

# **PATENT** *System 88* Fire Alarm Control Panel



## **General Features**

- Compact, Versatile and Attractive
- Input zones available in multiples of 4
- Up to 120 input zones
- Class B wiring (Standard)  
Class A wiring (Option)
- LCD Display for Events Logging and Recording (Option)
- Charger capacity range from 1.5A to 30A
- Colour coded control switches for easy operation
- Networking facilities for general alarm, remote alarm silence and system master reset
- Standard enclosure made to IP30, options include water resistant type, stainless steel, surface/recessed mounting, custom made to suit.
- Alarm Verification Feature (AVF) with alarm counter (Option)
- Ease of maintenance and servicing with specific faults indicators to facilitate trouble shooting
- Extended auxiliary switches/relays and LED monitoring modules
- Fully supervised and fuse protected for all input and output lines
- ARMS (DECAM) Fire & Fault line supervision
- Total loss of power supply warning indication
- Complies with EN54 Parts 2 and 4
- Complies with Singapore Standard CP 10 : 2005

The **PATENT** *System 88* Fire Alarm Control Panel excels in Performance, Reliability, Versatility, Unique Features, Ease of Maintenance and Operation.

The Panel utilizes the well proven electronic principle of Fire Detection and Alarm. It is compact and built to blend well with any architecture.

Operation of the Panel has been made easier by the use of simple frontal indications (LED & LCD) and colour coded switches. Maintenance and servicing has been simplified by the use of specific indications provided behind the front indicators.

The *System 88* model is available in a wide array of high performance Control & Indicating Equipment. This includes Fire Alarm Control Panels, Fire Extinguishing Control Panels, Smoke Control Panels, Preaction Sprinkler Control Panels, Repeater Panels (LED & LCD), Mimic Panels, Monitoring & Auxiliary Output Control Panels and Power Supply Units (PSU).

These can be custom made to meet your ideal solution for both new and existing installations.

## Fire Alarm Control Panel



### Features

- 4 zones to 120 zones in multiples of 4 zones
- Individual zone Isolate/test functions with indicators
- Auxiliary isolate switch with audio & visual indicators
- Alarm sounder silence (Orange) and fault buzzer silence (Yellow) switches with audio & visual indicators
- Evacuate alarm switch (Red) for general alarm evacuation
- Indicators test switch (Blue) for all LEDs and buzzer
- Reset switch (Brown) for system normalizing
- Resound for subsequent alarms & faults
- Visual and reminding audio warning for all control switches
- Specific fault indications for ARMS (DECAM) both fire & fault, auxiliary supply and signal lines
- Specific fault indications for all zone input circuits, sounder output circuits for line open, line short and earth faults
- Non silenceable alarm within initial 3 minutes with bypass facility for incorporation with voice communication system
- Auto switching standby power supply facility to sub panels not equipped with power supply units
- Charger & Battery monitoring for mains failure, over/under voltage, overcharged, disconnection and blown fuse with specific faults indications

## Fire Alarm Control Panel with Liquid Crystal Display (LCD)

### Features

- Standard fire alarm control functions
- 20 characters x 4 lines message display
- Colour coded navigation keys
- Up to 120 date & time event recording for activations of detection zones and common fault signals
- Counter to register up to 999 events
- Password control for events deletion
- Alarm Verification Feature (AVF) with indicators for AVF bypass, alarm retard and alarm confirmation states (Option)
- Fully supervised and monitored software processing with indicator for processor fault
- Non volatile memory chips (EEPROM) & Micro Controller Processing Unit (MCPU)
- Failure of the MCU will not impair the primary functions of a standard fire alarm system



## Fire Alarm Control Panel with Extended Auxiliary Functions

### Features

- Standard Fire Alarm Control Panel Features
- Alarm Verification Feature (AVF) with alarm counter, indicators for AVF bypass, alarm retard and alarm confirmation states
- 8 ways Remote Monitoring Status Module with options for line supervision, open and close contacts termination
- 5 ways Auxiliary Control Relays Output Module and bypass switches with options for line supervision, 24VDC supply signal, normally open & normally close contacts termination
- 4 ways Remote Monitoring Status combined with 2 ways Auxiliary Control Module
- 2 and 8 ways additional sounder output module with line supervision





## Fire Extinguishing Control Panel with Liquid Crystal Display (LCD)

### Features

- Standard fire extinguishing controls functions
- 20 characters x 4 lines message display
- Colour coded navigation keys
- Up to 120 date & time event recording for activations of detection A & B zones; remote/local manual release, electrical actuator firing, actual gas discharged signal (gas gone switch)
- Counter to register up to 999 events
- Password control for events deletion
- Fully supervised and monitored software processing with indicator for processor fault
- Non volatile memory chips (EEPROM) & Micro Controller Processing Unit (MCPU)
- Failure of the MCPU will not impair the primary functions of a standard fire extinguishing system.

## Fire Extinguishing Control Panel

### Features

- Standard fire alarm control functions
- 1 zone to 60 zones (cross zone with detection A & B)
- Voting system logic circuit based on discharge triggered by activation of any two detectors (Option)
- Multiple zones with individual or common firing circuits
- Timer delay field adjustable in steps of 10 secs from 0 to 70 secs.
- 7 segment LED display to indicate timer countdown
- Backlighted red "GAS GONE" flashing indication to signify an actual discharge of extinguishant
- Remote / local electrical manual release facilities with line supervisory faults indicators
- Remote mechanical actuator manual release facilities with line supervisory faults indicators
- Remote / local firing abort facilities with indicators
- Actuators Fired/Faults and pressure low LED indicators
- Isolation facilities for detection zone & remote electrical manual release
- Resound / silence facilities for alarm bell (1st detection), electronic sounder (2nd detection)
- Auxiliary relay output for 1st & 2nd detection with isolate facility
- Field selectable DIP switches for individual firing with common signal output



## Fire Alarm Repeater Panel (LCD Indication)

### Features

- 20 characters x 4 lines message display
- Colour coded navigation keys
- Repeat up to 120 date & time event recording for activations of alarm zones and common faults
- Non volatile memory chips (EEPROM) and Micro Controller Processing Unit (MCPU)
- Counter to register up to 999 events
- Password control for events deletion
- Buzzer resound for subsequent alarm & faults with acknowledge switch
- Fully supervised and monitored software processing with indicator for processor fault

## Fire Alarm Repeater Panel (LED Indication)

### Features

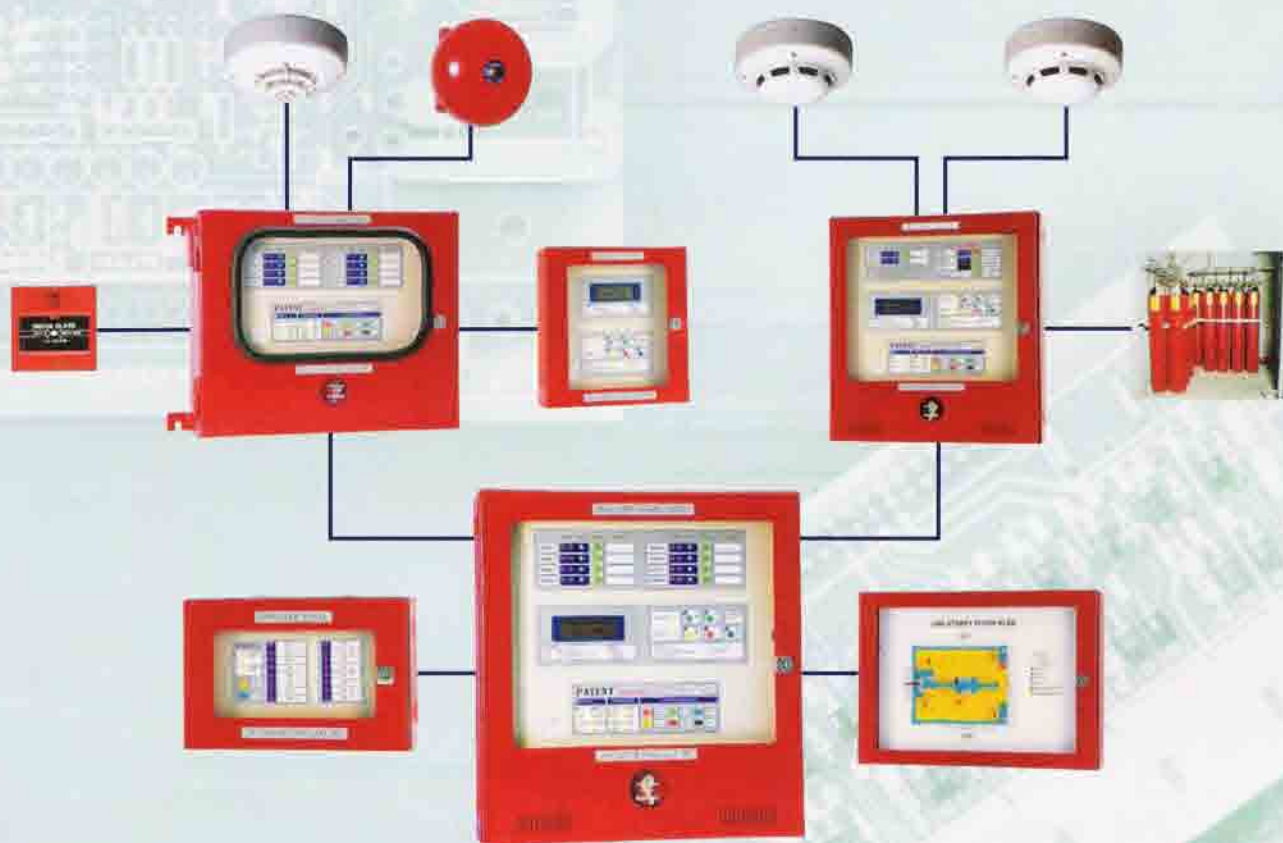
- 4 zones to 120 zones
- Buzzer resound for subsequent alarms & faults with buzzer silence switch
- Individual alarm indicators with common fault indication
- Indicators test facilities for LEDs & buzzer
- Hardwire termination provided as standard.
- Communication using 2 wires for supply and 2 wires for multiplexing signal transfer (Option)
- Extended facilities for remote Evacuate Alarm, Silence & Reset functions (Option)
- Extended facilities to repeat individual faults, isolate indication & remote monitoring status from Main Panel (Option)



**Panels housed in a variety of enclosures;  
Weatherproof, Recessed Mount, Stainless Steel, Explosion Proof**



## Fire Alarm System Architecture



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