

19-A, VIP Block, Lahore Medical Housing Society, Canal Road Lahore.

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## \* Introduction

- \* Fire Mechanix, is a Pakistan based Engineering Business Establishment, actively involved in imports, technical assistance, installation and supplies of Fire, CCTV & Electrical engineering products, systems and services
- \* We offer a wide range of engineering solutions in the field of Fire, Electrical & Electronic Systems.
- \* Having Association and joint ventures with reputed overseas organizations based in Europe, U.S.A., Middle East and Far East, It enables us to cater customer's specific need and requirement all under one roof.
- \* Our commitment is to focus on developing new & innovative products, which are on leading edge of quality and technology.
- \* Fire Mechanix Motto" To Increase Number of Satisfied Customers."

With Fire Mechanix, Service Is The Most Important Aspect Of Our Relationship With The Customer. From Your Inquiry, Which Will Be Expertly Handled By Our Sales Engineer, Through To the Final Inspection and Delivery, Our Professional Approach Assures Continued Customer Satisfaction

Suppliers, Importers & installer of electrical, electronic equipment, Firefighting and detection systems.

Date Founded: March 2007

Bankers: MCB Sabzazar Multan Road Lahore.

National Income Tax Number (N.T.N No.) 7290823-4 General Sale Tax Number (GST) 32-77-8761-295-84

No. Of Employees: 12 Professionals, 05 Supervisors

Address: Fire Mechanix

19-A VIP Block Lahore Medical Housing Society Canal Road Lahore.

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# **BRANDS WE DEAL IN**

Company	Country	Product	Status
Gent by Honeywell	UK	Fire Alarm System	Solution Integrator
Notifier by Honeywell	U.K	Fire Alarm System	Solution Integrator
Hochiki America	USA	Fire Alarm System	Solution Integrator
Esser by Honeywell	UK	Fire Alarm System	Solution Integrator
Kentec	UK	Fire Alarm System	Solution Integrator
Unipos	Turkey	Fire Alarm System	<b>Solution Integrator</b>
SD3	Italy	Fire Alarm System	Solution Integrator
Fike	USA	Suppression System	Solution Integrator
Toa	Japan	Public Address System	Solution Integrator
С-Тес	UK	Fire Alarm System	Solution Integrator
ADOS GMBH	Germany	Gas Detection System	Solution Integrator
Hikvision	China	CCTV	Solution Integrator
Dahua	U.A.E	CCTV	Solution Integrator
Fike	UK	FM200 Fire Suppression System	Solution Integrator

# **PAST PROJECTS**

Project Name	Consultant Name	Work Description	Brand
Man Diesel Raiwind Road Lahore	Fire Mechanix	Fire Alarm System	Apollo U.K
PCSIR Ferozpur Road Lahore.	Fire Mechanix	Fire Alarm System	Gent By Honeywell
The Shoppe The Mall Lhr.	Fire Mechanix	CCTV	Dahua
Interloop Manga Road Raiwind.	Fire Mechanix	Fire Alarm System	Morlay by Honeywell
J & P Coats Raiwind Road Lhr.	Fire Mechanix	Fire Alarm System	С-Тес
LUMS Lahore Campus DHA	Fire Mechanix	Fire Alarm System	Gent by Honeywell
Pakistan Associate of Industrial Engineering Raiwind Road Lhr.	Fire Mechanix	Fire Alarm & CCTV	Gent by Honeywell  Dahua
D.L. and T. Land Communication	The Mark of	Fig. Alassa Cartana	
Pakistan Tobacco Company Akora Khatak KPK	Fire Mechanix	Fire Alarm System	Gent by Honeywell  Notifire by Honeywell
Nestle Kabirwala Factory.	Fire Mechanix	Fire Alarm System	Gent By Honeywell
Quid-e-Azam Solar Park	Fire Mechanix	Fire Alarm System	Gent by Honeywell
Bahawalpur.		Public Address System	Toa
		PABX	Panasonic
UCH Power Plant Baluchistan.	Descon.	Fire Alarm System	Gent By Honeywell
Jotun Paints	Descon.	Fire Alarm System	Inum
Coca Cola Karachi.	Fire Force	Fire Alarm System	Gent By Honeywell
Honda Atlas Power Plant Shiekhupura.	Digital Works	Fire Suppression System	Kentec U.K
Lahore University of Management Science(LUMS)	Descon	Fire Alarm System	Gent by Honeywell



# **Fire Alarm System**

## **Xenex Panel**

BSI approved to EN54: Parts 2 & 4, the Xenex control panel can be used on installations meeting BS 5839:Part1. Control panel options for 2-8 zones can be specified. Designed to simplify system installation, each Xenex panel contains an integral power supply and battery support to drive up to 8 alarm sounder circuits, 2 auxiliary relay contacts, a zone disablement facility and also one-man test and commissioning features. Utilizing LPCB approved conventional smoke or heat Detectors, Xenex offers exceptional value for money.



## **ES Detect Conventional Detectors**

ES Detect conventional range offers high quality sensors and advanced detection. Fixed heat detector: Automatic heat detector with fast semiconductor sensor to guarantee reliable detection of fires with strong heat generation. Fixed heat detector class B: For increased operating temperature according to EN 54-5 class B. Rate-of-rise heat detector: Automatic heat detector with fast semiconductor sensor to guarantee reliable detection of fires with rapidly rising temperatures and integrated fixed temperature function for the detection of fires with slowly rising temperatures. Optical smoke detector: Optical smoke detector to guarantee safe and early detection of fire.







## **Manual Call Point**

Our conventional manual call points are designed to provide a manual alarm interface to conventional fi re alarm control panels. All call points are supplied in the standard red color and are available in semi-flush mounting or surface mounting options. The manual call points are all with a 470 Ohm resistor and Normally Open contact, complete with glass. Both break glass, and resettable operating elements can be used in the standard unit by a yellow strip on the element which becomes visible when activated.



# **Sounders**

Honeywell's Non-Addressable sounder is a high quality device designed to alert building occupants of an emergency. The product features a new folded horn design which provides outstanding sound output at low current draw.





# **Vigilon Plus 4 and 6 Loop Panels**

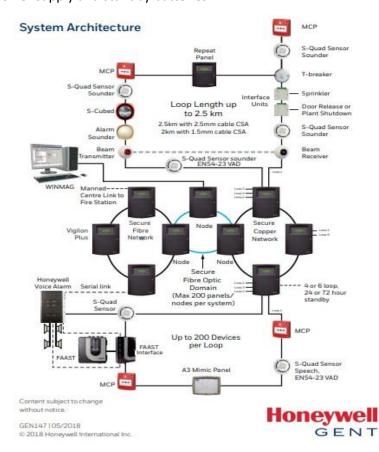
Vigilon Plus Control Panels are available in 3 sizes managing 2, 4 or 6 loops each accommodating up to 200 devices including advanced fi re sensors, interfaces, call points, alarm sounders and visual alarms. The Compact Plus 2 loop panels and Vigilon Plus 4 loop panels are available with integrated 24 hour standby and the 6 loop panel has full 72 hr standby capacity. Advanced networking options allow networking of up to 200 panels in a multi-domain structure with options of copper or optic fiber connections. Vigilon's back-lit LCD display presents clear indication of Fire or Fault location and the



control panel's innovative 8-line x 40 character display with push-button keypad is simple to use. Fire Plans can be tailored to precisely meet site requirements. Vigilon's software allows

network areas to be sectored to evacuate or alert status, or configured with pre-set delays. Fully compatible with Honeywell Gent's innovative S-Quad range – a combined Multi-Sensor range

with speech, sounder and EN54-23 Visual Alarm devices in one intelligent unit. The Vigilon Plus Repeat control panel provides full display and control of the system. Connecting to the detection loop, the repeat panel provides a cost effective solution with minimum requirements for cabling and installation. Repeat panels are supplied complete with their own 72 hour power supply and standby batteries.





## S-Quad Sensor and Sensor Sounder

A truly intelligent analogue sensor combining local processing in the sensor and the panel to achieve an immediate response to real fires whilst minimizing the risk of false alarms.



#### Description

A comprehensive range combining sensor sounder and voice in one multifunctional device.

## **Beam Detectors**

Vigilon's loop powered technology allows up to 16 beam pairs to be connected to the same loop circuit, each covering a distance of up to 100m without the need for an external Power Supply Unit, wiring or interfacing. Compatible with the full range of Vigilon and Nano control panels the S-Quad beam uses the panel software to ensure a fast response to fi re while offering software filters to reduce the number of unwanted alarms.





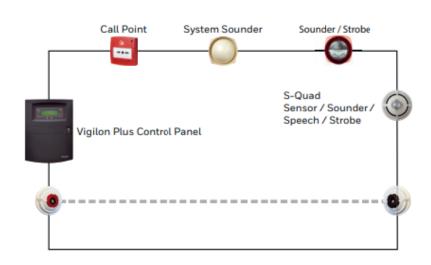
#### **Beam Transmitter**

- Loop Powered (16 per loop)
- LED array to assist alignment
- Auto gain adjustment allowing 1 man commissioning



#### Beam Receiver

- · Loop Powered (16 per loop)
- 100m beam transmission
- · Improved immunity to EMC & dust build up on the lens







# **Analogue Addressable Manual Call Points**

Every manual call point is continuously monitored ensuring a trigger is responded to in less than one second system wide. The range includes options for glass and resettable elements and lift-up protective covers. A key switch version is also available for areas where tampering or vandalism is expected. An Environmentally Protected (EP) version with Ingress protection rating IP67 is also available, complete with resettable element, protective cover and back box.





#### Description

Manual call points for the Vigilon and Nano system are easy to install and can be mounted on standard installation back boxes or bespoke red back boxes for surface mounting.

## S-Cubed

S-Cubed incorporates sound, speech and an EN54-23 visual alarm all in one device.



S-Cubed offers a comprehensive range of loop powered alarm sounders with integrated voice and EN54-23 certified visual alarms. Combined with flexible configuration from the fire control panels, this loop powered device can give a differentiated combination of audible and visual alarms for alert and general evacuation.





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# CONVENTIONAL FIRE PANELS





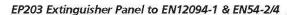
#### MFP 4-28 Zone Conventional Fire Panel to BS5839-4



- Fully compliant with BS 5839 Part 4
- Robust metal lid and metal back box with heavy-duty base connections
- Four sounder circuits and head out (detector removed) fault indication provided as standard
- Expandable from 4 to 28 zones in 4 zone steps
- End of line units included (one per zone)
- Separate indication of open circuit, short circuit, head out, sounder and battery/PSU faults
- Non-latching 'class change' sounder input, latching fire & non-latching fault outputs (via MFPX loom)
- Fault buzzer mute facility
- Short circuit = fire facility (pre-1980 BS,no resistors in call points), selectable on a zone by zone basis for retro-installations
- Non-latching zones facility for gross connection to other panels
- Wide range of engineer facilities including one man detector test, sounder walk test, sounder isolate, sounder delay and auxiliary isolate
- Up to eight two-wire repeaters with full external control (except isolate) per system (requires one FF596T Repeater Transmitter PCB fitted at the main panel).
- Fully compatible with the Context Plus UL-listed Series 65A range of conventional detectors and with the Ei range of wireless detectors and ancillaries

#### Technical Data

MAINS SUPPLY VOLTAGE: 230 Va.c. ±10% 50/60Hz TOTAL OUTPUT CURRENT LIMITED TO: 1.4 A (MPP 4-12), 3A (MFP16-28) NUMBER OF ZONE CIRCUITS: 4, 8, 12, 16, 20, 24 or 28 MAX. NO OF SMOKE DETECTORS PER ZONE: 20 MAX. NO OF MANUAL CALL POINTS PER ZONE: No Limit NUMBER OF SOUNDER CIRCUITS: 4 MAX. NO OF BELLS @ 25 mA: 56 (MFP 4-12); 120 (MFP16-28) MAX. NO OF ELECTRONIC SOUNDERS @ 20 ma; 70 (MFP 4-12); 150 (MFP16-28) SOUNDER OUTPUTS EACH FUSED AT: 1A (MFP 4-12); 1.6A (MFP16-28) ENCLOSURE (W x H x D): 405x267x29mm (MFP 4-12); 521x334x140 (MFP16-28) WEIGHT (WITHOUT BATTERIES): 5KG (MFP 4-12); 9.5KG (MFP16-28)





- LPCB approved to EN12094 part 1 and EN54 parts 2 and 4
- Functions as a standard three zone conventional fire panel with additional circuitry for controlling the release of fire-suppressing gas into protected areas
- Unique 128 x 64 pixel graphical display facilitates straightforward system programming
- Any combination of activated zones can be programmed to automatically start the panel's extinguishant release sequence
- Includes a pull-down front-panel manual release button and two keyswitches for accessing the panel's functions and toggling between auto/manual mode
- Three conventional sounder circuits (two x 1st stage, one x 2nd stage)
- Powerful 3A EN54-4 compliant switch mode PSU
- Wide range of monitored inputs and auxiliaryoutputs
- Abort and hold inputs allow the panel's release sequence to be cancelled or suspended at any time
- Time-stamped event log
- RS485 connections for up to eight EP210 remote status units.
- Optional EP211 economy status units, EP212 relay expansion boards, EP215 abort/hold buttons and BF372 extinguishant release call points also available.
- Ideal for use in computer rooms, telecommunication centres, archive storage areas, etc..

### Technical Data

MAINS SUPPLY VOLTAGE: 230 Va.c. ±10% 50/60Hz
TOTAL OUTPUT CURRENT LIMITED TO: 3A
NUMBER OF ZONE CIRCUITS: 3
MAX. NO OF SMOKE DETECTORS PER ZONE: 20
MAX. NUMBER OF COMBINED DETECTORS & MANUAL CALL POINTS PER ZONE: 32
NUMBER OF SOUNDER CIRCUITS: 3 (two x 1st stage, one x 2nd stage)
MAX. NO OF SECTRONIC SOUNDERS @ 20 mA: 10
SOUNDER OUTPUTS EACH FUSED AT: 200mA
AUXILIARY OUTPUTS: 6 (Fire, Local Fire, Extract Fan, 1st Stage, 2nd Stage, Fault)
EXTINGUISHANT RELEASE OUTPUTS: 5 (fire, Local Fire, Extract Fan, 1st Stage, 2nd Stage, Fault)
EXTINGUISHANT RELEASE OUTPUTS: 6 (Manual release, flow switch, low pressure, mode, hold, abort)
ENCLOSURE (W x H x D): Back box = 439 x 276 x 70; Lid = 467 x 293 x 29mm; WEIGHT: 4.65KG





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55000-326IMC



55000-139 / 55000-145IMC



Our Context Plus Series 65A range of conventional fire detectors incorporates well-proven sensing technologie including an IC based on that used in our Context Plus XP95 analogue addressable detectors. The range consists of ionization, integrating ionization and photo-electric smoke detectors, two grades of thermal detector and a standard base. Each type of detector has an LED which flashes continuously in stand-by mode.

The range is tested and approved to the following standards: UL268-smoke detectors (file S24127) and UL521-thermal detectors (file S24128).

#### Context Plus Ionization Smoke Detector, 55000-226IMC

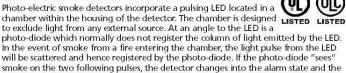
The sensing part of the detector consists of two chambers - an open outer chamber and a semi-sealed reference chamber within. Mounted in the reference chamber is a low activity radioactive foil of Americium 241 which enables current to flow between the inner and outer chambers when the detector is powered up. As smoke enters the detector, it causes a reduction of the current flow in the outer chamber and hence an increase in voltage measured at the junction between the two chambers. The voltage increase is monitored by the electronic circuitry which triggers the detector into the alarm state at a preset threshold. An externally visible red LED lights up when in alarm. IP rating = IP23D

Features: Flashing LED; Alarm indication: Red LED; Supply voltage: 9 to 33V Average stand-by current at 24V: 45uA; Average stand-by current at 9V: 21uA Alarm current at 24V: 52mA; Alarm current at 9V: 17mA

Ambient temperature: 32 to 158°F; Max wind continuous: 2,000ft/min Remote output (R-) characteristics: Current sink to -ve line, limited to 17mA. Note: when using a remote indicator a current-limiting series resistor may be required.

#### Context Plus Photo-electric Smoke Detector, 55000-326IMC

indicator LED lights up. IP rating = IP23D



Features: Flashing LED; Alarm indication: Clear LED, Red in alarm; Supply voltage: 9 to 33V Average stand-by current at 24V: 45uA; Average stand-by current at 9V: 40uA Alarm current at 24V: 52mA; Alarm current at 9V: 17mA Ambient temperature: 32 to 100°F; Max wind continuous: not affected Remote output (R-) characteristics: Current sink to -ve line, limited to 17mA. Note: when using a remote indicator a current-limiting series resistor may be required.

# Context Plus Thermal Detector, Ordinary, 55000-139IMC Context Plus Thermal Detector, Intermediate, 55000-145IMC





Thermal detectors operate by using a matched pair of thermistors to sense heat. One thermistor is exposed to the ambient temperature, the other is sealed. In normal conditions the two thermistors register similar temperatures, but, on the development of a fire, the temperature recorded by the exposed thermistor will increase rapidly, resulting in an imbalance, causing the detector to change into the alarm state. Rate-of-rise detectors are designed to detect a fire as the temperature increases, but they also have a fixed upper limit at which the detector will go into alarm if the rate of temperature increase has been too slow to trigger the detector earlier. Externally, the thermal detectors have wide openings to the surrounding atmosphere to allow good movement of air around the external thermistor. IP rating = IP23D

Features: Flashing LED; Alarm indication: Red LED; Supply voltage: 9 to 33V 9 to 33V Average stand-by current at 24V: 55uA; Average stand-by current at 9V: 50uA Alarm current at 24V: 52mA; Alarm current at 9V: 17mA Ambient temperature: 32 to 100°F; Max wind continuous: not affected Remote output (R-): Current sink to -ve line, limited to 17mA. Note: when using a remote indicator a current-limiting series resistor may be required. Alarm upper limit: 135°F for 55000-139IMC; 200°F for 55000-145IMC

## Context Plus Base, 45681-200IMC

Designed to enable detectors to be plugged in without any need for force - particularly useful when fitting to suspended ceilings. As well as being lockable it contains no electronic parts which could be damaged during installation.





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Supply voltage: 9 to 33V; Normal operating temp (no condensation or icing): 32 to 100°F









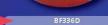
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## CONVENTIONAL FIRE ALARM ACCESSORIES













#### RESETTABLE CONVENTIONAL FIRE ALARM CALL POINT, BF370MER

The BF370MER's simple 'RESET' mechanism comprises tough ABS plastic elements that simulate break glass activation. It is instantly reusable without the environmental hazard caused by fragments of broken glass making it ideal for use in food processing plants, schools, shopping malls and other high traffic areas. Finished in red, the unit is flush or surface mountable and has alternate terminals for open and closed circuits. When wired for open circuit operation, the circuit closes instantly when activated.

The BF370MER also meets the requirements of BS5839 Part 2 and EN54 Part 11

- Double terminal wire connectors for independent input and output connections
- · No glass elements to break, lose or incorrectly fit when installing.
- · Complete functional test with every activation.
- · Preopened conduit entries from top, bottom and the back

Options include a transparent polycarbonate lift-up protection cover and different casing colours. Specific languages or custom imprints also available on request.

Size (H x W x D): 88 x 88 x 53 mm (Surface Mount) 88 x 88 x 20 mm (Flush Mount) Net/Gross Weight: 160/184g. Connections: Terminal, max 2.5mm² cable Current Ratings: 12/24V DC 10A; 48V DC 3A; 250V AC 10A; IP rating = IP24D

#### MOTOR DRIVEN CONVENTIONAL DOME BELL, BF336D

The BF336D 24V 6"(150mm) bell is designed to meet the special requirements of fire alarm systems where low power consumption and high sound output is essential. The unit's heavy duty micro-motor with built-in varistor suppression ensures reliability and long life. Designed to meet the requirements of EN54-3:2001.

- Interchangeable base suitable for surface mounting
- · Zero standby current and low current consumption
- Louder mechanical Resonant Tone

Amps = 0.03A; Decibel rating at 1m = 95dB; Weight = 812g; IP rating = IP23

#### CONVENTIONAL 4 TONE SPATIAL SOUNDER, BF334C/4103R

Designed for areas where low current consumption relative to sound output is required, our conventional spatial sounder requires only 11mA @ 24V d.c to provide an output of 103 dBa @ 1 metre. With an operating frequency of 800 to 1000Hz, it provides sound within the frequency range specified by BS5839. Tones are available by selecting either warble, sweep or pips via the jumper fitted to the sounder's PCB. By using three wires, a second stage alarm may be switched so that the continuous tone overrides the selected tone.

Output @ 1 metre 24Vdc: 103dBa; Current @ 24V dc: c.11mA Voltage Range: 8-35V dc; Number of Tones: 4; Volume control: -30dBa; IP Rating: IP65 Temperature Range: -20°Cto + 70°C; Weight (per unit unpacked): 200g Approx.dimensions 105mm diameter x 85mm deep

#### **ELECTRONIC SOUNDER, BF330ER**

The BF330ER is a versatile and compact electronic sounder ideal for fire, security and hazard warning applications. Flush or surface mountable, it is IP54 rated and designed to meet the requirements of BS5839-1.

Operating Current: Max 35mA at 24V DC; Operating Voltage: 12V–24V DC Operating Frequency 2.5KHz ±30%; Sound Output Level 100± 3db at 24V DC (@1m) Operating Temperature -100c min to +600c max; Approximate Weight: 144g Protection Classification: IP 54; Terminal Capacity: 2 x 1.5mm2 Conductors Dimensions: (H x W x D) 88 x 88 x 43 mm (75mm with base)

#### Also available



32 TONE SPATIAL SOUNDERS



32 TONE SPATIAL SOUNDER/BEACONS Shallow (BF333CSR) and deep (BF333CDR) versions available



XENON BEACONS











## Introduction

## Product Overview

Syncro AS is an analogue addressable fire control panel, available in either one or two detection loops. It combines compact and practical styling with the programming power and connectivity normally associated with much larger systems.

Being a multi-protocol panel, Syncro AS supports Apollo, Argus Vega and Hochiki detection, making it ideal for small and medium sites that require advanced fire sensing and evacuation options. Fully scalable and networked to become part of much larger systems if the need arises, it provides a solution for any size of installation.



### Syncro AS Features

- > Expandable from one to two loops\*
  > Network up to 64 panels\*
- Network up to 64 panets
- > Two programmable sounder circuits
- > Five programmable inputs
- > Three programmable relays
- ) 3A power supply
- > Up to 512 additional programmable I/O via Syncro I/O modules\*
- > Powerful, network-wide cause and effects\*
- Sensitivity adjustment and drift compensation
   Compatible with View repeaters\*
- > Supports Apollo, Argus Vega and Hochiki protocols
- > Stores 500 last events in event log
- Installer friendly, removable equipment chassis
   Different language and character set variants available
- > Approved and certified to EN54-2/EN54-4

\*These items not available on Syncro AS Lite panel

# Uverviev

With its large graphical display and ergonomic button and indicator layout, the Syncro AS control panel is simple and straightforward to understand for installers, commissioning engineers and end users alike.

#### Easy to Install

For installers, we have designed the panel to be easy to install. The elegant and simple construction enables the chassis to be completely dismantled by removing just two screws. The outer cover can also be detached by removing two hinge pins making first fix installation straightforward, and enabling the sensitive electronic parts to be stored safely for re-fitting at the commissioning stage.

#### Flexibility

Using leading edge microprocessors, its electronics provide a flexible control system with high reliability and integrity.

#### Zone Indicators

500 zones displayed on the screen with the first 16 zones shown by the indicator lights.

#### Connectivity

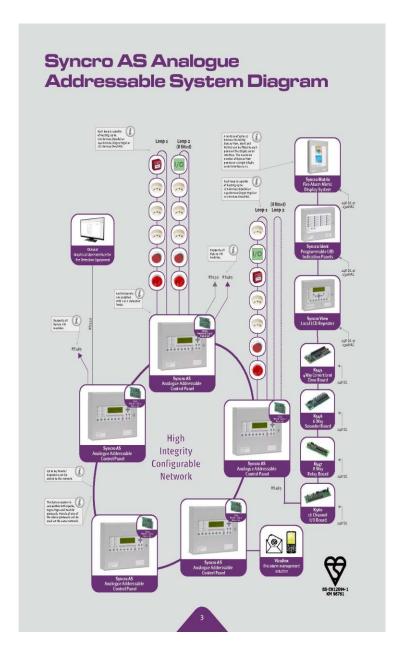
Syncro AS connects seamlessly to other Syncro AS, or Syncro multi-loop panels and repeaters via the fully fault tolerant and robust Syncro network.

The Syncro AS supports all Syncro serial bus peripherals such as View repeaters, 16 channel I/O boards, Relay boards, Sounder boards and Conventional Zone boards to provide an additional 512, fully-programmable points.

#### Power Supply

An integral 3 Amp power supply and temperature compensated battery charger provides ample power for the two, 1 Amp rated standard sounder outputs, loop powered sounders and other devices.

If you require a printer with a Syncro AS panel please view Datasheet 85.





# **CCTV System**































# **Fire Fighting System**





















# **Personal Protective Equipments**



# DEALS IN ALL KIND OF FIRE ALARM, FIRE FIGHTING, SAFETY AND SECURITY SYSTEMS



























## A SHORT LIST OF OUR VALUABLE CUSTOMERS

