

Discovery



Analogue addressable devices
from Channel Safety Systems



Discovery

Analogue addressable devices

Discovery is a range of high-specification, intelligent fire detectors that are developed to meet the requirements of sophisticated systems; whilst providing engineers with an additional dimension in fire protection capability. Discovery gives you total reassurance in installations where adaptability to changing conditions and protection against unwanted alarms are paramount.



Image shows from left to right F/CHBG/IS/DISC & F/CHSM/M/DISC

Features

- Rejection of transient signals
- Flashing LED option
- Five response modes for ease of optimisation to changing environments
- Drift compensation for constant sensitivity
- 360° visibility in alarm
- Compatible when used on a system with XP95 devices



GET INTERACTIVE

Scan the code for more information on the Discovery range and related Fire Alarm Panels

www.channelsafety.co.uk/discovery/

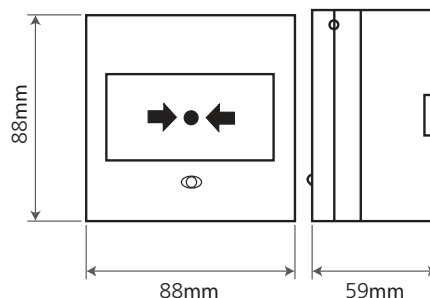


Call Point

The Discovery Manual Call Point has been designed to operate on a loop of intelligent fire detection devices and when activated interrupts the polling cycle for a rapid response.

Features

- Resettable element
- Easy access, front reset mechanism
- Front facing addressing
- Easy fit connector system for installation
- Ergonomic reset key and keyring hole
- Flashing LED Option
- EN54-11 Approved
- 180° viewable LED
- Continuity link for cable insulation testing

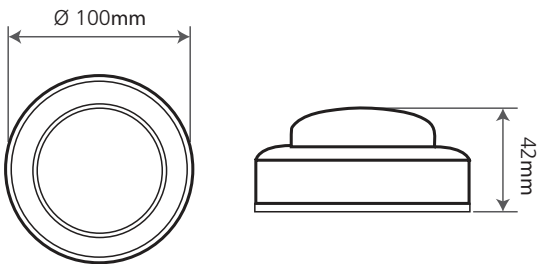


SPECIFICATIONS

Supply Voltage	17 - 28V DC
Communications Protocol	5 - 9V peak to peak
Max. Current Consumption at 24V Quiescent	100µA
Power - Up Surge, 1 Second Typical	1mA
Alarm LED on	4mA
Operating Temperature	-40°C to 70°C
Humidity (no condensation)	0 - 95%
IP Rating	IP45
Weight	180g

PRODUCT CODE	DESCRIPTION
F/CHBG/IS/DISC	Discovery surface break glass complete with isolator

Optical Smoke Detector



The Discovery Optical Smoke Detector works using the light scatter principle and is suitable for slow burning or smouldering fires, and should be positioned where these are most likely to occur. The Discovery optical smoke detector can be set to a sensitivity mode best suited for the application.

Features

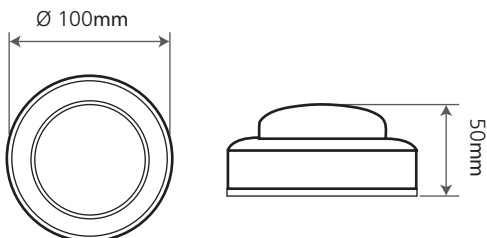
- Responds well to slow-burning smouldering fires
- Well suited for bedrooms and escape routes
- Unaffected by wind or atmospheric pressure
- Five response modes
- Remote test feature
- Dual LED for 360° indication

SPECIFICATIONS

Sensor	Silicon PIN photo-diode
Sampling Frequency	1 per second
Operating Voltage	17–28V DC
Communication Protocol	Apollo Discovery 5–9V peak to peak
Quiescent Current	300µA
Power-up surge Current	1mA
Temperature Range	–40°C to +70°C
Humidity	0 to 95%
IP Rating	IP44
Weight	105g

PRODUCT CODE	DESCRIPTION
F/CHSM/P/DISC	Discovery optical detector less base

Heat Detector



The Discovery heat detector, distinguishable by the low airflow resistant case, uses a single thermistor to sense the air temperature around the detector.

Features

- Ideal in environments that are dirty or smoky under normal conditions
- Well suited for warehouses, loading bays and underground car parks
- Unaffected by wind or atmospheric pressure
- Five response modes
- Remote test feature
- Dual LED for 360° indication

SPECIFICATIONS

Operating Voltage	17–28V DC
Communication Protocol	Apollo Discovery 5–9V peak to peak
Quiescent Current	400µA
Power-up surge Current	1mA
Temperature Range	–40°C to +70°C
Humidity	0 to 95%
IP Rating	IP44
Weight	105g

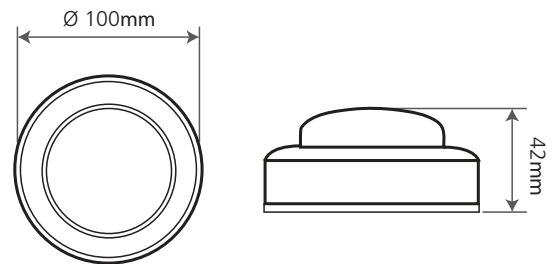
PRODUCT CODE	DESCRIPTION
F/CHHM/DISC	Discovery heat monitor less base

Ionisation 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. It is a good general purpose detector that responds well to fast burning, flaming fires.

Features

- Designed to operate in a variety of environments
- Resilient to dust
- Five response modes
- Remote test feature
- Dual LED for 360° indication



SPECIFICATIONS

Operating Voltage	17–28V DC
Communication Protocol	Apollo Discovery 5–9V peak to peak
Quiescent Current	300µA
Power-up surge Current	1mA
Temperature Range	–40°C to +70°C
Humidity	0 to 95%
IP Rating	IP44
Weight	105g

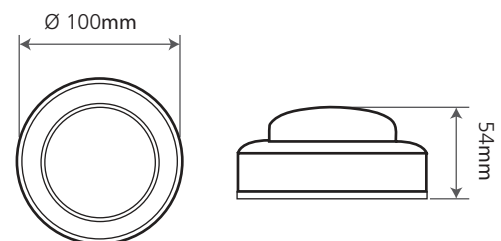
PRODUCT CODE	DESCRIPTION
F/CHSM/A/DISC	Discovery ionisation detector less base

Multi-Sensor Detector

The Discovery Multi-sensor 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.

Features

- Ideal for a wide range of applications but well suited for sensitive environments
- Enhanced false alarm management
- Recommended for hotel bedrooms and hospital wards
- Unaffected by wind or atmospheric pressure
- Five response models
- Heat only and optical only options
- Remote test feature
- Dual LED for 360° indication



SPECIFICATIONS

Operating Voltage	17–28V DC
Communication Protocol	Apollo Discovery 5–9V peak to peak
Quiescent Current	400µA
Power-up surge Current	1mA
Temperature Range	–40°C to +70°C
Humidity	0 to 95%
IP Rating	IP44
Weight	105g

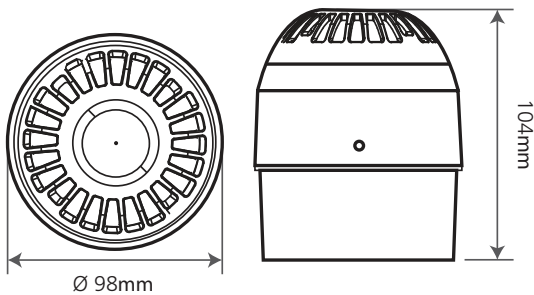
PRODUCT CODE	DESCRIPTION
F/CHSM/M/DISC	Discovery smoke/heat detector less base

Open-Area Sounder Visual Indicator

The Discovery Open-Area Sounder Visual Indicator makes full use of the Discovery protocol and has been designed for use in indoor and open areas. When the fire system is being commissioned a 'Magnetic Wand' can be used to adjust and test each sounder locally.

Features

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



SPECIFICATIONS

Operating Voltage	17 - 28V DC
Protocol Pulses	5- 9V
Current Consumption at 24V Switch-on Surge, <1s	1,2mA
Quiescent Current	450µA
Device Operated at Max Volume	8,2mA
Max Sound Output at 90°	100dB (A)
Operating Temperature	-20°C to +60°C
Humidity	0 to 95%
IP Rating	IP65
Weight	260g

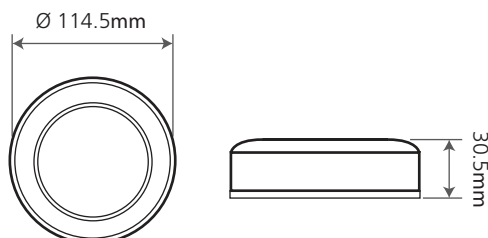
PRODUCT CODE	DESCRIPTION
F/CHWB/BN/DISC/AP/R	Discovery open-area sounder indicator - red lens

Sounder Visual Indicator Base

The Discovery Sounder Visual Indicator Base makes full use of the Discovery protocol. For ease of commissioning a 'Magnetic Wand' can be used to test and adjust each sounder locally.

Features

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



SPECIFICATIONS

Operating Voltage	17 - 28V DC
Protocol Pulses	5- 9V
Current Consumption at 24V Switch-on Surge, <1s	1,2mA
Quiescent Current	450µA
Device Operated at Max Volume	8mA
Max Sound Output at 90°	90 ± 3dB (A)
Operating Temperature	-20°C to +60°C
Humidity	0 to 95%
IP Rating	IP21D
Weight	160g

PRODUCT CODE	DESCRIPTION
F/CHWB/BN/DISC/A	Discovery sounder visual indicator base

Compatible Panels

Firewatch Analogue Addressable Panels



FW1001 panels are available in single or double loop, 16 to 32 zone. Full compatibility with Apollo XP95, Discovery and Hochiki ESP protocol devices.



FW9003 panels are available in 1, 2 or 5 loop. Each panel is capable of supporting Apollo XP95, Discovery, Hochiki ESP and Nittan protocol devices.



FW9004 panels are available in 1, 2 or 4 loop. Supports Apollo XP95, Discovery & Hochiki ESP protocol devices.



FREE DESIGN SERVICE

Channel's Free Design Service is offered on the basis of receipt of order on contract award.

Our Technical Services Division can also offer a complete Design, Supply & Commissioning service:-

Fire Alarm, to BS.5839. Part 1 2013

Emergency Lighting to BS.5266 Part 1 2011

Nurse Call Systems

Disabled Refuge Systems

CCTV and Access Control Systems

As our Project Sales Engineers and Service Engineers are based across the UK, we offer a fast and efficient service for design, site surveys, project management and all commissioning and maintenance services requirements.

All our external team members are fully qualified to 'sign off' designs and Channel maintains all the relevant insurance policies which means the legal onus is on us, not the contractor.

To discuss your requirements in more detail please contact

Channel Technical Services Division on

0845 884 7000

