

Product Catalogue

# Syncoln Accreditation

Syncoln products are certified in a global arena to meet the most exacting standards set by both our customers, and the dynamic and challenging environments in which they are designed to operate.

Syncoln is quality certified by LPCB to ISO9001:2008 and ISO14001:2004 for our Environment Management System. The continuous improvement of the Syncoln programme ensures that our products will always be designed to meet the ever-evolving criteria set by our worldwide approval bodies.





Fire Dete	1. Analogue Addressable	Discovery	7-13
Fire Detectors	2. Conventional	Series 27	14-19
Syst	з. Audio Visual	Sounders & Visual Indicators Audio Visual Bases	20-23
System Components	4. Interfaces	Standard Interfaces DIN-Rail Interfaces	24-29
nts	5. Manual Call Points	Manual Call Points	30-33
panel	6.Control Panels		34-37
Sp.	7.Gas Detector		38-39
Specialist Applications	8.Test equipment & maintenance	Test Kits Equipment	40-42
Suc			





#### PRODUCT LIFETIME GUARANTEE

Our products save lives and protect property around the world from the risk of fire, a huge responsibility and one we take very seriously. Our Product Lifetime Guarantee provides a warranty on our products, which for detectors is 10 years (CO detectors is five years). The guarantee supports our recommended working life of the product and further endorses our commitment to our customers in providing them with reliable, quality fire detection products.

Syncoln acknowledges the importance of life safety and system integrity and recommends the routine replacement of detectors after 10 years (CO detectors, 5 years).

The Product Lifetime Guarantee is subject to terms and conditions. For further information, please refer to the Syncoln General Conditions of Sale which can be found on pages 43–45 or on the Syncoln website. Outside the United Kingdom, this is known as a 10 Year Product Guarantee.

# Additional services

#### **SERVICING & DISPOSAL**

We offer a service facility for Syncoln detectors and ancillary products, such as Interfaces and Manual Call Points. This means that older models of our detectors can be serviced (subject to being within their recommended working life).

#### THE FOLLOWING SERVICES ARE OFFERED:

Detectors can be returned for a full clean and recalibration so they work within the same limits as newly-manufactured detectors

Manual Call Points, Interfaces and Audio Visual products can be returned for cleaning and testing to ensure they are still functioning within manufacturing limits

Equipment which is found to be beyond economical repair (BER) or is older than the recommended working life can be disposed of

For more information on the services and disposal of products and their associated charges, contact info@syncoln.com

# Analogue Addressable

Syncoln offers analogue addressable systems with Discovery protocol.

Syncoln has been using an open, digital communication protocol and has ensured backward compatibility when developing new products. An open protocol allows freedom of choice for the fire system specifier, installer and end user. A system using a digital communication protocol has a high immunity from corruption and is therefore often preferred in a system which is life-critical.

#### **CHOICE OF DETECTOR TYPE**

The choice of detector from the analogue addressable range follows the well-established principles of system design. That is, the optimum detector type will depend on the type of fire risk and fire load, and the type of environment in which the detector is sited.

For general use, smoke detectors are recommended since these give the highest level of protection. Smoke detectors from the analogue addressable range may be optical or multi-sensor types. The most widely used single-sensor detector is the optical smoke detector. For the greatest versatility in designing fire detection systems, the optical/heat multi-sensor is the detector of choice.





There are two types of analogue addressable systems – those with 'distributed intelligence' and those with 'centralised intelligence'.

In systems with 'distributed intelligence', the detectors incorporate processors which can determine whether alarm levels of smoke or heat exist and can initiate action accordingly.

Detectors in systems with 'centralised intelligence' monitor the air around them for smoke or heat and transmit the data to the fire control panel on interrogation. The processor in the panel compares the values with stored values and determines whether a pre-alarm or alarm should be signalled.

The advantages of 'distributed intelligence' are local adaptation to the environment and reduction of traffic on the supply and data wires.





Discovery is a range of high specification, analogue addressable fire detectors. Discovery detectors offer reliable detection and false alarm management through a combination of EN 54 approved operating modes and sophisticated algorithms. Discovery has a 'distributed intelligence' system, where decisions are made in the detector head as well as the fire 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 approved response modes which can be selected from the fire 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 EN 54 in all response modes. Mode One will give a higher sensitivity to fire than Mode Five.

Designed for 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.





# Analogue Addressable Discovery Optical Smoke Detector



The Discovery Optical Smoke Detector operates using the light scatter principle and is ideal for applications where slow-burning or smouldering fires pose a potential risk.

Responds well to slow-burning, smouldering fires

Well-suited to bedrooms and escape routes

Unaffected by wind or atmospheric pressure

Five response modes approved to EN 54

Remote test feature

Comprehensively tested to the EN54 standard

5000-200

Discovery Optical Smoke Detector

# Analogue Addressable Discovery Optical/Heat Multi-sensor 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 to sensitive environments

Five response modes approved to EN 54

Heat only and optical only options

Remote test feature

Comprehensively tested to the EN54 standard

#### 5000-400

Discovery Multisensor Detector

# Analogue Addressable 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 to warehouses, loading bays and car parks

Unaffected by wind or atmospheric pressure

Five response modes approved to EN 54

Remote test feature

Comprehensively tested to the EN54 standard

#### 5000-300

Discovery Heat Detector



# 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 7 Cards are supplied with all Mounting Bases.

XPERT 7 Card addressing

One-way fit of detector

Locking feature to prevent unauthorised detector removal

5000-100

Intelligent Mounting 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

5000-500

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 deisolation on short-circuit removal

Up to 20 detectors or their equivalent load, may be installed between isolators

5000-600

Isolator

## Isolator Base



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

5000-601

solator Base



# MiniDisc Remote Indicator



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

Can be used across the entire Syncoln range

Small and discreet

Anti-tamper screw to protect against unauthorised removal

5000-602

MiniDisc Remote Indicator

## XPERT 7 Card



XPERT 7 Cards are supplied with all XPERT 7 Mounting 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

# Conventional

In conventional systems, detectors are wired as a circuit or zone. They signal fire conditions to a fire control panel by changing from a high to low impedance. The panel detects this impedance change by current monitoring and identifies the zone.

# SERIES 27 CONVENTIONAL DETECTORS ARE RECOMMENDED FOR A NUMBER OF APPLICATIONS INCLUDING:

Clean-room and EDP suites

Hotel rooms, studio apartments and small flats

Offices, long corridors, hospital wards and light industrial factories

Warehouses and bars

Loading bays and car parks

Kitchens and laundry rooms

Boiler rooms







#### **HOTEL ROOMS**

For hotel rooms, studio apartments and small flats (up to 50 sq m) multisensor Orbis detectors and Series 27 optical detectors are recommended.

#### KITCHENS

A range of Orbis detectors including heat A1S, A2S, BS and CS as well as Series 27 CS detectors are recommended for kitchens and laundry rooms.

#### CAR PARKS

Orbis multisensor detectors, Series 27 heat A1R and BR detectors are recommended for car parks (enclosed and ventilated) and loading bays.





Series 27 incorporates well-proven sensing technologies together with advances in materials and electronics.

Having a wide-operating voltage of 9-33 V, Series 27 detectors can be integrated into security systems when used with a relay base. The range consists of optical smoke detectors, four grades of heat detector and a range of bases.

• FLASHING LED





**SERIES 27 RANGE** 

#### **KEY FEATURES OF SERIES 27 INCLUDE:**

Wide-operating voltage of 9-33 V DC

Wide-operating and storage temperature of -20°C to +60°C

Can be used on security systems

Proven detection performance

Note: For approvals of individual detectors refer to the appropriate data sheet.



## Optical Smoke Detector



The Series 27 Optical Smoke Detector incorporates a pulsing LED located within the housing of the detector. The external detector moulding is identical to that of the ionisation detector, and has an indicator LED which is clear in quiescent state but produces a red light in alarm.

Responds well to slow-burning, smouldering fires

Well-suited to bedrooms and escape routes

Unaffected by wind or atmospheric pressure

Flashing LED and magnet operated test switch option

#### 2000-200

Series 27 Optical Smoke Detector with flashing LED

## Heat Detector



The Series 27 Heat Detector monitors temperature by using a dual thermistor network which provides a voltage output proportional to the external air temperature.

Can be used for applications where smoke detectors are unsuitable

Ideal environments that are dirty or smoky under normal conditions

Wide-operating voltage

2000-300 A1R with flashing LED

2000-301 BR with flashing LED

 $2000\mbox{-}302$  CS with flashing LED

## Standard Base



The Series 27 Standard Base has been designed to enable detectors to be fitted without the need of force – particularly useful when fitting to suspended ceilings. All Series 27 bases have a one-way only fit. Detectors can be locked into place by a grub screw using a 1.5mm hexagonal screwdriver.

Detector locking mechanism

One-way fit

Easy to wire

Contains an earth connector

Contains no electrical parts

Terminal for remote indicator

2000-100

Series 27 Standard Base



# MiniDisc Remote Indicator



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

Can be used across the entire  ${\bf Syncoln}$  range

Small and discrete

Anti-tamper screw to protect against unauthorised removal

5000-602

MiniDisc Remote Indicator

# Audio Visual

Syncoln offers a wide range of Audio Visual (AV) signalling devices – sounders, visual indicators, sounder visual indicators and sounder visual indicator bases – for use in conjunction with our range of conventional and intelligent







# Intelligent Open-Area Sounder



The Intelligent Open-Area Sounder has been designed for use in open areas and can be connected to an XP95/Discovery system.

#### Self-test fault monitoring

Choice of tones on standard device: Syncoln, Slow Whoop and

Two volume settings 92dB(A) and 100dB(A)

Synchronisation of tones

Individual and group addressing

Built-in isolator

Red or white options

Loop-powered

IP65 rated

EN 54-3 Certified

5000-902

Intelligent Open-Area Sounder (red)

# Intelligent Open-Area Sounder Visual Indicator



The Intelligent Open-Area Sounder Visual Indicator is designed for use in open areas and can be connected to an XP95/Discovery system.

#### Self-test monitoring

Choice of tones on standard device: Syncoln, Slow Whoop and

Two volume settings 92dB(A) and 100dB(A)

Individual and group addressing

Synchronisation of tones and flashes

Built-in isolator

Loop-powered

IP65 rated

Red and clear lens options

Flash rate 1Hz (red)

EN 54-3 and EN 54-17 Certified

#### 5000-903

Intelligent Open-Area Sounder Visual Indicator (red)

# Loop-Powered Visual Indicator



The Loop-Powered Visual Indicator is a local-area visual indicator designed for indoor use. The visual indicator has been developed as a supplement to sounders for use in situations where there is a risk that sounders will not be heard.

For use on an XP95/Discovery systems

Self-test indicator

High intensity LEDs

Automatic LED check

Lockable

Wide angle of visibility

Enables compliance with the Equality Act

Synchronised flash

Flash rate 1Hz

P23D rated

5000-905

Loop-Powered Visual Indicator (red)

# Integrated Base Sounder



The Integrated Base Sounder comprises a base sounder with integral mounting base, and is for use with Discovery or XP95 detectors. It is designed for indoor use.

For use on an XP95/Discovery systems

Two tones

Two volume ranges 55-75dB(A) and 75-91dB(A)

Individual and group addressing

Unique acoustic self-test

Built-in isolato

IP21D rated

EN 54-17 Certified

#### 5000-900

Integrated Base Sounder

# Conventional Sounder Visual Indicator



The Sonos Sounder Visual Indicator is a conventional sounder visual indicator which makes use of the TimeSaver® base, resulting in a faster and more reliable installation.

For use with conventional systems

A choice of 32 tones including all the major international standards

Simple 'First Fix' installation

#### 1000-100

Conventional Sounder Visual Indicator (Shallow Base)

#### 1000-101

Conventional Sounder Visual Indicator (Deep Base)

## Conventional Wall Mounted Pulse Beacon



Conventional wall mounted Visual Alarm Devices are available with a white and red flash colour. The white flash variant has an EN 54-23 approved coverage pattern of W-3.1-11.3, whereas the red flash variant has a coverage pattern of W-2.4-7.5.

EN 54-23 approved

Flash Colour: Red or White

Synchronised Flash

IP65 (deep base)

#### 1000-300

Conventional Wall Mounted Pulse Beacon (Shallow Base)

#### 1000-301

Conventional Wall Mounted Pulse Beacon (Deep Base)

## Conventional Sounder



The Sonos Sounder is a conventional sounder which makes use of the TimeSaver® base resulting in a faster and more reliable installation.

For use with conventional systems

A choice of 32 tones including all the major international standards

Simple 'First Fix' installation

Volume control - typical 8dB

#### 000-200

Conventional Sounder (Shallow Base)

#### 1000-201

Conventional Sounder (Deep Base)

# Interfaces

Syncoln 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. There are a variety of interfaces available to suit a number of individual applications.

Interfaces Range		
	Standard	DIN-Rail
	Enclosure	Enclosure
Switch Monitor	•	•
Zone Monitor	•	
Sounder Control Unit	•	
Input/Output Unit	•	•
Main Switching Input/Output Unit	•	
Twin Input/Output Unit	•	
Twin Switch Monitor	•	







# Intelligent Standard Interfaces

Intelligent Standard interfaces are fitted with bi-directional short-circuit isolators so that they are unaffected by a single short-circuit on either loop input or output.

#### **KEY FEATURES OF SYNCOLN INTERFACES:**

Easy to install

Well-protected

Modular design







# Intelligent Input/Output Unit



The Intelligent Input/Output Unit provides supervision of one or more normally open contacts connected to a single pair of cables and a set of changeover relay output contacts.

Improved design for ease of wiring meaning faster installation

Controllable isolator\*

Address range 1 -254\*

Nine-pre-configured modes, including compatibility mode from XP95/ Discovery to CoreProtocol systems\*

Failsafe mode (meets the requirements of BS7273-4)

Configurable input styles\*

Earth fault monitoring\*

New SH1200-107SYN

Intelligent Twin Input/Output Unit

Old 5000-803

Intelligent Twin Input/Output Unit

\*Note: CoreProtocol enabled systems only – please check with your system partner for availability

# Intelligent Mains Switching Input/Output Unit



The Mains Switching Input/Output Unit provides a voltage-free, single pole changeover relay output and a monitored switch input.

Improved design for ease of wiring meaning faster installation

Controllable isolator\*

Address range 1 -254\*

Nine-pre-configured modes, including compatibility mode from XP95/ Discovery to CoreProtocol systems\*

Two input channels

Failsafe mode (meets the requirements of BS7273-4)

Configurable input styles\*

Earth fault monitoring\*

#### SH1200-109SYN

Intelligent Mains Switching Input/Output

\*Note: CoreProtocol enabled systems only – please check with your system partner for availability

# Intelligent Twin Input/ Output Unit



The Intelligent Twin Input/Output Unit provides the function of two Input/Output Units within one enclosure. The two units are electrically independent of each other. There is a DIL switch on each unit to set the address.

Both input/output units in the enclosure provide supervision of one or more normally open volt free contacts connected to a single pair of cables and a set of changeover relay output contacts.

Improved design for ease of wiring meaning faster installation

Contains controllable isolator\*

Address range 1 -254\*

Nine pre-configured modes, including compatibility mode from XP95/
Discovery to CoreProtocol systems\*

Failsafe mode (meets BS 7273-4 requirements)

Configurable input styles\*

Earth fault monitoring\*

SH1200-108

Intelligent Twin Input/Output Unit

\*Note: CoreProtocol enabled systems only – please check with your system partner for availability

## Intelligent Twin Switch Monitor



The Intelligent Twin Switch Monitor provides the function of two Switch Monitor units within one enclosure. The two units are electrically independent of each other. There is a DIL-switch on each unit to set the address.

Both Switch Monitor units in the enclosure are designed to monitor the state of one or more single pole, voltfree contacts connected on a pair of cables to report the status. It has a selectable status reporting delay making it suitable for monitoring flow switches.

Improved design for ease of wiring meaning faster installation

Controllable isolator\*

Address range 1 -254\*

Nine-pre-configured modes, including compatibility mode from XP95/Discovery to CoreProtocol systems\*

Priority mode for first response

Configurable input styles\*

Earth fault monitoring\*

## SH1200-111SYN

Intelligent Twin Switch Monitor

\*Note: CoreProtocol enabled systems only – please check with your system partner for availability

## Intelligent Switch Monitor



The Switch Monitor is designed to monitor the state of one or more single pole, volt-free contacts connected on a single pair of cables and to report their status' to Syncoln-compatible analogue control equipment.

Improved design for ease of wiring meaning faster installation Controllable isolator\*

Address range 1 -254\*

Nine-pre-configured modes, including compatibility mode from XP95/Discovery to CoreProtocol systems\*

Priority mode for fast response

Configurable input styles

Earth fault monitoring

New SH1200-110SYN Intelligent Switch Monitor

Old 5000-801 Intelligent Switch Monitor

\*Note: CoreProtocol enabled systems only – please check with your system partner for availability

## Sounder Control Unit



The Sounder Control Unit is used to control the operation of a zone of conventional sounders and report their status' to the control panel.

Allows sounders to be operated continuously or be pulsed, 1 second on, 1 second off

May be synchronised with loop sounders

Built-in isolator

5000-806

Sounder ControlUnit

## Zone Monitor



The Zone Monitor powers and controls a zone of up to 20 Syncoln Series 27 or Orbis fire detectors from a Discovery or XP95 loop.

Loop-powered

LED alarm indication

Built-in isolator

5000-802 Zone Monitor

# Intelligent DIN-Rail Interfaces

DIN-Rail interfaces feature enclosures that clip to a standard 35mm DIN-Rail or are screwed to the base of a larger enclosure. They enable fire system designers to create multipurpose interfaces for individual sites.









# Intelligent DIN-Rail Input/Output Unit



The Intelligent DIN-Rail Input/Output Unit provides supervision of one or more normally open volt-free contacts connected to a single pair of cables and a set of changeover relay output contacts.

Improved design for ease of wiring meaning faster installation

Controllable isolator\*

Address range 1 -254\*

Nine-pre-configured modes, including compatibility mode from XP95/ Discovery to CoreProtocol systems\*

Failsafe mode (meets the requirements of BS7273-4)

Configurable input styles\*

Earth fault monitoring\*

#### SH1200-113SYN

Intelligent DIN-Rail Input/Output Unit

\*CoreProtocol enabled systems only – please check with your system partner for availability

## Intelligent DIN-Rail Switch Monitor



The Intelligent DIN-Rail Switch Monitor is designed to monitor the state of one or more single pole, volt-free contacts connected on a single pair of cables to report the status. It has a selectable status reporting delay making it suitable for monitoring flow switches.

Faster installation due to improved design for ease of wiring

In-built controllable isolator\*

Address range 1 – 254\*

Five pre-configured modes, including compatibility mode from XP95/ Discovery to CoreProtocol systems\*

Priority mode for fast response\*

Configurable input styles\*

Earth fault monitoring

#### SA1200-112SYN

Intelligent DIN-Rail Switch Monitor

# Syncoln Manufactured Manual Call Points

Syncoln's Manufactured Manual Call Points comply with European Standard EN 54-11 and have been designed to make installation and testing quick, easy and cost effective

Our extensive collection of Manual Call Points complements the variety of products available in our product ranges. As standard, every Manual Call Point is available with a resettable element, front LED indicator and a backbox for surface mounting.

#### 'PLUG AND PLAY'

'Plug and Play' terminal connections allow for fast, easy and cost effective installation in a variety of environments where time and access may be critical.

#### **SPECIALIST ENVIRONMENTS**

Details such as a selection of differently coloured call points, flashing LED option and a resettable element for fast testing and resetting of the device mean that Syncoln's Manual Call Points are suited to a number of specialist environments.









# KEY FEATURES OF APOLLO'S MANUAL CALL POINTS INCLUDE:

Flashing LED option to indicate polling (Discovery systems only)

Easy access, front reset mechanism

Front-facing addressing

E-Z Fit connectors

Ergonomically-designed key-shape

EN 54-11 approved (red only)

Continuity link

Highly visible alarm

Backward compatibility and retro-fit

Flush-mount and back-box installs

Reports an activation in under 0.2 seconds

Resettable element

Anti-tamper front face

Captive screws on all waterproof versions



# Intelligent Manual Call Point



The Syncoln range of Intelligent Manual Call Points has been designed to comply with European standard EN 54-11. In addition, the call points include a number of features designed to make installation and testing quick, easy and cost effective. They can be used on XP95, Discovery and CoreProtocol® systems.

#### Resettable operating element

Easy access, front reset mechanism

E-Z fit connector system for installation

EN 54-11 & EN 54-17 Certified

Front-facing LED

Continuity link for cable insulation testing

Suitable for Semi-flush or surface mounting

5000-700

Intelligent Manual Call Point

# Conventional Manual Call Point



Syncoln Resettable Manual Call Point 2000-400's simple 'RESET' mechanism consists of tough ABS plastic operating elements that simulates break glass activation. It is instantly reusable without environmental hazard caused by fragments of broken glass—making it very suitable for used in food processing plants and places that are prone to false activations such as schools, shopping malls and other high traffic areas.

Size (H x W x D)	88 X 88 X 53 mm (Surface Mount) 88 X 88 X 20 mm (Flush Mount)
Current Ratings	12/24V DC 10A 48V DC 3A 250V AC 10A
Net/Gross Weight	160/184g
Connections	TERMINAL- MAX 2.5mm2 CABLE

#### 2000-400

Conventional Manual Call Point(Old)

# Conventional Manual Call Point



1) Manually trigger alarms

- 2) Push plastic button of manual call point down to activate an alarm
- 3) Simplified appearance
- 4) Easy installation and maintenance

Description: Manual Call Point

Model: Manual Call Point flashing LED and transparent cover

Rating voltage:	2W 24V (DC14~28V)
Standby current:	35uA / 0uA
Start current: Operating temperature:	500uA -20℃~ +50℃
Alarm current: Dimensions:	23mA 96.00mm X 96.00mm

Model Description Conventional manual call point with flashy LED and transparent cover.

4000-200

Conventional Manual Call Point

# Extinguishant Release



Constructed to EN54 Part 11. Ideal for use with Automatic Extinguisher

Supplied with transparent hinged cover to prevent accident operation.

Includes a frangible glass element, test key

and yellow back box.

Labelled, Extinguishant Release.

Current Ratings

12/24V DC 10A 48V DC 3A 250V AC 10A

2000-402

Extinguishant Release

# Control Panel

A powerful conventional fire alarm panel offering an array of user and installer-friendly features at a very competitive price, CFP conventional fire panels are LPCB certified to EN54-2/4. 2, 4 and 8 zone versions are available, each featuring four conventional sounder circuits, class change and alert inputs, on-board fire and fault relays and combined keypad/keyswitch entry. Panels are compatible with a wide range of smoke and heat detectors, there are numerous provided engineering functions such as selectable zone delays, coincidence and non-latching zone facilities and also Comprehensive test and fault finding facilities are equipped.



# Conventional Fire Alarm Control Panel



Attractive flush or surface mountable plastic lid and enclosure – no bezel required

Installer-friendly design accommodates easy fir first fix and straightforward maintenance

'Class change' and 'Alert' inputs

Two open-collector outputs (Remote and Reset)

Two on-board relays (Fire and Fault)

Wide range of engineering functions including zone test, coincidence\*, zone delay and non-latching zones\*

Integral 1.5A EN54-4/A2 compliant switch mode PSU

Four conventional sounder circuits

Intuitive user-friendly interface with colour-coded buttons and combined keypad/keyswitch entry to access level 2

LPCB certified to EN54 Parts 2 and 4

Low 25mA quiescent current

End of line units included (one per zone)

Ancillary system expansion connections provided for up to eight two-wire repeaters (one CFP761 network driver card required per system) and optional CFP relay boards

Space for two x 12V 3.3Ah VRLA batteries

CFP702-4/SYN CFP up to 2 zone Conventional Fire Alarm Panel

CFP704-4/SYN CFP up to 4 zone Conventional Fire Alarm Panel

CFP708-4/SYN CFP up to 8 zone Conventional Fire Alarm Panel

## Modular Addressable Fire Alarm Control Panel: Solution N1



Modular, intelligent and ultra-modern Fire Control Panel for analogue addressable detectors and conventional detectors.

Prepared for 2 to 6 loops and / or 8 to 24 conventional zones.

Supports Hochiki ESP and CDX detectors as well as Apollo Orbis, XP95 and Discovery

Power supply 24V / 4,2A, main board with 32 bit CPU and Touch Control Panel with graphics LCD module 240 x pixel 64

Fire brigade key depot, fire brigade control panel interface and F.B. activation as standard equipment as well as a redundant RS-485 interface (Fire (brigade display tableau

8 programmable push buttons

max. of 512 zones can be organized

Event log for 10.000 messages

USB interface for PC configuration

Up- and Download of operating software

One hundred percent redundant RS-485 interface

3 separate RS-232 interfaces

Interface for transmission modem "I Module" (option). Transmission can be by analogue modem, ISDN or Webserver

4 programmable relays

2 conventional zones for special applications like monitoring of extinguishing systems

16 programmable digital O/C outputs

8 programmable monitored inputs

3 opto coupled outputs

Earth fault detection

Slot for 2 x network card \_redundant network possible

4 fused power supply outputs 24V / 1A

 ${\bf B01050\text{-}00}$  Fire Control Panel "Solution F1-6" , Standard configuration for 2-6 loops

B01060-00 Fire Control Panel "Solution F1-18", Standard configuration for 2-18 loops

#### Addressable Fire Alarm Control Panel: Teledata One



Fire detection by means of cabled or wireless devices

Multiprotocol control panel, with its minimal set-up

Open or closed loops of 240 compatible devices

Expansion of basic configuration by adding 2 loops each time to control up to 2160 devices, both optical and thermal, from a single control panel

In complex applications, a ring network installation up to 32 control panels

Combining by means of logical expressions in order to trigger events for the panel to which they belong or for other panels of the ring network

3 different access levels according to the user: installer, safety responsible and final user

Immediate, auto- programming and auto-addressing mechanisms for configuration procedure

Certified UNI EN 54-2 e 54-4 for fire detection and report

Optional external peripheral, such as keyboards and LED panels by installation of dedicated cards

Programming the control panel locally or from remote, by means of the dedicated online platform OneCloud, data can be exported and imported with any USB key

Exporting and importing data with any USB key

Monitoring by means of WINWATCH32 supervision system

Diagnostic of detectors and devices directly from the control panel

Customizing the control panel for any installation condition: colour, display background, programmable LED colour, logo displayed and language

Teledata One up to 9 loops Addressable Fire Alarm Panel



# Gas Detectors

## Methane (CH<sub>4</sub>/ 220v AC) Gas Detector



To avoid personal safety injury, instrument damage and potential dangerous accident; do not use the product before reading its manual. 13100 Methane (Natural gas) detector is a wall-mounted household gas alarm designed to detect the concentration of combustible gases using high quality air-sensitive component and manufactured with advanced technology. It provides visual and audible signals

Voltage 17-28 VDC

Quiescent Current VDC	400mA at 24		
Alarm Current	3.5mA at 24 VDC		
Size inc Base	100mm Dia x 50mm H		
Operating Temperatu C (no icing)	re -20°C to +60°		
Relative Humidity condensing)	0 to 95% (non		
IP Rating IP43			
Weight inc Base	160grams		

13100 Methane (CH4 / 220v AC)

#### Carbon Monoxide Alarm Detector Local



This device is used for detecting carbon monoxide rather than used as smoke alarm or any other gas alarms. Besides, this alarm can only detect the carbon monoxide in the air. If you want to protect the whole family effectively, please install the alarm in every room, living room, kitchen and washing room, which will effectively protect your family.

90\*120\*40 mm

Size specification:

1		
Weight	220 g	
Туре	B type (no	on-controlled)
Using vol	tage gy alkaline	DC 4.5V (LR6 1.5V 3 AA
Working 45°C	g condition	temperature from 0°C to
Relative	humidity	0-90% RH
Static we current	-	deviation
Display s	scope of 0% deviation	oncentration 25-550
Power so	ource 3 pcs	1.5V AA battery
Standby	mode	< 90 μΑ
Working	mode	< 1.5 mA
Alarming	g mode	< 75 mA
Alarm de	ecibel	≥ 85 dB/m

1060SYN Carbon Monoxide Alarm Detectors

# Test Equipment & Maintenance

To keep a fire detection system in good working order, it should be subject to a routine maintenance programme in accordance with locally applicable regulations. Over the course of a year, every detector in the system should be functionally tested at least once, using recommended equipment. We offer a range of Syncoln test equipment for both conventional and intelligent systems to enable you to do this.



**C**€

#### Apollo Loop Test Set



The Apollo Loop Test Set is a selfcontained, portable test unit capable of providing a number of useful functions in relation to individual detectors, ancillary devices or complete circuits of analogue addressable devices in the Apollo intelligent ranges, including loop diagnostics and programming individual devices. The Apollo Loop Test Set is designed for indoor use only and should not be subjected to harsh environments. It should not be used in Intrinsically Safe enclosures or other hazardous areas such as those containing dust or explosives. It should not be used in areas where temperatures and/or humidity are high or go through rapid changes. The Apollo Loop Test Set is supplied in a robust carrying case complete with a universal charger, connector cables, XPERT8 Intelligent Mounting Base and carry strap.

7" colour touch screen

Works with XP95, Discovery and CoreProtocol

5-6 hour battery life

Earth fault detection

Loop in and Loop out

Colour coding for different issues

Multi-region AC power adaptor

Field upgradeable for future products

SA7800-870AP0 Loop Test Set

#### Conventional Test Set



The Conventional Test Set is an invaluable tool designed to give a thorough on-site check of conventional fire detectors within the Syncoln Series 27 and Alarm Sense ranges. Each test set is supplied with a link head, mains adapter and carrying case with shoulder strap.

Easy to use

Two button select/accept options

LCD for a clear display

53832-020 Conventional Test Set

#### Flame Sensor Test Unit and Case



The Flame Sensor Test Unit is a tool which is designed to test flame detectors without the need for real flames.

Mimics the characteristics of real flames

29600-226 Flame Sensor Tester

# Equipment

In addition to the main test kits, **Syncoln** provides a range of equipment to assist you in keeping your system in good working order.

Please Contact Syncoln.

<sup>\*</sup> When ordering, please state if you require an EU lead or UK lead.

### Index

Sequential part number list

Part number	Product description	Page	Part number	Product description P	age
1000-100	Conventional Sounder Visual Indicator (Shollow Base)	23	5000-600	Isolator	12
			5000-601	Isolator Base	12
1000-101	Conventional Sounder Visual Indicator (Deep Base)	23	5000-602	MiniDisc Remote Indicator 1	9 13
000-200 Conventional Sounder (Shollow	23	5000-700	Intelligent Manual Call Point	32	
1000 201	Base)		5000-801	Intelligent Switch Monitor (Old)	27
1000-201	Conventional Sounder (Deep Base)	23	5000-802	Zone Monitor	27
1000-300	Conventional Wall Mounted Pulse Beacon (Shollow Base)	23	5000-803	Intelligent Input/Output Unit (Old)	26
			5000-806	Sounder ControlUnit	27
1000-301	Conventional Wall Mounted Pulse Beacon (Deep Base)	23	5000-900	Integrated Base Sounder	22
	ruise beacon (Deep base)		5000-902	Intelligent Open-Area Sounder (red)	21
2000-100	Series 27 Standard Base	18	5000-903	Intelligent Open-Area Sounder Visual Indicator (red)	
2000-200	Series 27 Optical Smoke Detector with flashing LED	18	5000-905	Loop-Powered Visual Indicator (red)	21
	Series 27 Heat Detector A1R	18	SH1200-107SYN	Intelligent Twin Input/Output Unit	26
	with flashing LED		SH1200-108SYN	Intelligent Twin Input/Output Unit	26
2000-301 Series 27 Heat  Detector BR with  flashing LED		18	SH1200-109SYN	Intelligent Mains Switching Input/ Output Unit	26
		SH1200-110SYN	Intelligent Switch Monitor (New)	27	
2000-302	Series 27 Heat Detector CS with flashing LED	18	SH1200-111SYN	Intelligent Twin Switch Monitor	27
2000-400	Conventional Manual Call	32	SH1200-112SYN	H1200-112SYN Intelligent DIN-Rail Switch Monitor	
2000-402	Point  Extinguishant	33	SH1200-113SYN	N Intelligent DIN-Rail Input/Output Unit	
4000-200	Release  Intelligent Manual Call	32	13100	Methane (CH4 / 220v AC) Gas Detector	
	Point		1060SYN	Carbon Monoxide Alarm Detector	37
5000-100	Intelligent Mounting Base	12	CFP702-4/SYN	Local  Conventional Fire Alarm Control	3.
5000-200	Analogue Addressable Discovery Optical Smoke Detector	11		Conventional Fire Alarm Control Panel / CFP 2 Zone	3.
			CFP704-4/SYN	Conventional Fire Alarm Control Panel / CFP 4 Zone	3.5
5000-300	Analogue Addressable Discovery Heat Detector	11	CFP708-4/SYN	Conventional Fire Alarm Control Panel / CFP 8 Zone	3:
5000-400	Analogue Addressable Discovery Optical/Heat Multisensor Detector	11	B01050-00 Addressable Fire Alarm Control Panel / Solution F1-6/ 2-6 loops		3
5000-500	Isolating Base	12	B01060-00	Addressable Fire Alarm Control	3

#### Index - Sequential part number list

Part number	Product description	Page
Teledata One	Addressable Fire Alarm Control Panel / Teledata One / 1-9 loops	37
SA7800-870APO	Apollo Loop Test Set	39
53832-020	Conventional Test Set	39
29600-226	Flame Sensor Test Unit and Case	39

#### General Conditions of Sale

Syncoln Fire Detectors Limited ('the Company') General Conditions of Sale

All contracts of sale by the Company shall be on and subject to these Conditions

"The Customer" is the person, firm or company set out on the reverse of

"The Goods" are the goods of or Services provided by the Company, details of which are set out on the reverse of these Conditions.

- 1.1 INFORMATION ABOUT GOODS Any description, specification or drawing published by the Company in relation to the Goods shall not form part of any contract of sale by the Company.
- 1.2 The Customer in assessing whether the goods are reasonably fit for any particular purpose for which it is purchasing them has not relied on the skill or judgement of the Company
- 2.1 ORDERS No order shall be binding on the Company unless and until expressly accepted by the Company in writing.
- 2.2 No order given may be cancelled or amended unless agreed by the Company in writing.
- 3.1 CONTRACT The Company shall sell and the Customer shall purchase the Goods in accordance with the written order of the Customer accepted by the Company in writing ("the Order") and with these Conditions (together "the Contract").
- 3.2 The Contract represents the entire understanding and supersedes any previous agreement between the Company and the Customer in relation to their subject matter.
- 3.3 The Contract shall not in any circumstances whatsoever be or be deemed to be affected by any previous dealings with the Company and any previous terms and/or conditions issued by the Company are superceded.
- 3.4 Where the Order Acceptance is on terms which vary from those set out in these Conditions, those terms shall prevail, but otherwise these Conditions shall be deemed to be part of the Contract.
- 4.1 PRICE The Price payable for the Goods shall be the price specified in the Order, provided that the Company may at any time before delivery, without notice, increase the Price.
- 4.2 The Price is exclusive of Value Added Tax and the Customer shall pay value Added Tax in respect of the Price at the standard rate prevailing at the date of delivery, together with all other taxes, duties or imports arising in connection with the sale.
- 5.1 PAYMENT Payment of the Price shall be made in pounds sterling at the office of the Company within 30 days from the date of invoice. All payments shall be made in full without deduction in respect of any right of set-off or counter-claim.
- 5.2 If the Customer fails to make due payment under the Contract, the Company shall be entitled to interest at the rate of 4% above the base rate of National Westminster Bank PLC from time to time on all outstanding sums from the date that payment fell due until payment is received.
- 5.3 If the Customer fails to make due payment under the Contract the Company shall be entitled to treat the Contract as repudiated by the Customer.
- 6.1 DELIVERY The Customer shall promptly, on request made at any time by the Company, provide the Company with any information or instruction it may require in order to supply the Goods.
- 6.2 Normal delivery terms are ex-works, despatch from Company works (where applicable) shall be deemed to be delivered to the Customer unless the Contract states otherwise.
- 6.3 Confirmed delivery dates are subject to credit being available at the proposed date of despatch. We will contact you if we are unable to ship because your available credit limit has been exceeded.
- 6.4 Where the Contract provides that delivery is the Company's responsibility:
  - 6.4.1 Any delivery time indicated by the Company is an estimate only and not an essential term of the Contract.
  - 6.4.2 The Company shall deliver the Goods to the agreed delivery address. Delivery shall be deemed to take place when the Goods arrive at the Delivery Address (before unloading).
  - 6.4.3 The Company shall not be liable for any damage to, deterioration in, or partial loss of the Goods in transit if the matter should have been apparent on a reasonable examination on delivery, unless the Company receives written notice thereof from the Customer within 7 days of delivery.
  - 6.4.4 Where the Company has made part delivery of the Goods it will not be taken under any circumstances to have agreed to waive any lien or right of retention on the remainder of the Goods or to give up possession of the whole of the Goods unless expressly so agreed in writing
- 6.5 Where Customer has rejected any of the Goods or notified any damage or deterioration under this Condition 6, the Customer shall, if requested to do so by the Company, return the Goods to the Company within 7 days of such request.

- 7. RISK All risk in the Goods shall pass to the Customer on delivery.
- 8.1 TITLE RETENTION OF TITLE CLAUSES Notwithstanding delivery and the passing of risk, property in and title to the Goods shall remain with the Company and shall not pass to the Customer until the Company has received payment of the full price of (a) all Goods the subject of this contract and (b) all other Goods supplied by the Company to the Customer under any contract whatsoever. Payment of the full price shall include, without limitation, the amount of any interest or other sum payable under the terms of this and all other contracts between the Company and the Customer.
- 8.2 During such time as the property in the Goods remain in the Company the Customer shall store the Goods separately from all other goods and in such a way as clearly to indicate at all times that the said property remains in the Company. The Company's representatives shall be allowed to enter at all reasonable times upon any land or buildings on or in which the Goods may be situated for the purpose of inspecting the way in which the Goods are being kept.
- 8.3 During such time as the property in the Goods remains in the Company, the Customer in possession of the Goods shall hold the Goods as bailee of the Company and shall have power to deal with the Goods in normal course of its business.
- 8.4 If the Customer shall sell any of the Goods it shall hold all the proceeds of sale as trustee for the Company and shall (until payment of such proceeds to the Company) place such proceeds in a separate bank account and hold the same to the order of the Company.
- 9.1 INTELLECTUAL PROPERTY All patent, design, trademark, service mark, copyright and other industrial or intellectual property rights of the Company of whatever nature in respect of the Goods, any of their constituent parts, their packaging or other material supplied with the Goods shall remain the absolute property of and vested in the Company.
- 9.2 The Customer shall indemnify and keep indemnified the Company against any and all loss, damage, claims costs and expenses whatsoever suffered or incurred by the Company in connection with any infringement of any patent, design, trademark, service mark, copyright or other industrial or intellectual property right of any other person in connection with the Company's use or application in relation to the Goods or possession of any material or information or instruction supplied by the Customer in relation to the Goods
- 10.1 WARRANTY The Company warrants that save only as provided in the Conditions the Goods will on delivery correspond with the Company's specification in respect of them current at the time of delivery.
- 10.2 Provided that any defect in the condition or performance of the Goods is notified to the Company by the Customer within 10 years (5 years for carbon monoxide detectors) from the date of manufacture, the Company shall correct such defect or replace the Goods (at the Company's discretion) subject to the Customer consenting or procuring consent for access to the Goods by the Company's employees or sub-contractors to carry out any work under this clause. This undertaking is given and shall be accepted by the Customer in lieu of any other remedy.
- - 10.3.1 The Customer makes any further use of the Goods after giving notice in accordance with clause 10.2:
  - 10.3.2 The defect arises because the Customer failed to follow the Company's oral or written instructions as to the installation, use, maintenance or cleaning of the Goods or (if there are none) good trade practice;
  - 10.3.3 The Customer alters or repairs the Goods without the Company's prior written consent;
  - 10.3.4 The defect arises as a result of fair wear and tear, wilful damage, negligence or abnormal storage or working conditions. For example, the Customer will be responsible for replacing parts that are expected to have a limited working life, such as batteries and rubber seals:
  - 10.3.5 The defect arises as a result of electrical or power supply failure;
- 10.4 Any notice of defect in the condition or performance of the Goods given by the Customer under clause 10.2 shall be made in writing to the Company within a reasonable time of discovery.
- $10.5\,$  The benefit of the warranty under clause 10.2 is not transferable.
- 11.1 LIABILITY The implied terms in the Sale of Goods 1979 are excluded in respect of Customer's dealing otherwise than as consumer, except the implied terms about title.
- 11.2 Save only as provided in these Conditions the Company shall not be liable for any defect in the Goods caused by the manufacture of the Goods in accordance with any material, information or instruction supplied or provided by the Customer. The Customer shall indemnify and keep indemnified the Company against any and all loss, damage, claims, costs and expenses suffered or incurred by the Company in connection with any such defect.
- 11.3 Save only as provided in these Conditions the Company shall not in any event be liable for any special, indirect or consequential loss. damage, costs or claims including but not limited to loss or damage resulting from negligence and loss of profit or revenue.

- 11.4 The Company's aggregate liability to the Customer in respect of any and all causes of action arising at any time in connection with the Goods, the Contract or its other subjectmatter shall not exceed 125% of the price of the defective goods, which sum the Customer agrees is reasonable.
- 11.5 These Conditions shall not exclude, restrict or limit any liability the exclusion, restriction or limitation of which is for the time being prohibited by legislation or any right or remedy in respect of any such liability.
- 11.6 Each of the exclusions, restrictions and limitations of the Company's liability in these Conditions shall be separate and severable from every other such exclusion, restriction or limitation. If a court or competent jurisdiction finds any such exclusions, restrictions and limitations to be unenforcable to any extent the exclusions, restrictions and limitations shall save to such extent remain in full force and effect.
- 12.1 USE AND SAFETY The Goods are designed only for use in accordance with the Company's operating and maintenance instructions in relation to the Goods at the time of delivery. The Company warns that use, repair or adaptation of the Goods in any other manner may result in damage to the Goods or other property and/or affect the safety of the Goods.
- 12.2 No undertaking is given by the Company that goods will not infringe the Letters Patent or any other industrial property rights of any third party and the Customer accepts the goods on this understanding and agrees not to pursue any claim against the Company and to hold the Company harmless in respect of any alleged or actual infringement of such third party rights.
- 12.3 Save only as provided in these Conditions the Company shall not be liable for any loss or damage caused wholly or partly by the fitment to the Goods of any part, accessory or item of equipment which has not been manufactured or approved by the Company or by misuse of the Goods or failure to follow operating or maintenance instructions supplied by the Company. The Customer shall indemnify and keep indemnified the Company against any and all claims whatsoever in respect of any such loss or damage.
- 13.1 GOODS PURCHASED FOR RESALE In respect of any goods which are purchased by the Customer for resale, the Customer shall not apply its own trade or other marks to the Goods or their packaging without the written consent of the Company.
- 13.2 In respect of any Goods which are purchased by the Customer for resale, the Customer shall not alter or interfere with the Goods and shall comply with all applicable legislative and other requirements and standards and the Company's instructions in relation to the storage, handling and safety of the Goods. The Customer shall indemnify and keep indemnified the Company against any and all loss, damage, claims, costs and expenses suffered or incurred by the Company arising from any failure by the Customer to comply with this Condition.
- 14.1 DEFAULT AND TERMINATION If any of the events specified in Condition 14.2 occurs all monies accrued owing under the Contract shall become immediately due and payable and the Company shall be entitled at any time thereafter to terminate the Contract and any other contract between the Company and the Customer by notice and/or to suspend further deliveries of Goods the subject of any or all such contracts.
- 14.2 The events referred to in clause 14.1 are:
  - 14.2.1 the Customer makes default in or commits a breach of the Contract;
  - 14.2.2 any distress or execution is levied upon the Customer's property or assets:
  - 14.2.3 the Customer makes or offers or proposes to make any arrangement or composition with its creditors, any resolution or petition to wind up the Customer is passed or presented, any petition for an administration order in respect of the Customer is presented, a petition for a bankruptcy order is made against the Customer, or a receiver or manager of the Customer's undertaking, property or assets or any part thereof is appointed; or
  - 14.2.4 the Customer fails to provide any letter of credit, bill of exchange or other security requested by the Company.
- 15. FORCE MAJEURE Should the Company be prevented from or hindered or delayed in performing any of its obligations under the Contract by reason of strike, lock-out or trade dispute, acts of national or local government or other authority, Act of God, storm, tempest, fire, flood, explosion, accident, theft, civil disturbance, insurrection or war or by any other cause whatsoever beyond the Company's reasonable control then the Contract may be suspended and/or cancelled (whether or not while suspended) by the Company without notice and the Company shall have no liability in relation to any failure by it caused by such prevention, hindrance or delay, or any such delay, suspension or cancellation.
- 16.1 ANTI-BRIBERY CLAUSE The Customer will:
  - 16.1.1 Comply with all applicable laws, regulations, codes and sanctions relating to anti-bribery and anti-corruption including, but not limited to:
  - 16.1.1.a Local and national laws in the territories in which it operates.
  - 16.1.1.b The UK Bribery Act 2010.
  - 16.1.1.c The US Foreign Corrupt Practices Act 1977.
  - 16.1.1.d The UN Convention Against Corruption.

- 16.1.2 Comply with the Halma p.l.c. Group Code of Conduct relating to bribery and corruption which may be found on the Halma website (www.halma.com).
- 16.1.3 Have in place its own policies and procedures to ensure compliance with this Clause.
- 16.1.4 Ensure that all parties with which it is associated or who are providing goods or services in connection with this Contract (including subcontractors, agents, consultants and other intermediaries) are aware of and comply with the requirements of this Clause.
- 16.1.5 Maintain complete and accurate records of all transactions and payments related to this Contract and, on reasonable request, disclose details of those transactions and payments to the Company.
- 16.1.6 On reasonable request confirm in writing to the Company that it has complied with the requirements of this Clause and, if so requested, allow the Company to verify this compliance by way of an audit of its records.
- 16.1.7 Immediately inform the Company if it suspects or becomes aware of any breach of this Clause by one of its employees, subcontractors, agents, consultants or other intermediaries and provide detailed information about the breach.
- 16.2 The Customer will indemnify, keep indemnified and hold harmless (on a full indemnity basis) the Company against all costs, expenses and losses that the Company incurs or suffers as a result of any breach by the Customer of any of its obligations under this Clause. This indemnity will not apply to any fine levied on the Company as a result of the Company's criminal liability.
- 16.3 If the Customer breaches this Clause the Company shall have the right to terminate this Contract without notice and with immediate effect and will be in no way liable to the Customer in respect of such termination for payment of damages or any other form of compensation.
- 17.1 GENERAL Each of the rights and remedies conferred on the Company by these Conditions shall be in addition and without prejudice to any other right or remedy which the Company may have under these Conditions or otherwise and in particular to any right to payment of all sums due or to become due in respect of the Goods.
- 17.2 No failure by the Company to enforce any of its rights under the Contract, or delay by the Company in enforcing any such rights, whether or not after knowledge of any breach of the Customer. shall constitute waiver thereof.
- 17.3 If any of these Conditions shall be held unenforceable, the remaining Conditions shall not be prejudiced thereby and shall continue in full force and effect.
- 17.4 Save only as provided in these Conditions time shall not be or be deemed to be of the essence of the Contract.
- 17.5 The Contract shall be personal to the Customer and the Customer shall not assign any of its rights under the Contract without the prior written consent of the Company.
- 17.6 Any notice under the Contract shall be given by letter or by telex, facsimile transmission or cable confirmed by letter.
- 17.7 Any reference in these Conditions to any provision of legislation shall be construed as a reference to that provision as amended, re-enacted or extended at the relevant time. Words in the singular include the plural and vice versa. The headings in these Conditions are for convenience only and shall not affect their interpretation.
- 17.8 The Contract shall governed by and construed in all respects in accordance with English law and the Customer shall submit to the jurisdiction of the Supreme Court of justice in England in respect of any matters which may arise in connection with the Contract.
- 17.9 The Contract represents the entire understanding between the parties and supersedes any previous agreement between the Company and the Customer in relation to the subject matter.
- 18.0 The Company is a registered producer under the UK WEEE Regulations WEE/HE0048TZ. Upon the sale of all electrical and electronic equipment (EEE) the Customer agrees to accept the financial obligations for removal, collection, recovery and recycling of the EEE once it becomes waste and any replaced WEEE to the customer.

- 11.4 The Company's aggregate liability to the Customer in respect of any and all causes of action arising at any time in connection with the Goods, the Contract or its other subject-matter shall not exceed 125% of the price of the defective goods, which sum the Customer agrees is reasonable.
- 11.5 These Conditions shall not exclude, restrict or limit any liability the exclusion, restriction or limitation of which is for the time being prohibited by legislation or any right or remedy in respect of any such liability.
- 11.6 Each of the exclusions, restrictions and limitations of the Company's liability in these Conditions shall be separate and severable from every other such exclusion, restriction or limitation. If a court or competent jurisdiction finds any such exclusions, restrictions and limitations to be unenforcable to any extent the exclusions, restrictions and limitations shall save to such extent remain in full force and effect.
- 12.1 USE AND SAFETY The Goods are designed only for use in accordance with the Company's operating and maintenance instructions in relation to the Goods at the time of delivery. The Company warns that use, repair or adaptation of the Goods in any other manner may result in damage to the Goods or other property and/or affect the safety of the Goods.
- 12.2 No undertaking is given by the Company that goods will not infringe the Letters Patent or any other industrial property rights of any third party and the Customer accepts the goods on this understanding and agrees not to pursue any claim against the Company and to hold the Company harmless in respect of any alleged or actual infringement of such third party rights.
- 12.3 Save only as provided in these Conditions the Company shall not be liable for any loss or damage caused wholly or partly by the fitment to the Goods of any part, accessory or item of equipment which has not been manufactured or approved by the Company or by misuse of the Goods or failure to follow operating or maintenance instructions supplied by the Company. The Customer shall indemnify and keep indemnified the Company against any and all claims whatsoever in respect of any such loss or damage.
- 13.1 GOODS PURCHASED FOR RESALE In respect of any goods which are purchased by the Customer for resale, the Customer shall not apply its own trade or other marks to the Goods or their packaging without the written consent of the Company.
- 13.2 In respect of any Goods which are purchased by the Customer for resale, the Customer shall not alter or interfere with the Goods and shall comply with all applicable legislative and other requirements and standards and the Company's instructions in relation to the storage, handling and safety of the Goods. The Customer shall indemnify and keep indemnified the Company against any and all loss, damage, claims, costs and expenses suffered or incurred by the Company arising from any failure by the Customer to comply with this Condition.
- 14.1 DEFAULT AND TERMINATION If any of the events specified in Condition 14.2 occurs all monies accrued owing under the Contract shall become immediately due and payable and the Company shall be entitled at any time thereafter to terminate the Contract and any other contract between the Company and the Customer by notice and/or to suspend further deliveries of Goods the subject of any or all such contracts.
- 14.2 The events referred to in clause 14.1 are:
  - 14.2.1 the Customer makes default in or commits a breach of the Contract;
  - 14.2.2 any distress or execution is levied upon the Customer's property or assets:
  - 14.2.3 the Customer makes or offers or proposes to make any arrangement or composition with its creditors, any resolution or petition to wind up the Customer is passed or presented, any petition for an administration order in respect of the Customer is presented, a petition for a bankruptcy order is made against the Customer, or a receiver or manager of the Customer's undertaking, property or assets or any part thereof is appointed; or
  - 14.2.4 the Customer fails to provide any letter of credit, bill of exchange or other security requested by the Company.
- 15. FORCE MAJEURE Should the Company be prevented from or hindered or delayed in performing any of its obligations under the Contract by reason of strike, lock-out or trade dispute, acts of national or local government or other authority, Act of God, storm, tempest, fire, flood, explosion, accident, theft, civil disturbance, insurrection or war or by any other cause whatsoever beyond the Company's reasonable control then the Contract may be suspended and/or cancelled (whether or not while suspended) by the Company without notice and the Company shall have no liability in relation to any failure by it
  - caused by such prevention, hindrance or delay, or any such delay, suspension or cancellation.
- 16.1 ANTI-BRIBERY CLAUSE The Customer will:
  - 16.1.1 Comply with all applicable laws, regulations, codes and sanctions relating to anti-bribery and anti-corruption including, but not limited to:
  - 16.1.1.a Local and national laws in the territories in which it operates.
  - 16.1.1.b The UK Bribery Act 2010.
  - 16.1.1.c The US Foreign Corrupt Practices Act 1977.

- 16.1.1.d The UN Convention Against Corruption.
- 16.1.2 Comply with the Halma p.l.c. Group Code of Conduct relating to bribery and corruption which may be found on the Halma website (www.halma.com).
- 16.1.3 Have in place its own policies and procedures to ensure compliance with this Clause.
- 16.1.4 Ensure that all parties with which it is associated or who are providing goods or services in connection with this Contract (including subcontractors, agents, consultants and other intermediaries) are aware of and comply with the requirements of this Clause.
- 16.1.5 Maintain complete and accurate records of all transactions and payments related to this Contract and, on reasonable request, disclose details of those transactions and payments to the Company.
- 16.1.6 On reasonable request confirm in writing to the Company that it has complied with the requirements of this Clause and, if so requested, allow the Company to verify this compliance by way of an audit of its records.
- 16.1.7 Immediately inform the Company if it suspects or becomes aware of any breach of this Clause by one of its employees, subcontractors, agents, consultants or other intermediaries and provide detailed information about the breach.
- 16.2 The Customer will indemnify, keep indemnified and hold harmless (on a full indemnity basis) the Company against all costs, expenses and losses that the Company incurs or suffers as a result of any breach by the Customer of any of its obligations under this Clause. This indemnity will not apply to any fine levied on the Company as a result of the Company's criminal liability.
- 16.3 If the Customer breaches this Clause the Company shall have the right to terminate this Contract without notice and with immediate effect and will be in no way liable to the Customer in respect of such termination for payment of damages or any other form of compensation.
- 17.1 GENERAL Each of the rights and remedies conferred on the Company by these Conditions shall be in addition and without prejudice to any other right or remedy which the Company may have under these Conditions or otherwise and in particular to any right to payment of all sums due or to become due in respect of the Goods.
- 17.2 No failure by the Company to enforce any of its rights under the Contract, or delay by the Company in enforcing any such rights, whether or not after knowledge of any breach of the Customer, shall constitute waiver thereof.
- 17.3 If any of these Conditions shall be held unenforceable, the remaining Conditions shall not be prejudiced thereby and shall continue in full force and effect.
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- 17.9 The Contract represents the entire understanding between the parties and supersedes any previous agreement between the Company and the Customer in relation to the subject matter.
- 18.0 The Company is a registered producer under the UK WEEE Regulations WEE/ HE0048TZ. Upon the sale of all electrical and electronic equipment (EEE) the Customer agrees to accept the financial obligations for removal, collection, recovery and recycling of the EEE once it becomes waste and any replaced WEEE to the customer.

May 2014

#### www.syncoln.com

#### SYNCOLN

Syncoln Fire Detectors Ltd. 3rd Floor, 14 Hanover Street, Mayfair, London, W1S 1YH, United Kingdom

Tel: +44 (0)2075145813
Fax: +44 (0)23 9249 2754
Email: info@syncoln.com
Web: www.syncoln.com











