

DISCOVERY®



Discovery is a range of high specification, analogue addressable fire detectors. Discovery detectors offer reliable detection and false alarm management by a combination of EN54 approved operating modes and sophisticated algorithms. Discovery has a 'distributed intelligence' system where decisions are made in the detector head as well as the control panel. Drift compensation is also incorporated into the detector, allowing it to adapt to dirty or dusty environments which reduces false alarms.

Each detector in the Discovery range can operate in one of five response modes, which can be selected from the control panel or hand held programmer. The response characteristics have been carefully set so that the detectors comply with the requirements of the relevant part of EN54 in all response modes. Mode One will give a higher sensitivity to fire than Mode Five.

Designed for the use in medium to large applications with specific system requirements, Discovery gives you total reassurance in installations where adaptability to changing conditions and protection against unwanted alarms is paramount.

Key features of Discovery include:

- Five operating modes approved and certified to CPD and EN54
- Automatic drift compensation to ensure constant sensitivity
- Advanced features for audio visual devices
- Rejection of transient signals
- Flashing LED option
- Four bytes of non-volatile memory for user data
- Alarm flag for fast alarm reporting
- Conventional alarm facility during control panel processor fault
- 360° LED visibility in alarm
- Compatible with XP95 systems
- Insect resistant



Find out more about the Discovery range at www.apollo-fire.co.uk/discovery

For all your fire detection products www.apollo-fire.co.uk +44 (0) 2392 492 412



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Discovery Optical Smoke Detector



The Discovery Optical Smoke Detector works using the light scatter principle and is ideal for applications where slow-burning or smouldering fires are likely.

- Responds well to slow-burning, smouldering fires
- Well suited for bedrooms and escape routes
- Unaffected by wind or atmospheric pressure
- Five response modes
- Remote test feature

58000-600
Discovery Optical Smoke Detector

Discovery Multisensor Detector



The Discovery Multisensor Detector comprises optical smoke and thermistor temperature sensors which give both a combined signal as well as a separate heat signal for Improved false alarm management.

- Ideal for a wide range of applications
- Enhanced false alarm management
- Recommended, in specific modes, for hotel bedrooms and hospital wards
- Unaffected by wind or atmospheric pressure
- Well suited for sensitive environments
- Five response modes
- Heat only and optical only options
- Remote test feature

58000-700
Discovery Multisensor Detector

Discovery Ionisation Smoke Detector



The Discovery Ionisation Smoke Detector uses a low activity radioactive foil to detect fires by irradiating the air in the smoke chambers and causing a current flow. If smoke enters the chamber, the current flow is reduced leading to an alarm.

- Responds well to fast-burning, flaming fires
- Designed to operate in a variety of environments
- Resilient to dust
- Five response modes
- Remote test feature

58000-500
Discovery Ionisation Smoke Detector

Discovery Carbon Monoxide Detector



The Discovery Carbon Monoxide Detector is good at detecting deep-seated fires. Please note that CO detectors do not detect smoke particles or heat and are not universal replacements for smoke detectors.

- Enhanced detection capability
- Ideal for smouldering fires
- Less susceptible to false alarms caused by steam than smoke detectors
- Five response modes
- Remote test feature

58000-300
Discovery Carbon Monoxide Detector

Discovery CO/Heat Multisensor Detector



The Discovery CO/Heat Multisensor Detector is good at detecting deep-seated smouldering fires which give off a lot of CO as well as flaming fires. They are ideal for use in hotel bedrooms where steam may be present, dusty environments or even where simulated smoke may be present.

- Responds to smouldering and flaming fires
- Less susceptible to false alarms caused by steam and dust
- Five response modes
- Remote test feature

58000-305
Discovery CO/Heat Multisensor Detector

Discovery Heat Detector



The Discovery Heat Detector uses a single thermistor to sense the air temperature around the detector.

- Ideal in environments that are dirty or smoky under normal conditions
- Well suited for warehouses, loading bays and car parks
- Unaffected by wind or atmospheric pressure
- Five response modes
- Remote test feature

58000-400 Discovery Heat Detector

Find out how Discovery Carbon Monoxide detectors were used in West Sussex County Hall in our case study on page 102.



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Intelligent Mounting Base



All detectors in the Discovery range fit the Intelligent Mounting Base. The mounting base is a low insertion force base with stainless steel contacts for the detector terminals. XPERT cards are supplied with all bases.

- XPERT addressing
- One way fit of detector
- Locking feature to prevent unauthorised detector removal

45681-210 Intelligent Mounting Base

Intelligent Deep Base



The Intelligent Deep Base is a mounting base for Discovery products which has an increased depth allowing for cables to be inserted from the side.

- Enables surface wiring
- XPERT addressing
- Locking feature to prevent unauthorised detector removal

45681-209 Intelligent Deep Base

Isolating Base



The Isolating Base senses and detects short-circuit faults on Discovery loops and spurs.

- Up to 20 detectors or their equivalent load, may be installed between Isolating bases
- High brightness LED
- Detects wiring short-circuits
- Minimises disruption from short circuits

45681-204 Isolating Base

Isolator



The Isolator is placed at intervals on the loop and ensures that, in the case of a short-circuit, only the section between the isolators will be affected. When the short-circuit is removed, the Isolators automatically restore power and data to the isolated section.

- Detects wiring short-circuits
- Minimises disruption from short-circuits
- Automatic de-isolation on short-circuit removal
- Up to 20 detectors or their equivalent load, may be installed between Isolators

55000-720 Isolator

Isolator Base



The Isolator Base is unique and designed to only accept the Isolator 55000-720.

45681-211 Isolator Base

Intelligent Low Power Relay Base



The Intelligent Low Power Relay Base incorporates a low power relay to control field equipment.

- Provides a set of voltage-free contacts controlled by the remote output of a detector
- Draws negligible current
- Capable of switching up to 30V at 1A

45681-242 Intelligent Low Power Relay Base

Intelligent Heater Base



The Intelligent Heater Base is designed to be used in cold climates where environmental conditions could result in either icing or condensation affecting the operation of detectors. It is recommended that the heater base be used in conjunction with either a Waterproof Base Cover or Deckhead Mounting Box to minimise moisture ingress.

- Raises the ambient temperature of a detector chamber by approximately 10°C
- Limits the risks or potential for losses of functionality of detectors installed in cold conditions

45681-219 Intelligent Heater Base
45681-519 Waterproof Base Cover
45681-217 Deckhead Mounting Box

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MiniDisc Remote Indicator



The MiniDisc Remote Indicator is a light-weight, compact red LED indicator for use in fire protection systems.

- Can be used across the entire Apollo range
- Small and discrete
- Anti-tamper screw to protect against unauthorised removal

53832-070 MiniDisc Remote Indicator

Blank XPERT Card



A universal address card supplied with all bases. Using a coding guide, pips are removed to set the address of the inserted detector.

- Simplifies and speeds up installation and commissioning
- Uses patented, proven technology
- Address remains the same, no matter how often detectors are replaced
- Flexibility to create any address

38531-771 Blank XPERT Card

Pre-Addressed XPERT Cards



Pre-Addressed XPERT Cards are supplied with pips already removed.

- Saves time and increases accuracy during commissioning
- Uses patented, proven technology
- Address remains the same, no matter how often detectors are replaced
- Complete set (1-126)

45682-127 Pre-Addressed XPERT Cards

Discovery Open-Area Sounder Beacon



The Discovery Open-Area Sounder Beacon uses Discovery Protocol and is designed for use in indoor and open areas. When a fire system is being commissioned a 'Magnetic Wand' can be used to adjust and test each sounder locally.

- 15 tone pairs
- Individual control of the sounder and beacon
- Volume and tone settings can be selected from the control panel
- Tones can be used for other purposes in addition warning of fire, making the device ideal for use in schools etc.
- Soft start option, ideal for hospitals and nursing homes
- Group and global control for increased response time

Discovery Open-Area Sounder Beacon:
50000-005 Red lens
50000-007 White lens
29650-001 Magnetic Wand

Discovery Sounder Beacon Base



The Discovery Sounder Beacon Base uses the Discovery Protocol and is appropriate for use with all the Discovery detector heads. For ease of commissioning a 'Magnetic Wand' can be used to test and adjust each sounder locally.

- Individual control of the sounder and beacon
- Volume and tone settings can be selected from the control panel
- Tones can be used for other purposes in addition warning of fire, ideal for schools
- Enables soft start option, ideal for hospitals and nursing homes
- Electronic bell tone
- 15 tone pairs

45681-393 Sounder Beacon Base
29650-001 Magnetic Wand

Discovery Open-Area Voice Sounder and Sounder Beacon



NEW
The Discovery Open-Area Voice Alarm Devices comprise a sounder and a sounder beacon that have been designed to provide clear instructional messages through the Discovery protocol. They are loop-powered wall mounted devices.

- Four pre-set message pairs, capable of up to 15 tone message pairs
- Low current and high volume
- Fully synchronised
- Set up and test at point of installation

Discovery Open-Area Voice Sounder:
50000-010 Red
50000-020 White
Discovery Open-Area Voice Sounder Beacon:
50000-030 Red
50000-040 White



Have you seen the latest technology solutions from Apollo, including OpenConnect? See page 8 for more information or visit www.open-connect.co.uk

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Discovery
Manual
Call Point

A seven-segment DIL switch enables addressing of each call point at commissioning stage. When operated, the manual call point interrupts the polling cycle for a fast response. Bi-coloured LEDs indicate isolate and normal conditions.

- Flashing LED option to indicate polling (Discovery systems only)
- 'Plug and Play' terminal connections for fast wiring
- Continuity link for wiring test before commissioning
- Reports an alarm in under 0.2 seconds
- Resettable element

58100-910
Discovery Manual Call Point (surface)

58100-900
Discovery Manual Call Point with Isolator (surface)

Waterproof
Manual
Call Point

The Waterproof Manual Call Point has been designed for use outdoors and in places where moisture can occur. A seven-segment DIL switch enables addressing of each call point at commissioning stage. When operated, the manual call point interrupts the polling cycle for a fast response. Bi-coloured LEDs indicate isolate and normal conditions.

- IP67 rated
- 'Plug and Play' terminal connections for fast wiring
- Continuity link for wiring test before commissioning
- Reports an alarm in under 0.2 seconds
- Resettable element

58100-950
Waterproof Manual Call Point

58100-951
Waterproof Manual Call Point with Isolator

58100-953
Waterproof Manual Call Point with Isolator (yellow) †

Discovery
Manual Call Point
(Non-Standard)

Apollo offers a selection of differently coloured call points suitable for a variety of applications such as initiating a "hazard" rather than a fire alarm. They can be used on XP95 and Discovery systems.

- Flashing LED option to indicate polling (Discovery systems only)
- 'Plug and play' terminal connections for fast wiring
- Continuity link for wiring test before commissioning
- Reports an activation in under 0.2 seconds
- Resettable element

Discovery Manual Call Point (Non-Standard):

58100-926 White (surface) †

58100-927 Yellow (surface) †

58100-928 Blue (surface) †

58100-929 Green (surface) †

58100-930 Orange (surface) †

† Non-standard variants of the Manual Call Point are not EN54-11 compliant and therefore cannot be used to signal fire.

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Interfaces

Apollo manufactures a comprehensive range of interfaces for systems which enable fire protection solutions to be engineered simply and effectively without the need for custom-designed equipment. These interfaces are available for use on a Discovery or XP95 system.

For more information
on each interface

see page 17

1 Standard Interfaces

Input/Output Unit

55000-847 Input/Output Unit

Three Channel Input/Output Unit

55000-588
Three Channel Input/Output Unit*

Output Unit

55000-849 Output Unit

Sounder Control Unit

55000-852 Sounder Control Unit

Switch Monitor

55000-843 Switch Monitor

Switch Monitor Plus

55000-841 Switch Monitor Plus

Zone Monitor

55000-845 Zone Monitor

Mains Switching Input/Output Unit

55000-875
Mains Switching Input/Output Unit

Locally Powered Zone Monitor

55000-864
Locally Powered Zone Monitor

2 DIN-Rail Interfaces

DIN-Rail Input/Output Unit

55000-803 DIN-Rail Input/Output Unit

DIN-Rail Output Unit

55000-804 DIN-Rail Output Unit

DIN-Rail Switch Monitor

55000-822 DIN-Rail Switch Monitor

DIN-Rail Mains Input/Output Unit

55000-797
DIN-Rail Mains Input/Output Unit

DIN-Rail Interface Enclosures

29600-239
DIN-Rail Interface Enclosure (4 units)

29600-240
DIN-Rail Interface Enclosure (10 units)

DIN-Rail Sounder Controller
(5 Amperes)

55000-182
DIN-Rail Sounder Controller (5 Amperes)

DIN-Rail Switch Monitor Plus

55000-821
DIN-Rail Switch Monitor Plus

DIN-Rail Zone Monitor
with Isolator

55000-812
DIN-Rail Zone Monitor with Isolator

DIN-Rail Dual Isolator

55000-802 DIN-Rail Dual Isolator

3 Mini Switch Monitor

55000-760 Mini Switch Monitor



* Standard Enclosure specific to 3 Channel Input/Output Unit.

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