection, and a high resistance to false alarms.



**Advanced XP95A Photoelectric Smoke Detector**

- Approved to UL268 7th edition
- Purelight® optical technology provides enhanced smoke detection and false alarm management
- Easy installation
- Internal drift compensation
- In-built self test
- XPERT card addressing
- XP95 protocol compatible



**Advanced XP95A Heat Detector**

- Approved to UL521 7th edition
- Reliable fire detection in areas with a wide temperature range from 32°F to 151°F
- Ideal for environments that are dirty or smoky under normal circumstances
- Electronic temperature sensing
- Alarm flag for fast alarm responding
- XPERT card addressing
- XP95 protocol compatible

## Compatible Bases



### Mounting Bases

The following bases are compatible with both Axis AX and Advanced XP95A detectors

- Axis AX UL base 4"
- Axis AX UL base 6"



### Sounder Bases

This sounder base is compatible with both Axis AX and Advanced XP95A detectors

- Axis AX high-frequency sounder base 6"

## Audio Visual, Modules and Pull Stations

### Beacons & Sounders



### Open Area Sounder/Beacon

- UL464 certified
- 15 pairs of tones
- 7 volume levels
- Visual indicator beacon (red-flash)

### Pull Stations



### Manual Single/Dual Action Pull Station

- Single or dual action
- Low-profile, high-visibility design
- Visual indication of activation including red status LED
- Integrated Form C relay contact
- Surface or semi-flush mountable
- Available in special application colours
- Key lock for reset
- Die-cast metal construction



### Dual Action Polycarbonate Pull Station

- Low-profile, high-visibility design
- Visual indication of activation including red status LED
- Internal access without alarm activation
- Lock reset
- Surface or semi-flush mountable
- Captive-screw terminals

## Intelligent Modules



### Mini Switch Monitor Module

- Built-in isolator
- Visible LEDs
- Loop powered
- Ground fault detection
- Selectable priority to monitor equipment where a fast response is required
- Interrupt facility
- Fits into equipment that has limited space
- Improved design for ease of mounting



### Switch Monitor Module

- Built-in isolator
- Visible LEDs
- Loop powered
- Ground fault detection
- Selectable priority to monitor equipment where a fast response is required
- Interrupt facility
- Improved design for ease of mounting



### Relay Output Module

- 240V rated volt-free relay output
- Built-in isolator
- Visible LEDs
- Loop powered
- Improved design for ease of wiring



### Switch Monitor Input/Relay Output Module

- 240V rated volt-free relay output
- Built-in isolator
- Visible LEDs
- Loop powered
- Ground fault detection
- Improved design for ease of mounting



### NAC Module

- Built-in isolator
- Visible LEDs
- Loop powered
- Can be used for public address speakers
- Power supply health monitoring
- Reverse polarity detection
- AC/DC monitoring (limited by wire length)
- Improved design for ease of wiring



### Dual Switch Monitor Module

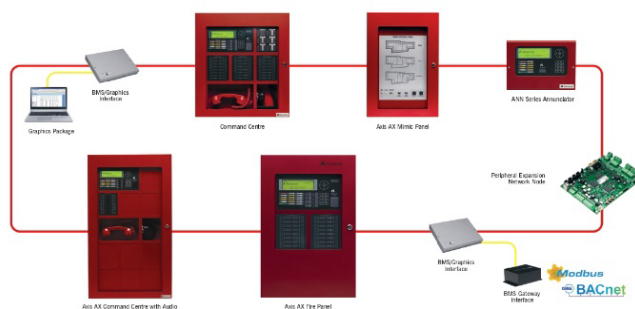
- Built-in isolator
- Visible LEDs
- Loop powered
- Selectable priority to monitor equipment where a fast response is required
- Interrupt facility
- Improved design for ease of mounting

# Advanced Networking

Advanced delivers fast, reliable, peer-to-peer communications from the smallest two-panel network up to a large 200-node network.

Advanced network systems are fully scalable to suit virtually any application including 'campus' style and 'high-rise' style configurations. Built-in diagnostics and test facilities make installation and ongoing maintenance simple. Performance exceeds multiple international standards.

- Peer-to-peer performance for optimum distributed intelligence
- Consistent system performance independent of the number of nodes
- Synchronisation of audio and strobes across entire 200-node network
- Fail-safe operation if loss of master command centre
- Supports multiple true peer-to-peer command centre operations
- Request/control/deny
- Sectoring feature allows customised operations per node
- Integrated or isolated high-rise telephone network option
- Offline test option isolates panels from network during testing without fear of false alarms
- Class B cable wiring – 32 nodes, 5,000ft maximum
- Class X cable wiring – 200 nodes, 5,000ft between nodes, 66,000ft maximum
- Fibre cable – 16,404ft max between nodes
- AdvView graphics provides graphical user interface in single or multiple stations
- AX-BMS interfaces to third-party building automation and controls solutions via standard BACnet or Modbus communications
- One configuration tool is required to program Axis AX panels. Diagnostic features prevent erroneous actions that may be detected prior to on-site installation and test
- Each intelligent audio node contains up to 16 digital messages which are synchronised across the entire 200-node network
- SLC power technology built into each panel provides tremendous application options
- Nodes may be customised to suit any application, reducing installation costs and maximizing performance. Nodes may (or may not) include SLC, displays, microphones, telephones, amplifiers, power supplies, switch modules, and any AX peripheral device.



Type of network	Class B	Class X
Typical use	Sites where one panel per building controls evacuation	Sites where more than one panel per building controls evacuation
Setup	Class B network card	Class X network card
Maximum cable length	Up to 1.5 km	Up to 1.5 km between nodes
No. of nodes	32 (60 with boosters)	200
No. of zones	Up to 1,000	Up to 1,000
Typical time to communicate first event	1 second	3.5 seconds

Approved to UL864 standards – complies with UKRI requirements.

**DynamixSmoke**  
Complete Smoke Control

**Integrated Fan and Damper Control**

Advanced's Axis AX fire system features **DynamixSmoke**, dedicated and non-dedicated fan and damper control, for fire and life safety. As you'd expect from Advanced it's a high-performance solution that is easy to configure and maintain, even on the most complicated sites.



## Features

- Regulatory compliance assured
- Automatic and manual smoke control options in accordance with NFPA and National Building Code Standards
- Dedicated smoke control auto/manual controls and LED status indicators
- Customised FSCS firefighter smoke control (graphic) stations can be located locally or remotely
- Groundbreaking ease of use
- Simple spreadsheet-style programming matrix is a step change that makes even the most complex smoke control programming easy
- System divided into virtual smoke control compartments in software for automatic fan and damper control (cbe)
- Uses standard I/O modules for fan and damper interfacing. Software auto-configures outputs for run/stop and open/close, with feedback inputs if required
- All options configurable from one dedicated menu with the ConfigTool
- Interlocking feature to prevent over pressurisation of ducts
- Post-fire purge options with configurable priorities
- Auto stairwell pressurisation option
- Key switch enable/disable option
- Manual controls can be configured for one-to-one operation, or grouped for one-to-multiple fans or dampers
- Duct probe option – will override auto settings if smoke detected
- The system can respond only to the first smoke compartment in alarm or priorities can be set so that devices respond dynamically to a spreading fire
- Dedicated smoke control reset function
- All manual controls take priority over automatic mode
- Adjustable feedback delay ensures fans are given time to run or a damper is allowed time to travel before any trouble conditions reported
- Fully programmable sequential fan restart to avoid power spikes
- Automatic testing of fans and dampers including scheduled 'holiday' dates
- Engineering test menu allows HVAC to be controlled using panel menu and provides current operation and status feedback
- Customisable intelligent graphic annunciators with simple connection and configuration via panel P-BUS/PENN.

Watch the DynamixSmoke video on YouTube: [Advanced Fire](#)



PerfectSync delivers best-in-class synchronisation of audio and strobes for fire and life safety applications. PerfectSync achieves a level of integrity and performance not seen before.

#### Features

- Synchronisation of audio and strobes across entire Axis AX network
- Dynamically adjusts as conditions change
- Prevents confusion during an emergency
- Aids in meeting intelligibility requirements
- No need for special programming or wiring
- Axis AX network capacity
  - 200 panels
  - 3200 distributed amplifiers
  - Each amplifier contains its own digital message generator
  - Each message generator can support 16 messages
  - 800 built-in NAC circuits
- **Total synchronisation**  
All speakers turn on and are fully synchronised even if the same message is played from different panels on a large network. The maximum time to re-activate any speaker output following the first message played does not exceed 5 seconds.

When a fire spreads, any new affected areas or higher priority messages will begin immediately. This may result in some areas

of the building being briefly out of sync. With PerfectSync these areas will quickly re-synchronise even on a large network system. Similarly paging operation may result in some areas of the building being temporarily out of sync as any automatic message must recommence from the beginning. With PerfectSync these areas will quickly re-synchronise.

#### • More audio flexibility

Up to 16 digital pre-recorded messages per amplifier. Simple 3-channel audio (evacuate, alert, page) to complex multi-channel notification including individual message prioritisation.

Unique audio engineering test feature confirms which amps are active, what message is playing, and can select and play a message in a specific area. Command centre audio control lockout with indication of who's in control.



## Fire and Emergency Telephone System

### Exceptional Clarity for Superior Performance



#### Providing robust telephone communication channels ensures maximum safety.

The Advanced fire and emergency telephone system provides:

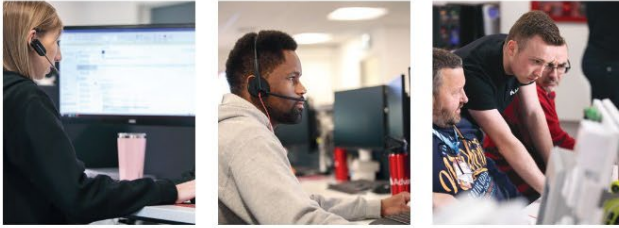
- **Addressability** – for precise identification of the location of field telephone users.
- **Flexibility** – so it can be configured as a standalone, independent system or completely integrated into the fire system.
- Crystal-clear live voice channels with no delays or echoing.
- Reassurance of communication channel status via dial, ring, busy and hold tones, as well as local LED indication at each addressable handset.

#### Quick and easy to install and configure.

Ideal for installations where local fire departments and emergency/facility personnel need access to fire/emergency telephone communications, e.g. in high and low-rise apartment buildings, hotels, universities, government and military sites.

As an entire telephone system can be installed and configured to operate standalone without panels, Advanced fire and emergency phones are also perfectly suited to any retrofit or non-fire application.

# Axis<sup>AX</sup> Parts List



## Technical support

Highly rated customer support. Available by telephone and online.

As an Advanced customer, you have access to a host of helpful advice and support.

This includes a wealth of online information, from 'how to' videos to datasheets and detailed product manuals. Simply complete one of our online forms and you'll be able to access a range of additional services, previously available to those with an Advanced360 account.

### Services include:

- **Technical support** – available by phone and online from one of our experienced technical support engineers.
- **Software** – download software and save your software packages by installation/site.
- **Literature** – download manuals, specifications, approved partner certificates, technical information and more.



- **Training** – view dates available. Direct customers can book training online and will be sent training certificates by email. If you need to access a previous training certificate, simply complete an online request form. All non-direct customers should book training through their distributor.
- **Warranty** – Download our warranty statement.

[advancedco.com/training-support](http://advancedco.com/training-support)

Product Code	Description
<b>Control Panels</b> <i>(Also available in grey. Add -G to product code)</i>	
AX-CTL-10	1-SLC Fire Alarm Control Panel – Red
AX-CTL-1L	1-SLC Fire Alarm Control Panel – 2x2 Fault Free – Red
AX-CTL-2	2-SLC Fire Alarm Control Panel – 2x2 Fault Free – Red
AX-CTL-4	4-SLC Fire Alarm Control Panel – Red
<b>Control Panels with Audio/Micro</b> <i>(Also available in grey. Add -G to product code)</i>	
AX-CTL-1V	1-SLC Fire Alarm Control Panel – 2x2 with Voice – Red
AX-CTL-2V	2-SLC Fire Alarm Control Panel – 2x2 with Voice – Red
AX-CTL-4V	4-SLC Fire Alarm Control Panel – 2x2 with Voice – Red
<b>Control Panels with Audio/Micro/Switch Module</b> <i>(Also available in grey. Add -G to product code)</i>	
AX-CD1-16	1-SLC Command Centre FACP – 3x3 Red enc. with Voice
AX-CD2-16	2-SLC Command Centre FACP – 3x3 Red enc. with Voice
AX-CD4-16	4-SLC Command Centre FACP – 3x3 Red enc. with Voice
AX-CD1-16P	1-SLC Command Centre FACP – 3x3 Red enc. with Voice and Phone
AX-CD2-16P	2-SLC Command Centre FACP – 3x3 Red enc. with Voice and Phone
AX-CD4-16P	4-SLC Command Centre FACP – 3x3 Red enc. with Voice and Phone
AX-LCC1-16	1-SLC Command Centre FACP – 3x3 Large Red enc. with Voice
AX-LCC2-16	2-SLC Command Centre FACP – 3x3 Large Red enc. with Voice
AX-LCC4-16	4-SLC Command Centre FACP – 3x3 Large Red enc. with Voice
AX-LCC1-16P	1-SLC Command Centre FACP – 3x3 Large Red enc. with Voice and Phone
AX-LCC2-16P	2-SLC Command Centre FACP – 3x3 Large Red enc. with Voice and Phone
AX-LCC4-16P	4-SLC Command Centre FACP – 3x3 Large Red enc. with Voice and Phone
<b>Local Operating Consoles</b> <i>(Also available in grey. Add -G to product code)</i>	
AX-LCC1-ST4	Local Operator Console 1 – 2x2 Deep – Class B Network
AX-LCC1-ST7	Local Operator Console 1 – 2x2 Deep – Class X Network
AX-LCC2-ST4	Local Operator Console 2 – 2x2 Deep – Class B Network
AX-LCC2-ST7	Local Operator Console 2 – 2x2 Deep – Class X Network
AX-LCC3-ST4	Local Operator Console 3 – 2x3 Deep – Class B Network
AX-LCC3-ST7	Local Operator Console 3 – 2x3 Deep – Class X Network
AX-LCC4-ST4	Local Operator Console 4 – 2x3 Shallow – Class B Network
AX-LCC4-ST7	Local Operator Console 4 – 2x3 Shallow – Class X Network
<b>Remote Control Annunciators</b> <i>(Also available in grey. Add -G to product code)</i>	
AX-ANN-4	Remote Control Annunciator – Class B Network
AX-ANN-QST7	Remote Control Annunciator – Class X Network
AX-ANN-D	Remote Display Annunciator – Class B Network
AX-ANN-QST7	Remote Display Annunciator – Class X Network

Product Code	Description
<b>LED Annunciators</b>	
AX-LED16RY	Addressable 3x4 LED Red/Yellow Module (16 red, 16 yellow)
AX-LED32R	Addressable 3x4 LED Red Module
AX-LED32Y	Addressable 3x4 LED Yellow Module
<b>Network Cards</b>	
AX-NET4	Plug-In Network Card – Class B Network
AX-NET7	Plug-In Network Card – Class X Network
AX-DCI	AX DCI 24V/24V DC Isolated Supply
<b>Expansion Modules</b>	
AX-NAC	Plug-In 2 x NAC Extender
AX-LTD	Plug-In 2 x SLC 2 x NAC Extender
AX-C2M	Conventional Zone Monitor – 4 x Class A or 8 x Class B Conventional Zones, 3 Relay Outputs
AX-ASW16	16-Way Addressable Switch/LED Module
AX-IO48*	16 Inputs and 48 Outputs Module
AX-AMP80	AV Amplifier Assembly (Panel)
AV-VB	Audio Booster Panel
AX-PSU	Power Supply Module
AX-PSU-6	Power Supply Module for AX-CTL Panel Range
AX-PENN-ST4	Peripheral Expansion Network Node – Class B Network
AX-PENN-ST7	Peripheral Expansion Network Node – Class X Network
AX-RL4	4-Way Relay Output Card (Programmable)
AX-RL8	8-Way Relay Output Card (Programmable)
AX-RL10	10-Way Relay Output Card (Programmable)
AX-MXA	Fibre Optic Converter Module
AX-ACM6	Fan Damper Switch Cards
AX-PIN	Printer
<i>*Also available in grey. Add -G to product code</i>	
<b>Network Interfaces</b>	
AX-BMS*	Graphics Interface – Class B Network (Boxed)
AX-BMS-ST7*	Graphics Interface – Class X Network (Boxed)
AX-BMS-PCB	Graphics Interface – Class B Network – Card and Spares Kit
AX-BMS-PCB-ST7	Graphics Interface – Class X Network – Card and Spares Kit
<i>*Also available in grey. Add -G to product code</i>	
<b>Software and Leads</b>	
AXPC-NET-003	AX Config Tool Software and Lead
AXPC-NET-018	AX-AMP Config Tool Software
UP-001	RS232 9-Way to 5-Way Plug-in Connector (Upload/Download Lead)
UP-006	USB Upload/Download Lead for Config Software
<b>Main PCBs</b>	
AX-ACB	AC Interface Board for AX Series Panel
AX-DSP*	AX C11 Large/Voice Display Module Assembly
AX-ESP7	AX-CTL Telephone Extension Display Module
AX-CTL-1PCB	1-SLC Fire Alarm Control Panel Base Card PCB K4
AX-CTL-2PCB	2-SLC Fire Alarm Control Panel Base Card PCB K4



# Axis<sup>AX</sup> Parts List

Product Code	Description
<b>Enclosures – Compact</b>	
<i>(Also available in grey. Add -G to product code)</i>	
AX-1C-BB	1-SLC Fire Alarm Control Panel Compact Back-box
AX-1C-OD	1-SLC Fire Alarm Control Panel Compact Outer Door
<b>Enclosures – Medium (2x2', 2x3')</b>	
<i>(Also available in grey. Add -G to product code)</i>	
AX-01-BB	AX-CTL-x 2'x2' Fault Free / 2'x3' Fault Free Back Box
AX-01-01	AX-CTL-x 2'x2' Fault Free Inner Door
AX-01-001	AX-CTL-x 2'x2' Fault Free Outer Door
AX-01-012	AX-CTL-x 2'x3' Fault Free Inner Door
AX-01-002	AX-CTL-x 2'x3' Fault Free Outer Door
<b>Enclosures – Large (3'x3', 3'x5')</b>	
<i>(Also available in grey. Add -G to product code)</i>	
CCM-01-BB	Command Centre – 3'x3' Back Box
CCM-01-01	Command Centre – 3'x3' Inner Door, 1 Double and 7 Single Apertures
CCM-01-002	Command Centre – 3'x3' Inner Door, 2 Double and 5 Single Apertures
CCM-01-003	Command Centre – 3'x3' Inner Door, 9 Single Apertures
CCM-01-00	Command Centre – 3'x3' Outer Door
CCM-02-BB	Command Centre – 3'x5' Back Box
CCM-02-01	Command Centre – 3'x5' Inner Door, 1 Double and 13 Single Apertures
CCM-02-003	Command Centre – 3'x5' Inner Door 15 x Single Apertures
CCM-02-004	Command Centre – 3'x5' Inner Door, 2 Double and 1 Single Aperture (Double Apertures on Row 1 and 3)
CCM-02-00	Command Centre – 3'x5' Outer Door
CCM-MP-BP2	2 x Rise/Standard PBUS Card Mounting Plate
AX-HPIN	Hinge Pin AX Panels (Pack of 6) (Kit of Parts)
<b>Enclosures – Other Parts</b>	
AX-SAP*	Single Aperture Blanking Plate
AX-SAP6*	Single Aperture Blanking Plate (Pack of 6)
AX-DAP*	Double Aperture Blanking Plate
AX-DAP6*	Double Aperture Blanking Plate (Pack of 6)
AX-1C-BP*	AX-CTL 1C Battery Cover Plate – Red
AX-BAT*	External Battery Enclosure
AX-BAT-TR	Battery Tray for AX-BAT Battery Cabinet. Hold 4 Sets of Batteries
AX-KEYL	Spare AX Panel Door Keylock 2 x CAT30 Keys
AX-KSW	2 Position 90° Key Switch - CA130 (C&K)
AX-ANN-1P*	Temper Proof Enclosure for Annunciator, Surface Mount Lockable
AX-ANN-WP	Temper Proof Enclosure for Annunciator, Surface Mount Lockable c/w 24VDC Heater
AXM-006*	Spare Annunciator Back Box
AXM-007*	Spare Annunciator Cover
AXM-008*	Spare Annunciator Bezel – Semi Flush – Red (No UL Listing)
AXM-009*	AX Peripheral Card Enclosure
AXM-012*	Mounting Plate Kit for Ferni & ID48 PCBs – Red
AX-GCAB	General Purpose UL-Listed Red Enclosure with CAT-30 Keylock
<i>*Also available in grey. Add -G to product code. Change -RD to -GY.</i>	

Product Code	Description
<b>Enclosures – Local Zone Annunciators</b>	
AX-LZA-CAB1*	1-Way Local Zone Annunciator Cabinet – Red
AX-LZA-CAB2*	2-Way Local Zone Annunciator Cabinet – Red
AX-LZA-CAB4*	4-Way Local Zone Annunciator Cabinet – Red
AX-LZA-CAB1-TR*	Trim Ring – 1-Way Local Zone Annunciator Cabinet – Red
AX-LZA-CAB2-TR*	Trim Ring – 2-Way Local Zone Annunciator Cabinet – Red
AX-LZA-CAB4-TR*	Trim Ring – 4-Way Local Zone Annunciator Cabinet – Red
<i>*Also available in grey. Add -G to product code.</i>	
<b>Microphone Components</b>	
AV-MIC*	Microphone Assembly
<i>*Also available in grey. Add -G to product code.</i>	
<b>Firefighter Emergency Phone System 2 with Ring</b>	
AV-TTL2-REM*	Telephone Riser Panel (Red) incl Riser and AX-PSU6
AV-TTL2-RISEL	Telephone Riser Interface Card with Ring and Hold Tones
AV-TTL2-PPB	Plug-in Audio Module for AV-TTL2-RISE for Remote Phone Paging
AV-TTL2-MCCS*	Multi-Command Center Fire Fighter Phone, Supervision Module and Enclosure for Interface to AV-TTL2-RISE Module
AV-TTL2-RMCCS	Command Centre Phone PCB
AV-TTL2-CAB*	Remote Cabinet Supports up to 2 AV-TTL2-RISE Modules and AX-PSU-6
<i>*Also available in grey. Add -G to product code.</i>	
<b>Firefighter Emergency Phone System Accessories</b>	
AV-SC-5	Firefighter Phone Cabinet Holds 5 Phones
AV-SC-10	Firefighter Phone Cabinet Holds 10 Phones
AV-TLP-2	Portable Firefighter Handset, Coiled Cord, 1/4" Plug – Red
AV-C-JACK	Conventional Firefighter Phone Jack with Active LED
AV-TLP-2-MWPB	Primary Firefighter Phone Interface PCB with Ring and Hold Tones
<b>Fully Assembled Firefighter Telephones</b>	
AV-TTL2-WO	Master, Breakglass and Keylock, Standard Cord
AV-TTL2-WOV	Master, Breakglass and Keylock, Armored Cord
AV-TTL2-WO2V	Master, Keylock, Standard Cord
AV-TTL2-WO2V	Master, Keylock, Armored Cord
AV-TTL2-WO3	Master, Magnet Latch with Handle, Standard Cord
AV-TTL2-WO3V	Master, Magnet Latch with Handle, Armored Cord

Product Code	Description
<b>Detectors &amp; Bases</b>	
SA3800-450ADV	AX Heat Detector* Enhanced
SA4150-450ADV	Enhanced Photoelectric Smoke Detector
SA5150-750ADV	AX Multi-Criteria (Smoke/Heat) Detector* Enhanced
SA5500-450ADV	XP95A Heat Detector
SA5050-350ADV	XP95A Multi-Criteria (Smoke/Heat) Detector
SA5050-350ADV	XP95A Photoelectric Smoke Detector
SA5000-210ADV	AX Base 6"
SA5000-230ADV	AX Base 6"
SA5300-802APO	AX High Frequency Sounder Base 6"
SA5300-806APO	AX Low Frequency Sounder Base
SA5300-802APO	AX High Frequency CO Sounder Base
SA5300-806APO	AX Low Frequency CO Sounder Base
<b>Duct Detectors</b>	
AX-STN-1.0	AX 1.0" Sampling Tube
AX-STN-2.5	AX 3/8" Sampling Tube
AX-STN-5.0	AX 5" Sampling Tube
AX-STN-10.0	AX 1.0" Sampling Tube
SL-DA4-N	Duct Smoke Detector – ION – 2 Wire
SL-DA4-P	Duct Smoke Detector – PHOTO – 2 Wire
SL-DA4-R-N	Duct Smoke Detector – ION – 4 Wire
SL-DA4-R-P	Duct Smoke Detector – PHOTO – 4 Wire
<b>Pull Stations</b>	
AX-APS2-F-1	Pull Station – Red, Single Action Fire Alarm
AX-APS2-F-2	Pull Station – Red, Dual Action Fire Alarm
AX-APS-BB-1	Pull Station Back Box – Red, Interior
AX-APS-BB-1-D	Pull Station Back Box – Red, Deep Interior
AX-APS-BB-2	Pull Station Back Box – Red, Weatherproof NEMA-3R
AX-APS-BB-2-D	Pull Station Back Box – Red, Deep Weatherproof Die-cast
AX-APS-KFY	Pull Station Lockset c/w 1 Key
56000-005APO	Polycarbonate Dual Action Pull Station
<b>Open Area Beacon Bases</b>	
58000-011ADV	Open Area Sounder/Beacon (Loop Powered) – Red
58000-012ADV	Open Area Sounder/Beacon (Loop Powered) – White
59000-041ADV	Open Area Sounder (Loop Powered) – Red
<b>Modules</b>	
59000-700ALL	Isolator Module
59000-705ARL	Mini Monitor Module (Din Rail Mount)
SA4705-600ADV	Mini Switch Monitor Module
SA4705-700ADV	Switch Monitor Module
SA4705-701ADV	Relay Output Module
SA4705-703ADV	Switch Monitor Input/Relay Output Module
SA4705-706ADV	NAC Module
SA4705-708ADV	Dual Switch Monitor Module

Buenos Aires, 27 de junio de 2024