

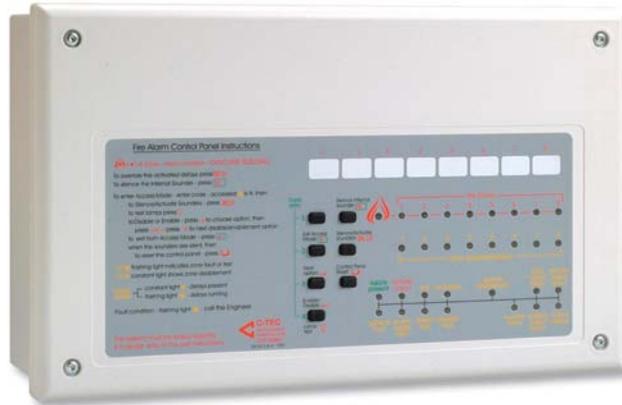


TWO-WIRE 2-8 ZONE FIRE ALARM CONTROL PANEL

C-TEC's CFP two-wire fire panel is designed to work with Apollo's AlarmSense® range of detectors, call points and sounders.

Most conventional fire systems are designed to work with two pairs of wires per zone: one pair for detection devices such as smoke detectors, heat detectors and manual call points; the other for alarm devices such as bells, sounders or strobes. By using different voltage bands for quiescent and alarm states, AlarmSense® components can be connected to the same pair of supply wires.

When powered and controlled by the CFP two-wire fire panel, this reliable technology takes all the complexity out of fire alarm system design, leading to quicker, less expensive and more flexible installation. Research shows an AlarmSense® two-wire system can achieve a 20-25% reduction of labour over a standard four wire conventional system.



- Designed to comply with EN54 parts 2 and 4.
- Available with 2, 4 or 8 AlarmSense® zone circuits (dependent on model purchased).
- Installer-friendly design accommodates easy first fix and straightforward maintenance.
- Attractive flush or surface mountable plastic lid and enclosure.
- Auxiliary remote, fire, fault and reset outputs.
- 'Class change' and alert inputs.
- Four conventional sounder circuits (for use with non-AlarmSense® sounders).
- Low quiescent current - for extended standby times with small batteries.
- Intuitive user-friendly interface.
- Multiple indicators provide a comprehensive overview of system status.
- Push button access code or keyswitch entry (dependent on model purchased) to a wide range of Engineering functions, including:-
 - Selectable zone delay facility
 - Coincidence (double-knock) facility
 - Comprehensive fault diagnostic facilities
 - Zone test facility
 - Non-latching zones facility
- System expansion connections for up to eight two-wire repeater panels and a range of Relay Output Cards (see technical specifications overleaf for further details),

A CFP two-wire fire alarm starter kit is also available containing the following:

- 1 x CFP two-wire four zone fire panel
- 1 x AlarmSense® smoke detector & base,
- 1 x AlarmSense® heat detector & base
- 2 x AlarmSense® sounders
- 1 x AlarmSense® manual call point
- 2 x 1.2 Ahr VRLA back-up batteries
- 1 x Installation and user manual



CFP 2-WIRE FIRE PANEL TECHNICAL SPECIFICATIONS

POWER SUPPLY SPECIFICATION	
Mains supply voltage	230 V \pm 10% 50/60Hz
Internal power supply	27Vd.c.Nominal
Total output current limited to	1.5 A
Supply and battery charger monitored for failure	YES
Batteries monitored for disconnection & failure	YES (batteries also protected against deep discharge - cut off approx 21V)
Max. battery size and type	2 x 12V 3.3A Hr VRLA (Valve Regulated Lead Acid) connected in series
Mains Fuse	240V 1A HRC Ceramic 20mm compliant to IEC (EN60127 PT2)
Battery Fuse	1.6A F 20mm compliant to IEC (EN60127 PT2)
ZONE CIRCUIT SPECIFICATION (for use with AlarmSense devices only)	
Number of circuits	2, 4 or 8 depending on version purchased
Max cable length per circuit	500metres
Line monitored for head out, open & short circuit faults	YES
Maximum allowable resistance (each conductor)	20 Ohms
Maximum cable capacitance (per circuit)	.27 μ F
Max. no. of detectors/manual call points per Zone	25
Max. no. of sounders per Zone	The panel's power supply is designed to give a max. output current of 1.5A. In addition to powering the sounders, this current is also used for handling short circuit faults and supplying the panel's battery charging circuit and any output relays which may be fitted. As a safe margin and to allow for these other loads, the total sounder loading for the panel should not exceed a maximum of 1.25A. Each zone circuit and each sounder circuit will support a max. sounder alarm current of 200mA. Currents in excess of this will cause the circuit's fuse to trip. The sounders should be distributed throughout the site according to the sound levels required, but the load should be distributed as equally as possible across each circuit.
AlarmSense Optical & Heat Detector Specification	Quiescent current <50 μ A; triggered voltage 9V nominal
AlarmSense Manual Call Point Specification	Quiescent current <50 μ A; triggered voltage 5V nominal
AlarmSense Sounder Specification	Quiescent current <1 μ A; Alarm current 4-16mA depending on tone and volume (note sounder current limited to 200mA per zone) Sounders operate when Zone voltage is above 20V
CONVENTIONAL SOUNDER CIRCUIT SPECIFICATION (for use with non-AlarmSense sounders)	
Number of circuits	4
End of Line Resistor Value	6800 Ohms 5% Tol. 0.25W (blue, grey, red, gold)
Each circuit monitored for open and short circuit	YES - indicated by common fault.
Alarm voltage	27V Maximum, 20V Minimum (final battery voltage)
Sounder circuit fuses	Each circuit protected by resettable fuses (200mA min. hold current; 400mA max. trip current; Approx. 50mA when tripped. Reset when faults removed)
Maximum total sounder output current to all outputs	4 x 200mA = 800mA
Maximum No. of Bells @ 25 mA	32
Maximum No. of electronic sounders @ 20 mA	40 (Sounders must be polarised)
AUXILIARY OUTPUTS	
Type	Non monitored open collector transistor.
Max. sink current	100mA each
Max open circuit voltage	27Vd.c.
Reset Output	Active during reset cycle
Remote Output	Active during any fire condition (provided all relevant Delays have expired)
Auxiliary Output	Active during any fire condition (provided all relevant Delays have expired)
Fault Output	Active when no faults are present - failsafe to o/c
24V Aux Power Output (for use with the above)	This output is protected by resettable fuses (200mA min. hold current; 400mA max. trip current; Approx. 50mA when tripped. Reset when faults removed)
AUXILIARY INPUTS	
Class Change (makes sounders sound continuously)	Connect to 0V to trigger (Non-latching)
Alert (makes sounders pulse intermittently)	Connect to 0V to trigger (Non-latching)
DIMENSIONS	
Physical size and weight	Size = 380 x 235 x 96mm appox; Weight = 1.75kg (without batteries)
SYSTEM ADD-ONS - system expansion connections are provided for the following optional add-ons:-	
UP TO EIGHT CFP760 TWO-WIRE REPEATER PANELS	One CFP761 Network Driver Card fitted at the Master panel allows it to communicate with the Repeater network. Each Repeater provides access to access levels 1 and 2.
ONE OF THE FOLLOWING RELAY OUTPUT CARDS	The CFP762 Relay Output Card which provides four volt free relay outputs (reset, fault, aux. fire and remote) or The CFP763 Relay Output per Zone Card which provides the same relay outputs as above plus an additional eight relays for output per zone facilities.

THE FOLLOWING '4-WIRE' CONVENTIONAL FIRE PANELS ARE ALSO AVAILABLE

- THE CFP STANDARD FIRE PANEL (TO EN54-2/4)
- THE CFP LPCB APPROVED FIRE PANEL (TO EN54-2/4)

PLEASE CONTACT YOUR DISTRIBUTOR FOR DETAILS