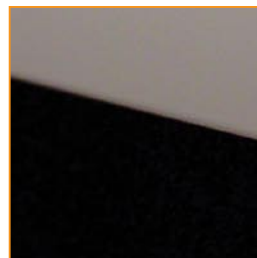
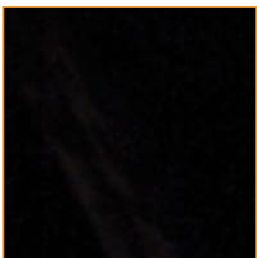
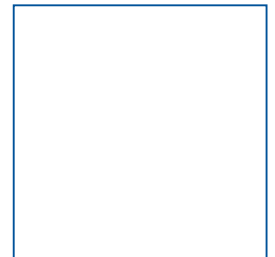
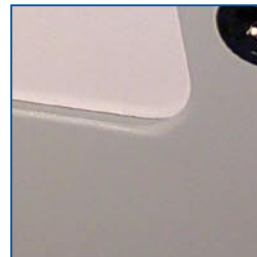
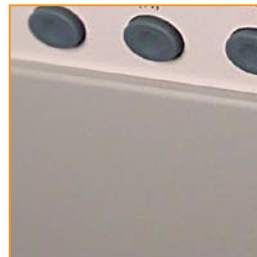
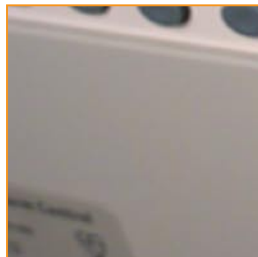
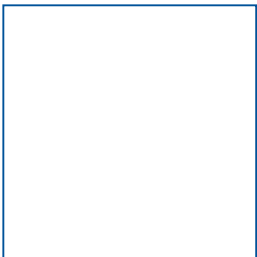
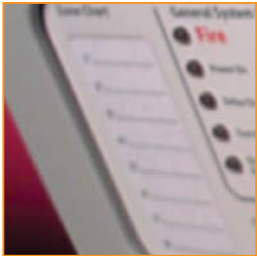
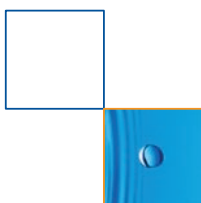


Kentec Electronics Ltd.



BS EN54-2 : 1998
BS EN54-4 : 1998
KM 73505

An introduction to.....



Sigma CP



Sigma CP Overview

The Sigma CP range of conventional fire control panels from Kentec Electronics Limited are high specification, fully featured control units designed for the most demanding of conventional fire detection and alarm system applications.

The Sigma CP range is tested and certified to EN54-2/4, they are available with two, four or eight detection zones as standard or installation saving, "two wire" versions. The features available ensure suitability for new installations or panel replacements on older systems.

The host of configuration options available are stored in non-volatile memory and are easily accessed via an intuitive user interface which allows the configuration data to be viewed and changed easily.

Sigma CP control panels are compatible with most standard, conventional detectors, call points and sounders and are also compatible with "two wire" detector bases from Apollo and Hochiki.

An integral three Amp power supply and temperature compensated battery charger provides ample power for the two, 0.5 Amp rated standard sounder outputs, zonal sounder outputs on "two wire" versions and Auxiliary 24V supply output.

Powerful Features

The simple and intuitive programming interface on Sigma CP panels allows simple configuration of many parameters by entering simple codes which are listed on the inner door and in the operation and maintenance manual. Configurable options include sounder delays, short circuit triggering of zones, non-latching zones, silent zones, I.S. barrier compatible zones and system disablements.

Connectivity

Sigma CP control panels have a dedicated; two wire serial bus for connection of repeater panels, Auxiliary relay boards or zonal sounder extension boards. Up to seven units may be connected to the serial bus which can be up to 1200 metres in length. All units connected to the serial bus are fully monitored and the control panel will announce a fault condition showing the address and type of any units that fail or are disconnected after the panel has been configured to recognize them

"Two wire" versions of Sigma CP can have detectors, call points and standard, polarized →

Ease of Installation

The elegant and simple construction of the panel 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 very simple and enabling the sensitive electronic parts to be stored safely for re-fitting at the commissioning stage.

Sigma CP panels combine compact and practical styling with the programming power and connectivity required for the most complex and demanding conventional fire alarm system installations.



sounders connected to the same two core cable, greatly reducing installation time and cost on some installations. These "two wire" versions also provide the capability of zonal sounders which may be configured as zonal alarm (sounders operate only in the zone of activation), common alarm (all sounders in all zones operate) or two-stage alarm (sounders are continuous in the zone of activation and pulsing in all other zones).



Customisation

At no additional cost, Sigma CP control panels can be branded with customer logos or printed in languages other than English. Our extensive library of language artworks already contains over 10 languages with more being added constantly.

Customised colour schemes and styling is also available (subject to negotiation).



**Sigma CP
Ancillary Board
(S580)**



**Sigma CP
Sounder Board
(S461)**

Sigma CP Ancillary Board - S580

The versatility of Sigma CP conventional fire panels can be further enhanced by fitting Sigma CP ancillary boards.

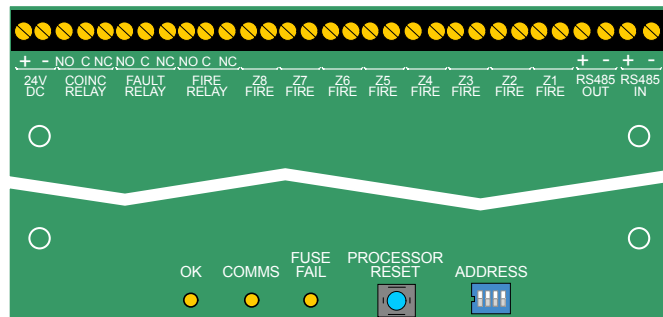
The S580 ancillary board connects to the RS485 serial bus of the control panel and provides the ability to extend fire, fault and coincidence signals to remote locations up to 1200 metres from the control panel using only two wires (four if powered by the main panel).

One ancillary board can be mounted within a Sigma CP control panel on push-in standoffs behind the main equipment chassis. Alternatively, Sigma CP ancillary boards are available in enclosures that match the styling of the control panel. Versions are available with a 750 milliamp power supply (K02750M2) or without power supply (K02000M2).

Individual volt free changeover contacts are available for each zone, common fire, common fault and coincidence operation.

Up to seven ancillary boards can be connected to each control panel allowing differing zonal information and control to be distributed around a building using a simple serial data connection.

The Sigma CP control panel automatically detects any ancillary boards that are connected at start-up and will provide a communications fault and display the address of any boards that fail or become disconnected ensuring the integrity of the system at all.



Sigma CP Sounder Board - S461

Additional sounder circuits can be added to Sigma CP panels via S461 Sounder boards.

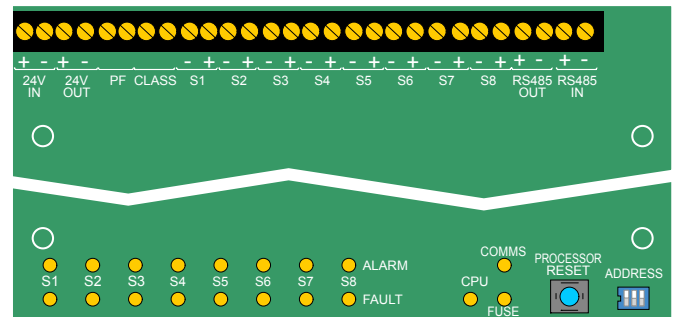
The S461 sounder board connects to the Sigma CP, two wire RS485 serial bus and provides 8 fully monitored sounder outputs that can be configured for; common alarm (all sounder outputs operate together), two-stage alarm (outputs continuous in the zone of activation and pulsing elsewhere) or zonal alarm (only the outputs associated with activated zones).

Sounder boards can be mounted within or local to the control panel or remotely at a distance of up to 1200 metres away from the control panel.

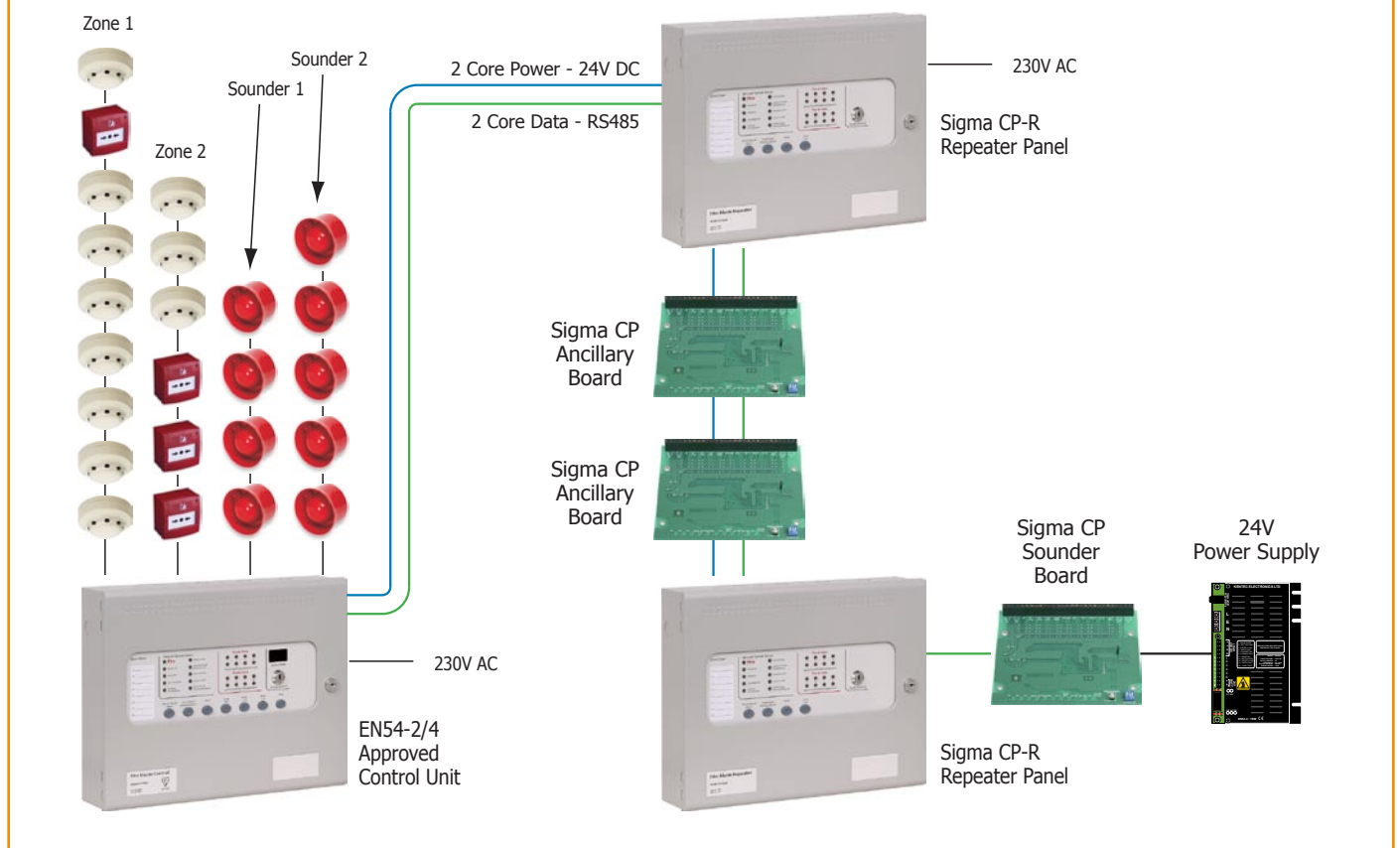
All sounder boards need an additional power supply which is capable of delivering enough power for all of the sounders connected. This power is not available from the Sigma CP control panel.

Up to seven sounder boards may be connected to a Sigma CP control panel depending on the quantity of other devices on the RS485 serial bus.

The Sigma CP panel automatically detects any sounder boards that are connected at start up and will provide a communications fault and display the address of any sounder boards that fail or become disconnected, ensuring the integrity of the system at all times.



Example System Schematic



Sigma CP feature list

Feature	Details
Number of zones	Two, four or eight
Indicators	High brightness LEDs
Display	Seven segment LED
Aux. 24V supply	500mA
Standard remote control inputs	Sound alarm, Silence alarm, Reset, Fault
Current available from PSU	3A
Sounder outputs	2 fused at 500mA
Serial port	RS485
BS5839-1 compliant	Yes
EN54-2 and EN54-4 compliant	Yes
Lockable enclosure	Yes
Multiple language support	Yes
Repeaters	Serial only, up to 7
Ancillary relay board	Zonal fire, fault and coincidence relay contacts
8 way sounder board	Zonal, two-stage or common alarm
3 year warranty	Yes
Single board construction	Yes
Easily removable equipment chassis	Yes
Language variations	Contact supplier for full list
Programmable Functions	Details
Adjustable sounder delay time	30 Seconds to 9 minutes
Sounder configuration options	Common, zonal or 2-stage alarm
Zonal sounder delay detectors only	30 Seconds to 9 minutes
Zonal sounder delay call points only	30 Seconds to 9 minutes
Coincidence input selection	Any zone can contribute
I.S Barrier selection by zone	MTL5061 galvanic isolators
Short circuit fire by zone	For compatibility with legacy systems
Non latching zones	Zone auto resets when input trigger removed
Silent zones	No sounders upon activation of selected zone
Zone input delay	30 seconds, selectable for each zone
General panel configuration	Disable fire output, general fault output, earth fault monitor, fire buzzer, pulsing Aux 24V output, resettable Aux 24V output.

Sigma CP technical specifications chart

Item	Electrical Rating	Comment
Mains supply	230V AC 50Hz +10% - 15%	Standard European mains connection
Mains supply fuse	1.6 Amp (F1.6A L250V)	Replace only with similar type
Power supply rating	3 Amps total incl. battery charge 28V +/- 2V	
Maximum ripple current	200 millivolts	
Maximum battery size (M2 enclosure)	Two 12V 7Ah sealed lead acid	
Battery charge voltage	27.6V DC nominal (temp. compensated)	
Battery charge current	0.7A maximum	Modulated DC
Battery fuse	20mm, 3.15A glass	Replace only with similar type
Current draw in mains fail (2 zone)	65 milliamps	
Current draw in mains fail (4 zone)	75 milliamps	
Current draw in mains fail (8 zone)	93 milliamps	
Current draw in alarm cond. (2 zone)	100 milliamps	Excluding sounders
Current draw in alarm cond. (4 zone)	210 milliamps	Excluding sounders
Current draw in alarm cond. (8 zone)	550 milliamps	Excluding sounders
Maximum current draw from batteries	3 Amps	With main power source disconnected
Zone indicators	2, 4 or 8	Red LEDs via light guide
Aux 24V output	Fused at 500 milliamps with electronic fuse	200 mA max. continuous load
Sounder outputs	Two at 21 to 28V DC fused at 0.5A with electronic fuse	Voltage reversing
Sounder end of line device	10K 5% 0.25W resistor	Supplied in terminals
Zone end of line devices	6K8 5% 0.5W resistor	Supplied in terminals
Fault relay contact rating	5 to 30 V DC 1A maximum	Volt free changeover
Fire relay contact rating	5 to 30 V DC 1A maximum	Volt free changeover
Alarm relay contact rating	5 to 30 V DC 1A maximum	Volt free changeover
Remote control inputs types	Fault, Reset, , Silence alarm, Sound alarm	Contact inputs
Remote control input rating	Switched 0V via 50 ohms maximum resistance	
Languages	All western and Cyrillic characters	Contact supplier for full, up to date list
Terminal capacity	2.5mm ² solid or stranded cable	
Cabling	FP200 or equivalent	
Operating temperature range	-5 to 45 degrees Celsius	
Construction	Powder coated 1.2 millimetre mild steel	
Size (M2 enclosure)	385 X 310 X 90 millimetres	Standard size
Finish (Lid and box)	BS 00 A 05 mid grey fine texture	
Finish (controls plate and labels)	RAL 7047 light grey	
Cabinet lock	Common key	801 key
Enable controls keyswitch	Common key	901 key

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