



# Advanced Axis AX (UL) Training Programme



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# Introduction

Our training courses are essential to helping you support and engineer Advanced products. We offer our partners free workshops, which cover not only the theory, but also applied exercises and tests. This ensures that on completion of our full training programme, you will have good working knowledge of all aspects of our Axis AX control equipment, intelligent devices and software packages.

Our training modules are developed to help keep you up to date with the latest products, approvals and industry standards. They are also designed to promote competency – so vital to your success and to the safety of those protected by the equipment you install.

We offer both face-to-face and e-learning, depending on the content to be covered. Our e-learning modules are designed to be convenient and flexible as they:

- can be accessed anywhere, anytime with an active trainer and live video
- allow on-field workers easy access to training without the time, cost and inconvenience of having to travel to a training centre
- make it easy for you to keep your employees updated on all the latest industry developments and so gain a simple and easy competitive advantage.

**Our e-learning modules are built around workshops with a designated live trainer and up to 20 delegates.**



Products are coming to market every day, bringing with them new features, new hardware and software updates – it can be difficult to keep ahead of all the changes. This is why we have developed e-learning modules, so you now have an easily accessible and cost-effective way of keeping up to date as changes occur.



# General Information

During your e-learning session, your trainer will be based in one of our purpose-built training facilities in the UK, Europe, Middle East, USA and South East Asia.

Each centre is fully equipped to carry out simulated, multi-panel system installation scenarios to help you get practical insight into how our products really work.

Small group sizes per session ensure all participants get the most from the training, with plenty of opportunities to ask questions.

Courses operate at different times of the day to suit participants from different time zones. UK sessions typically run as follows:

- **Morning sessions** from 09:00 to 12:30
- **Afternoon sessions** from 13:00 to 16:30

If our open courses don't meet your needs in the United States or Canada, we can, by prior arrangement, customise courses to suit you. Please note a minimum of six participants are needed for customised training.

Training courses are available for the following modules:

<b>Module 1</b> Axis AX Extensive Product Overview	<b>Module 6</b> Networking & Software Configuration
<b>Module 2</b> Installation & Maintenance	<b>Module 7</b> Graphics Programming*
<b>Module 3</b> Diagnostics & Panel Engineering	<b>Module 8</b> Axis AX Range of Conventional and Intelligent Devices
<b>Module 4</b> Networking Systems	<b>Module 18</b> Commander Module*
<b>Module 5</b> PC-Net Software	

Training modules are built up of short units with an automated question and answer session at the end of each. Upon successful completion of all units and a pass rate of 70% or higher, a certificate will be awarded, proving competency.

	Consultant	Sales Engineer	Project Engineer	Design Engineer	Estimator	Installation Engineer	Commissioning Engineer	Maintenance Engineer	Technical Support Engineer	Facilities Management Team	Trainer
Module 1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Module 2						✓	✓	✓	✓	✓	✓
Module 3						✓	✓	✓	✓		✓
Module 4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Module 5		✓	✓	✓		✓	✓	✓	✓		✓
Module 6				✓		✓	✓		✓		✓
Module 7		✓	✓	✓	✓	✓	✓		✓		✓
Module 8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Module 18		✓	✓	✓	✓	✓	✓		✓		✓

We store all completed training records on a secure internal database.

\*Not available in the USA or Canada.

# Our Training Team



**Paul Duffy BEng ESDE**  
Technical Services Manager

Having led Advanced training and technical support since 2002, Paul is responsible for our training programme and our trainers in the UK and around the world.



**Mark Taylor**  
Senior Technical Support Engineer

Mark joined Advanced from Kidde Products in 2006. Specialising in fire alarm CIE, Mark has a wealth of experience from installation through to systems integration.



**Leigh Kaiser**  
Senior Technical Support Engineer

USA based Leigh has worked for Advanced since 2007 in a variety of roles. With a BS degree in Fire Protection/Life Safety, Leigh has over 40 years of industry knowledge working for many of the top fire alarm manufacturers in North America.



**Nick Blackhall**  
Technical Support

Nick has a degree in Electrical and Electronic Engineering and joined Advanced in 2014. He has been training installers since 2017.



**Michael Patterson**  
Technical Support

Training since 2021, Michael joined the team in 2018. As well as providing training and technical support, Michael has also worked in operations, test engineering and QA.



**Laura Shaw**  
Technical Support

Laura joined Advanced as an apprentice in 2015 and holds an HNC in Electrical and Electronic Engineering. Laura has been training staff and customers since 2018.



**Ray Julien**  
Technical Support

Ray transitioned from a military career to Advanced back in 2020. Using transferable engineering skills, Ray initially joined the production team and moved to technical support in 2021.



**Chris Jayme**  
Technical Support

Chris joined Advanced from electronics company Atmel in 2008. He has worked in our special assembly team, where he built, programmed and tested bespoke panels and joined technical support in 2022.



**Shaun Scott**  
Applications Engineer

Shaun joined the technical support team in 2004 having previously worked in manufacturing operations. He has been a trainer since 2008, and as well as providing training on our fire products, Shaun has also helped develop our emergency lighting installation and testing course.



## Module 1

### Extensive Product Overview



## Module 2

### Installation & Maintenance



#### Duration

~3 hours.

#### Content

##### 1.1 Axis AX panels and repeaters

- Detailed overview of CIE, power supply ratings and connectivity. Unit followed by a 10-minute, multiple-choice test which contributes towards the certification scheme.

##### 1.2 Peripherals, PBus, amplifier and smoke control

- Detailed overview of expansion modules, supply ratings, connectivity in line with day-to-day applications. Unit followed by a 10-minute, multiple-choice test which contributes towards the certification scheme.

##### 1.3 PC software and false alarm management (FAM)

- Overview of product standards, PC software tools available and how to minimise false alarms using Advanced CIE.

#### Equipment required

None.

#### Goal

You will:

- learn the operational principles of Advanced CIE and peripheral devices
- gain a deep understanding of Advanced products in order to help develop the fire alarm system more effectively.

#### Who is this course suitable for?

Consultants, specifiers, designers, installers, sales and purchasing, maintenance, technical support and trainers.

#### Duration

~3 hours.

#### Content

##### Product overview presentation and virtual panel demo

Axis AX product presentations providing an overview of the control equipment menu structure (Levels 1, 2 & 3), and how it can be navigated via the on-board controls via the virtual terminal.

The course covers the logging process of devices, testing devices and the troubles that may occur during installation and maintenance.

Live demonstration/programming of the following:

##### 2.1 User log on, adding/removing devices, common troubles and trouble finding, including:

Axis-Terminal (virtual panel display).

- User log-on
- Disablements
- Add/removing/addressing devices (also wireless if requested)
- Protocol information
- Earth faults.

Unit followed by a 10-minute multiple choice test contributing towards the certification scheme.

#### 2.2 Device sensitivity settings and test modes

- Programming via panel facia (text changes, sensitivity etc.)
- Output group configuration/manual programming of sounders/beacons /relay-type devices.

Unit followed by a 10-minute multiple choice test contributing towards the certification scheme.

#### 2.3 Walk test, Service Tool (reporting) and Flash test modes

- Live activations and walk test demos
- Local terminal event log download.

Questions and answers.

#### Equipment required

PC/laptop for remote access.

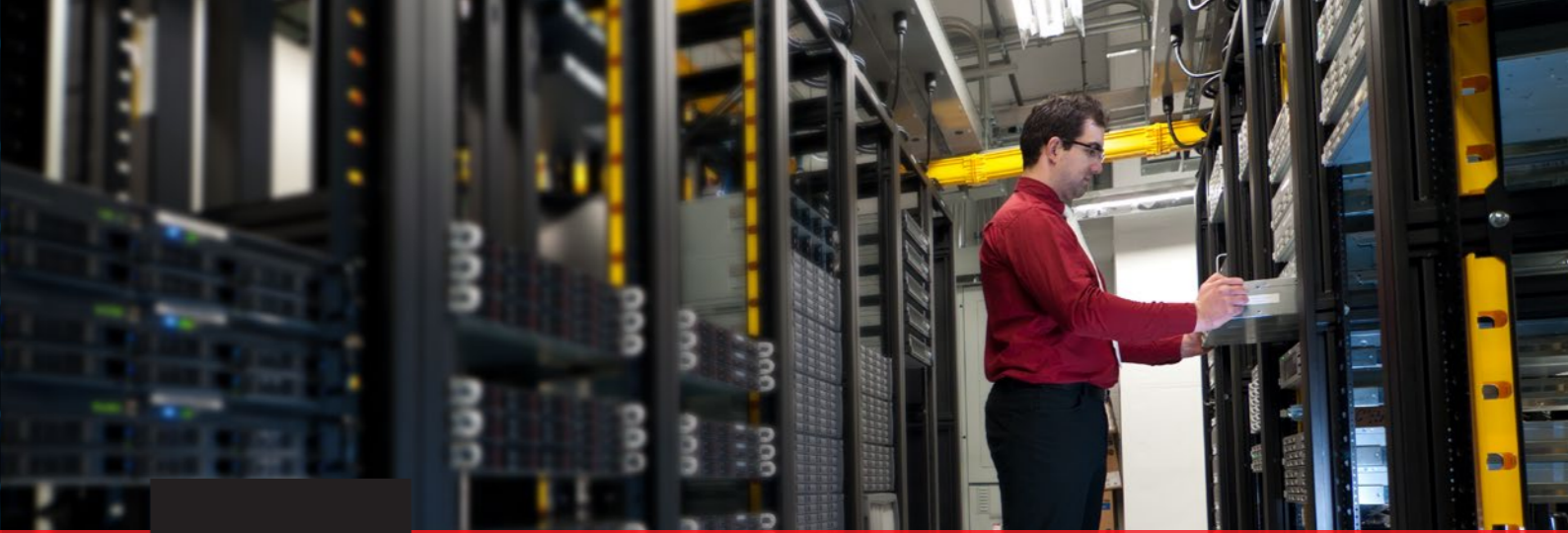
#### Goal

You will learn the basics of the operational aspects of the CIE from adding/replacing devices and trouble finding, to carrying out routine testing of the fire alarm system.

#### Who is this course suitable for?

Installers, commissioning, facilities managers, maintenance, technical support and trainers.





## Module 3

# Diagnostics & Panel Engineering

### Duration

~2 hours.

### Content

#### Axis panel review presentation

Providing an in-depth overview of the diagnostics operation, manual output group programming and terminology.

Hands-on programming of the following control equipment features:

#### 3.1 Diagnostics logging and event log capture

#### 3.2 Output group programming.

Unit followed by a 10-minute multiple choice test contributing towards the certification scheme.

Questions and answers.

### Equipment required

PC/laptop for remote access.

### Goal

You will learn the engineering aspects of the CIE from using the trace diagnostics and panel multimeter.

### Who is this course suitable for?

Installers, commissioning, maintenance, technical support and trainers.

## Module 4

# Networking

### Duration

~2 hours.

### Content

#### Product overview presentation

#### 4.1 A detailed product overview covering all aspects of networked fire systems.

- The course covers all programming and hardware features to permit full flexibility of a networked system using copper and fibre optic solutions.

#### 4.2 Detailed discussion of the network configurable options that can be used when programmed via the PC software package.

- Unit followed by a 10-minute multiple choice test contributing towards the certification scheme.

Questions and answers.

### Equipment required

None.

### Goal

You will learn the basics of the operational aspects of the CIE from adding/replacing devices, fault finding to carrying out routine testing of the fire alarm system.

### Who is this course suitable for?

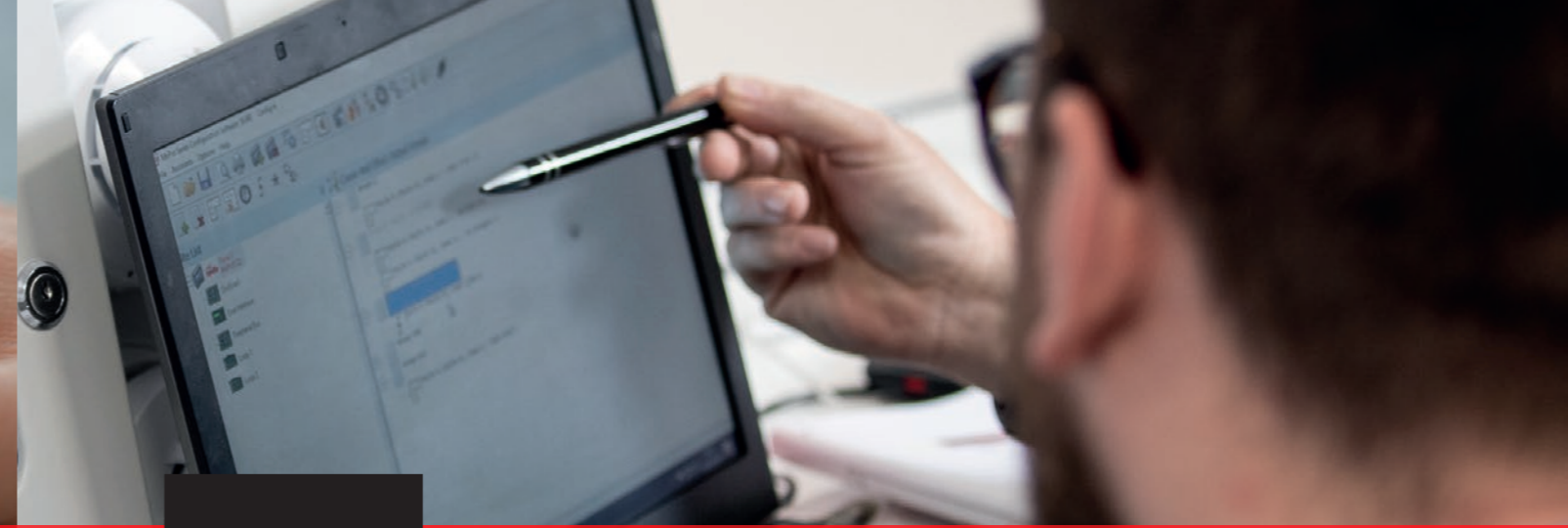
Consultants, specifiers, designers, installers, sales and purchasing, maintenance, technical support and trainers.



## Module 5

### PC Configuration – Basic Level

Duration	Equipment required
~2 hours.	Laptop/PC running the latest in Microsoft Windows.
Content	Goal
<p><b>Product overview presentation of DynamixTools software.</b></p> <p>A beginner's guide to our PC software, including:</p> <p><b>5.1 Software overview</b></p> <p><b>5.2 Upload/download</b></p> <p><b>5.3 Basic config, including virtual terminal, reports and design check.</b></p> <p>Basic 'cause and effect' programming demonstration to introduce the programming options.</p> <ul style="list-style-type: none"> <li>• Flasher (panel firmware upgrade option)</li> <li>• Logo Tool (panel rebranding/end user logo setup)</li> <li>• Service Tool/local terminal.</li> </ul>	<p>You learn the basics of the PC software functionality: adding and removing devices, custom sensitivity changes as well as how to create detailed reports and backups of the system.</p> <p><b>Who is this course suitable for?</b></p> <p>Commissioning, service/maintenance, technical support and trainers. Also beneficial for sales, project and design.</p>



## Module 6

### PC Configuration – Advanced Level

Duration	Equipment required
1 day.	Laptop/PC running the latest in Microsoft Windows.
Content	Goal
<p><b>DynamixTools software overview presentation</b></p> <p>Advanced 'cause and effect' programming demonstration for the experienced engineer wishing to cover options such as phased evacuation, ringing styles, logic statements, mimic control panels, minimising false alarms and IP Gateway.</p> <p>At the end of this training session, engineers will receive a set of tasks and be asked to complete them using the PC software tools demonstrated during the training course. This allows the trainer to cover any areas of uncertainty fully prior to participants being left to their own devices.</p> <p>Questions and answers.</p>	<p>You will learn the basics of the PC software functionality – adding and removing devices, sensitivity changes and providing reports and backups of the fire alarm system.</p> <p><b>Who is this course suitable for?</b></p> <p>Commissioning, service/maintenance, technical support, trainers and design.</p>





## Module 7 – Session 1

### PC-NET-005 Graphics Programming\*

#### Duration

~3 hours.

#### Content

##### Graphics configuration

Product overview presentation providing the following information:

- 1) An overview of the connectivity for the Axis AX products and the BMS/graphical control equipment on the Ad-Net network.
- 2) An overview of the PC Graphics functions to include limitations and optimisation requirements.

Practical demonstration of the following:

- 1) Installation of software
- 2) Set-up of communication port
- 3) The graphical software application and all available menu structures/icons
- 4) Discussion of the basic Axis Graphics setup
- 5) Importing of maps
- 6) How to set up the communication port and show basic event transactions to prove communication
- 7) How to plot devices on to the imported maps and how to position them using the Wizard
- 8) How to create graphical buttons for interlinking maps and controlling key functions.

#### Advanced engineering

- 1) **Wizard** – discuss how the Wizard is used to build the event you wish to create and how it links to the key functions from the menu.
- 2) **Smart** – discuss the smart options offered by the Axis Graphics.
- 3) **Managers** – discuss the dongle licensing features and what options are available.

#### Training task

Provide engineers with sample bitmaps they can use and ask them to create their own graphical site file using the import options, Wizard and navigational buttons.

#### Equipment required:

Laptop/PC running the latest in Microsoft Windows.

#### Goal:

You will learn the basics of the Advanced PC Graphics and how to add and remove devices.

#### Who is this course suitable for?

Sales, commissioning, service/maintenance, technical support and trainers.

\*Not available in the USA or Canada.

## Module 7 – Session 2

### Smart Watch and Smart Cube Configuration\*

#### Duration

~3 hours.

#### Content

##### Smart watch and smart cube configuration

Product overview presentation providing the following information:

- 1) Smart Watch and Smart Cube options
- 2) An overview of the Axis Graphics functions to include limitations and optimisation requirements for the internet of things (IOT).

Practical demonstration of the following:

- 1) Configuration setup
- 2) TCP/IP setup
- 3) Node/loop offsets
- 4) PC demonstration configuring devices.

Questions and answers.

#### Equipment required

Laptop/PC running the latest in Microsoft Windows.

#### Goal

You will learn the TCP/IP concepts, configuration of network systems and PC graphics.

#### Who is this course suitable for?

Sales, commissioning, service/maintenance, technical support and trainers.

\*Not available in the USA or Canada.



## Module 8

### Axis AX Intelligent Devices

#### Duration

~2 hours.

#### Product overview presentation using PowerPoint and live cameras

##### 8.1 Intelligent devices

- Details of the range of SLC/loop-driven products available, applications and limitations.

Live, hands-on demonstration of device installation, wiring and operation.

Questions and answers.

#### Equipment required

None.

#### Goal

You will:

- learn the operational principles of the Axis sensors and modules from conventional circuits to intelligent SLC/loop devices.
- gain a deep understanding of the Axis range to help develop the fire alarm system more effectively.

#### Audience

Consultants, specifiers, designers, installers, sales and purchasing, maintenance, technical support and trainers.



## Module 18

### Commander Module – Programming & Configuration\*

#### Duration

By arrangement.

#### Content

##### 18.1 – Session 1: Product overview (essential features)

- 1) Overview presentation of the Commander module detailing all internal/external connections and DIP switch settings.
- 2) Details of PC connectivity to Commander and how it can be set up using the default IP address.
- 3) General overview of the Obsys software menu structure and its ease of navigation.
- 4) Discussion of the Commander object limitations and the parameters required to allow set-up.
- 5) Detailed overview of each of the highlighted options from the training module including:
  - a) Configuration
  - b) LAN port set-up
  - c) Interfaces (Advanced, BacNet and Modbus)
  - d) Essential data
  - e) Processors.
- 6) Participants will also be introduced to the 'BacNet/Modbus points table' and learn about the information required for its completion when purchasing a Commander.
- 7) Gain an understanding of the difference between 'configured' and 'non-configured' Commanders and the default settings applied by Advanced.

#### Practical demonstration

- 1) Installation of software.
- 2) Menu navigation, including the need to use the 'scan' feature.

\*Not available in the USA or Canada.

- 3) LAN port configuration for preferred IP settings.
- 4) Initial setup of the necessary driver interfaces and associated parameters.
- 5) Setting up a single object and discussion around the different parameters and options.
- 6) Connection to a single Panel/BMS.
- 7) Demonstration of the backup and restore options to/from PC.
- 8) Demonstration of how the Commander programming can be stored locally in RAM.

##### 18.2 – Session 2: Advanced Engineering

Discussion about the option to create logical programming using the 'processor' option plus a demonstration of how to create these circuits and the theory behind this requirement.

Questions and answers.

#### Equipment required

None.

#### Goal

You will gain a deeper understanding of Advanced solutions for building integration via ModbusTCP and BacnetIP, industry-standard protocols for communicating with third party equipment.

#### Who is this course suitable for?

Sales, commissioning, service/maintenance, technical support and trainers.





## Advanced Customised Courses

### Duration

By arrangement.

### Content

We can create customised courses on request. Before requesting a customised training course, please consider the following:

- 1) What aspects of the product do you want to cover?
- 2) Who will be attending the training session?
- 3) Do any special requirements need to be addressed during the training?
- 4) Are there any particular programming options that we should focus on in more depth?

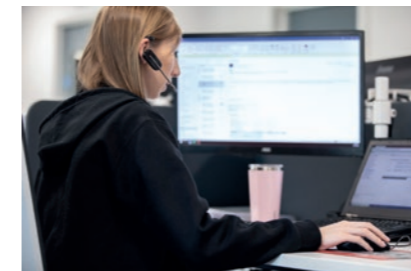
Note: a minimum of four participants up to a maximum of eight must attend a customised course of this type. If training is to be held off site, a possible charge may be incurred.

### Booking

To arrange one of our customised training courses, please contact [training@advancedco.com](mailto:training@advancedco.com)

# How to register for Axis AX training

To register for training, please visit our website:  
[www.advancedco.com/training-support](http://www.advancedco.com/training-support)



## Technical support

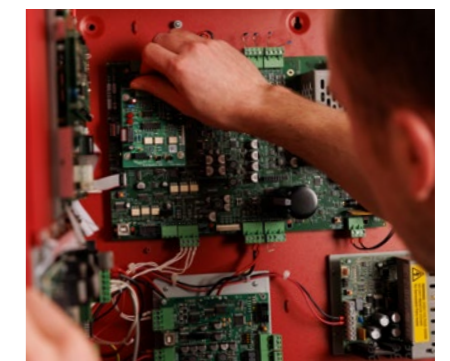
Highly rated customer support. Available by telephone and online.

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

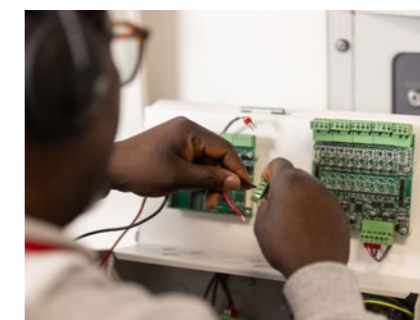
This includes a wealth of online information, from 'how to' videos to datasheets and detailed product manuals. Simply complete one of our online forms and you'll be able to access a range of additional services, previously available to those with an Advanced360 account.

### 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)



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