



# FIRE ALARM Systems

## CONVENTIONAL SYSTEM

### Apollo FP Control Panels

- 2,4,6,8,14,24 & 32 Zone versions
- Easy to Fit
- Attractive Styling
- Easy to Maintain
- Complies with BS 5839, part 4, 1988.

#### CONTROLS

##### EXTERNAL

Control Buttons enabled by keyswitch

- 1 Reset/Resound/Test Zone Lamps
- 2 Silence Alarm Sounders
- 3 Silence Fault Sounders
- 4 Evacuate

##### INTERNAL

- 1 Engineer's one man test
- 2 Zone isolate
- 3 Revert to 1980 BS (no resistors in call points)

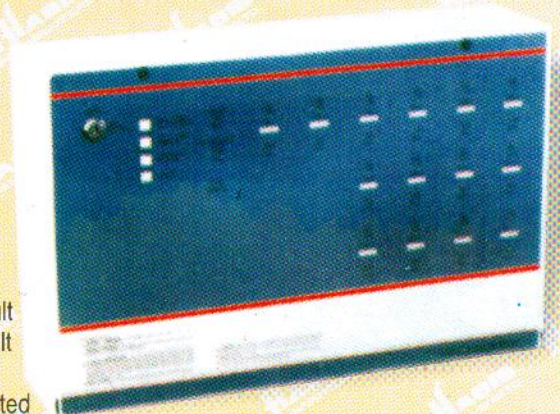
#### INDICATORS

##### External

- Sounder Fault
- Power Supply Fault
- Mains On
- Zone Fire
- Zone Fault

##### INTERNAL

- Open Circuit Zone Fault
- Short Circuit Zone Fault
- Zone Isolated
- Engineer Tested Selected



#### OUTPUTS

Two sounder circuits, voltage free changeover contacts on Alarm, Auxiliary 24 VDC (may be removed on alarm) - 100mA max. Ancillary connections for expansion modules will allow the following.

- |                            |                                 |
|----------------------------|---------------------------------|
| 1 Repeater Panels          | 4 Connection to Landlords Panel |
| 2 Multiple Sounder outputs | 5 Larger power supply           |
| 3 Fault relays             |                                 |

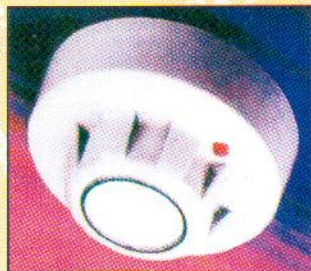
### Fire Detectors Series 65

#### SERIES 65 IONISATION SMOKE DETECTOR

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 the 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 LED will light up when the detector changes to alarm state.

#### SERIES 65 OPTICAL SMOKE DETECTOR

Optical smoke detectors incorporate a pulsing LED located in a labyrinth within the housing of the detector. The labyrinth is designed to exclude light from any external source. At an angle to the LED is a photo-diode which normally does not register the column of light emitted by the LED. In the event



of smoke from a fire entering the labyrinth the light pulses from the LED will be scattered and hence registered by the photo-diode. If the photo diode "sees" smoke on the two following pulses, the detector changes to the alarm state when the indicator LED will light up. The detector housing is identical to that of the ionisation smoke detector. It is distinguished from this type by having an indicator LED which is clear quiescent state but produces red light in alarm.

#### SERIES 65 HEAT DETECTOR

The Series 65 heat detectors are resettable and operate by using a matched pair of thermistors to sense heat.

#### SERIES 65A COMBINED HEAT & SMOKE DETECTOR

Series 65A are the latest type of detectors offering heat & optical smoke detection from a single unit.



Complete range is also available for hazardous environment



## Manual Call Stations

The design and features of Models from the new World Series of Call Points benefit from the experience gained during nearly quarter of a century spent specialising in Manual Call Points of the Break Glass Type.

Standard Model for ordinary environment	MCP-100
Model for ordinary environment (press glass)	MCP-100/PG
Model for weather proof environment	MCP-100/WP
Model for hazardous environment	MCP-100/Ex



## ANALOGUE ADDRESSABLE FIRE ALARM SYSTEM

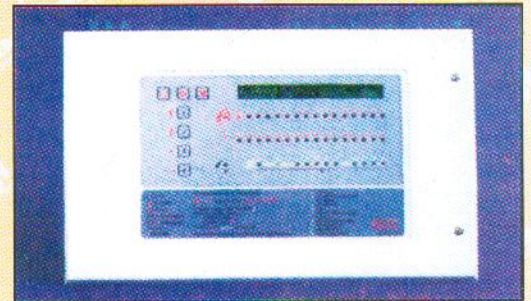
The smoke/heat detectors and manual call stations are programmed through the control panel in such a way that each component is given a number and the exact location. Like optical smoke detector No. 7, location generator room. Which means when the fire is detected by detector No. 7, the control panel will show the detector number and location on its display and a print out by the printer, which makes the

fire staff to go exactly at right place rather to wasting time in searching the whole zone, thus minimising the response time, and we all know, in a fire situation even seconds count. The complete system can be networked by using specially designed software and computers for sophisticated monitoring. Similar faults are also identified by exact location.

## Apollo AFP Control Panels

Fully compliant with EN54 Parts 2 & 4 and BS 5839 Part 4, The new AFP loop analogue addressable fire panel offers high performance at a competitive price. Attractively designed, easy to use and simple to install, it's wide range of features include:

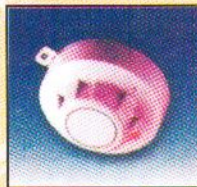
- 126 addressable devices per loop.
- Easy-to-read 80 character back-lit display.
- Four separate independently programmable sounder circuits rated at a total of 3A.
- Powerful short circuit protected loop drivers allows the connection of up to 32 loop driven sounder.
- Evacuate, alert and class change inputs.
- Fire, fault and pre-alarm outputs.
- 999 event memory.
- RS232 port provided for connection to external serial printer.
- Sophisticated test and maintenance facilities.
- Panel can be programmed on-site via tactile switches on panel front or via an easy to use, low-cost upload/download PC programme.
- Comprehensive 'Auto-Learn' facility allows panel to self configure to devices connected to the loop.
- Push button entry code access protection,
- Detailed description of faults on LCD display.



## Analogue addressable Loop Devices

### XP95 IONISATION SMOKE MONITOR

As smoke enters the outer chamber the flow drops and voltage increases. The voltage is measured and an analogue signal is converted to digital for transmission to control equipment. Pre-alarm or fire alarm is instigated by the microprocessor when smoke density increases to pre-set levels.



### XP95 OPTICAL SMOKE MONITOR

When smoke enters the chamber it scatters light onto the photo-diode, increasing the signal transmitted to control equipment. The clear LED emits red.



### XP95 TEMPERATURE MONITOR

The XP95 temperature monitor has a low air-flow resistant case for good contact

between sensing thermistor and surrounding air. Temperature is measured by a single thermistor network which gives a voltage output proportional to the external air temperature. The signal is processed and transmitted to control equipment

### XP95 MANUAL CALL POINT

When operated the manual call point interrupts the polling cycle and can report its address in under 0.2 seconds.



### XP95 ISOLATOR

Designed to protect the XP95 loop from short circuit fault, preventing the whole loop becoming inoperable.

The line resistance of the XP95 isolator is particularly low.

Complete range is also available for hazardous environment.



# ALARM DEVICES

## Apollo Electronic Solenoid Bell



A Unique, patented alarm bell designed for use in fire, security, industrial and other signalling systems. The benefits of quality of sound output, with reduced current consumption, are made possible by combining a miniature solenoid with an integrated electronic control circuit.

- Integrated Electronic Control Circuitry
- Increased Reliability - No Mechanical Contacts or Rotary Parts to wear
- Two in, Two out wiring to comply with BS5839: PART 1:1988

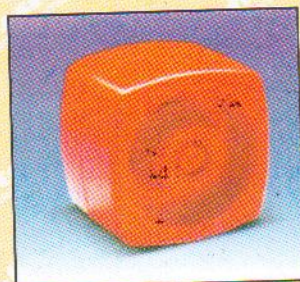
Dimensions: 6" (155mm) dia. X 3 1/2" (85mm) depth  
 Nominal Voltage: 24 V.D.C.  
 Voltage Range: 18-30V D.C.

Nominal Current: 30mA  
 Nominal Output: 93-95 dBA at 1 metre  
 Movement: Solenoid with electronic control

## Syrex Shrieker

The Syrex Shrieker is a low current fire alarm sounder ideally suited for long cable runs where a low current draw is required. Termination in the base allows quick and easy installation.

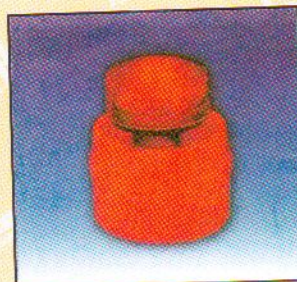
Type	Voltage	Current	dB at 1m	Frequency	Tones
Standard	12V/24V DC	8mA	100 + 3dB	700/950 Hz	9
Rating:	Continuous				
Case:	High impact ABS				



## Syrex LC

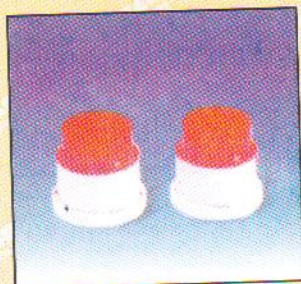
The Syrex LC is a high output low current consumption sounder having 3 different notes selectable on the same unit: continuous, warble and pip. High impact flame retardant ABS case. Protection to IP65 available as standard.

Voltage Range: 24 V DC  
 Current: 20mA  
 Audibility: dB at 1m



## Syrex Shrieker XN

Voltage Range: 24V DC  
 Current: 50 mA  
 Audibility: 100dB at 1m + 3dB  
 Frequency: 70/950Hz  
 Flash Energy: 0.5 Joule (1Hz)  
 Case: High Impact ABS



## Low Current Xenon Beacon

A low cost, low power xenon beacon ideal for fire alarm applications:

Voltage Range: 24V DC  
 Current: 45 mA  
 Flash Rate: 60 FPM (1Hz)  
 Flash Energy: 0.65 joule (AC version)  
 1.2 Joule (AC version)  
 Case Material: Polycarbonate lens & UV stabilised polycarbonate/ABS body & base



## KLX 125 Xenon Beacon

Voltage Range: 24V DC  
 Current: 170 mA  
 Flash Rate: 70 FPM (1Hz)  
 Flash Energy: 2.9 Joule  
 Case Material: Polycarbonate toughened UV stable dome. ABS base



# Alarm Sense®

## Alarm Sense® Two Wire System

Alarm Sense is a range of Apollo conventional detection and alarm products specially designed to be connected to the same pair of supply wires. Alarm Sense devices are powered and controlled by purpose-designed control and indicating equipment.

## Alarm Sense® Concept

The majority of conventional fire detection systems are designed with two pair of wires per zone: one pair of wire is used to connect detecting devices-smoke or heat detectors and manual call points-to the control panel. The other is used for alarming devices-for example, bells, sounders or strobes.

Standards and codes of practice for installation have a significant influence on the design of fire detection equipment. Compliance with standards need not, however, lead to rigidity of design, as has sometimes been thought. Many designers of fire protection systems call for both flexibility of design and full compliance with all the relevant standards.

This demand can be met by using Alarm Sense-the new conventional range from Apollo.

By using different voltage bands for quirescent and alarm states, Alarm Sense allows detectors, manual call points, input or output modules and sounders or beacons to be connected to the same pair of wires, thus making installation quicker, less expensive and more flexible. There is a series of patents pending on the Alarm Sense range.



## Solo Test And Maintenance Kits

The SOLO Series is a complete fire detector lets and maintenance kit, designed to be tough and durable for use by anyone who performs regular detector maintenance to save time and money. A SOLO Series-kit allows the user to test, access, remove and replace both smoke and heat detectors alike, including those which cannot be accessed easily. Suitable for operating at heights of over nine meters, SOLO is easy to use, quick and cost effective. Comprising SOLO 100: a lightweight telescopic access pole, SOLO 200: a universal detector removal tool and SOLO 300: a versatile smoke detector tester, The SOLO Series really is *The only one you'll ever need.*



the only one you'll need



### SOLO 100 Telescopic Pole

Weight: 1.80 kg  
Material: GRP  
Dimensions: From 1.26 m closed to 4.5 fully extended

### SOLO 101 Extensions

Length: 1.13 m  
Weight: 0.35 Kg

### SOLO 200 Detector Removal Tool

Weight: 1.10 kg  
Material: Aluminium / ABS  
Detector Sizes: From 6.5 mm dia to 110 mm dia  
Max working angle: 30 degrees

### SOLO 300 Smoke Detector Tester

Weight: 0.65 Kg (without aerosol)  
Material: PETG/PVC/STEEL  
Max working angle: 90 degree  
Use with SURETEST Aerosol Code 29600-105

## APOLLO FIRE DETECTORS LIMITED

36-Brookside Road, Havant, Hampshire PO9 1JR, England, Tel: +44 (0) 1705 492412 Fax: +44 (0)1705 492754

## HASEEN HABIB CORPORATION (PRIVATE) LTD. حسین حنیب کارپوریشن (پرائیویٹ) لمیٹڈ

Head Office / Factory : 123/3 Industrial Area, Kot Lakhpat Lahore.  
Sales Office : 27 - Nicholson Road  
Rawalpindi : PMA House , Liaquat Road  
Karachi : 115, Sabah Palace, 1st Floor, 29-A, Block-6  
PECHS, Main Shakra-E-Faisal.

Tel: 042-35123195-96  
Tel: 042-36367222-23  
Tel: 051-5772564 - 5530193  
Tel: 021-34538945

Fax: 042-35123197  
Fax: 042-36368855 - 36374041  
Fax: 051-5530192  
Fax: 021-34538946

E-mail: works@firechief.com.pk  
E-mail: info@firechief.com.pk  
E-mail: pindi@firechief.com.pk  
E-mail: khi@firechief.com.pk

Faisalabad : 8, Ground Floor, National Hotel, Sargodha Road, Tel: 041-8787001

Fax: 041-787002

E-mail: fsd@firechief.com.p

UAN: 111-HASEEN(111-427336) Lahore, Rawalpindi, Karachi, Faisalabad

www: firechief.com.pk