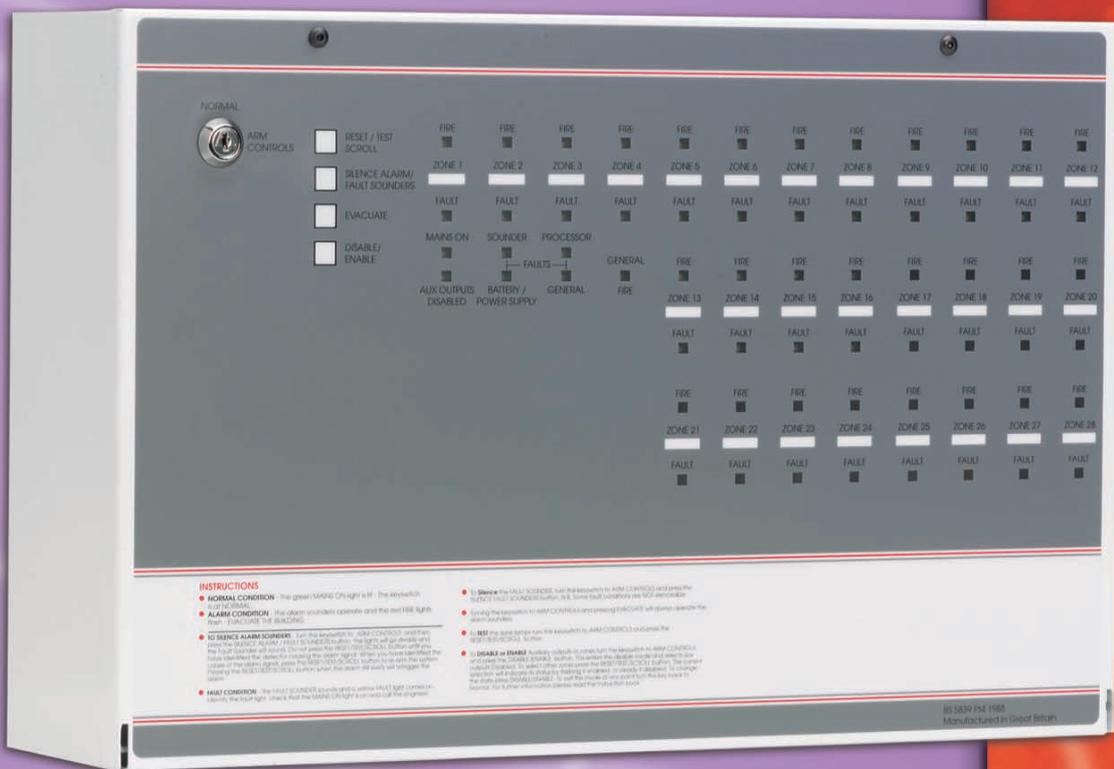


# MFP range



of 4-28 zone  
microprocessor-based  
fire alarm control panels





# MFP RANGE

## of 4-28 zone microprocessor-based fire alarm control panels



### MFP Range Features

- Fully compliant with BS5839 Part 4.
- Microprocessor based design.
- Robust metal lid and metal back box.
- Attractive easy-to-clean polycarbonate front label.
- Four sounder circuits and head out (detector removed) fault indication provided as standard.
- Expandable from 4 to 28 zones in 4 zone steps.
- Heavy-duty base connections.
- Ultra-bright, long-life LED indicators.
- Built-in 24V power supply and battery charger.
- End of line units included (one per zone).
- Compatibility with virtually all known conventional smoke and heat detector ranges.
- True three wire operation of sounder and detector circuits (0v is common) for considerable cost savings on installation.
- Separate indication of open circuit fault, short circuit fault, head out fault, sounder fault and battery/power supply fault.
- Non-latching 'class change' sounder input, latching fire and non-latching fault outputs (available via optional MFPX expansion loom).
- Fault buzzer mute facility.
- Space available for the rated capacity of VRLA batteries.
- 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 cross connection to other panels.
- True battery monitoring circuit.
- Wide range of engineer facilities including one man detector test, sounder walk test, sounder isolate, sounder delay and auxiliary isolate.
- Easy to follow installation instructions and log book.
- 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).
- Multilingual variants available (subject to quantities).

C-TEC's MFP Range of conventional fire alarm control panels fills the gap between low cost, low specification fire alarm control panels and high price, high specification equipment.

Expandable from 4 to 28 zones in four zone steps, the MFP's balance of features and competitive pricing makes it ideal for a variety of applications, ranging from new installations to upgrades and extensions of new systems.

Easy to follow wiring instructions are printed adjacent to the terminals of all variants and a lift-off lid guarantees an easy first fix and straightforward maintenance.

Fully compliant with BS 5839 Part 4 and the head removal requirements of BS 5839 Part 1, a variety of 'add on' boards are also available, converting the MFP into one of the most sophisticated fire panels available.



### Power Supply Specification

	MFP4, MFP8, MFP12	MFP16, MFP20, MFP24, MFP28
Mains supply voltage	230 Va.c.±10% 50/60Hz	230Va.c.±10% 50/60Hz
Internal power supply	27Vd.c.	27Vd.c.
Total output current limited to	1.4A @ 240 Va.c.	3A @ 240 Va.c.
Supply and battery charger monitored for failure	Yes	Yes
Batteries monitored for disconnection and failure	Yes	Yes

### Detector Circuit Specification

Number of circuits	4 (MFP4, extendable to 12) 8 (MFP8, extendable to 12) 12 (MFP12, non-extendable)	16 (MFP16, extendable to 28) 20 (MFP20, extendable to 28) 24 (MFP24, extendable to 28) 28 (MFP28, non-extendable)
Line monitored for open and short circuit faults	Yes (short circuits can be disabled for each zone)	Yes (short circuits can be disabled for each zone)
Line monitored for head out/detector removed faults	Yes	Yes
End of line device (provided)	Miniature circuit board	Miniature circuit board
Detector continuity diodes	Silicon 1N4001 or Schottky type	Silicon 1N4001 or Schottky type
Call point resistor value	470 - 680 Ω 0.5W	W 470 - 680 Ω 0.5W
Max. number of smoke detectors per zone	20 (max detector current 2mA)	20 (max detector current 2mA)
Max. number of manual call points per zone	No limit	No limit

### Sounder Circuit Specification

Number of circuits	4	4
End of line resistor value	6800 Ω 5% Tol. 0.25 W	6800 Ω 5 % Tol. 0.25 W
Line monitored for open and short circuit faults	Yes	Yes
Outputs fused at	1A	1.6A
Maximum total output current to all outputs	1.4A	3A
Maximum number of bells @ 25mA	56	120
Maximum number of electronic sounders @ 20mA	70	150
Auxiliary volt free relay contacts	1A 30Vd.c max (do not connect mains voltages)	1A 30Vd.c max (do not connect mains voltages)

### Auxiliary Inputs / Outputs

Available via optional MFPX expansion loom (not supplied)	Class change input; Fire 1, Fire 2 and Fault outputs. These open collector outputs have a max. sink current of 100mA each and are typically used to drive relays (such as C-TEC's BF376) to control ventilation systems, gas valves and door release systems (do not use the panel's power for door release systems as this will drastically reduce battery stand-by time).	
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### Fuses (to IEC - EN60127 Pt2)

Mains terminal block	400mA T 20mm	630mA T 20mm
Sounder outputs F1,F2,F3,F4	1A F 20mm	1.6A F 20mm
Auxiliary output F6	1A F 20mm	1A F 20mm
Battery fuse F5	1.6A F 20mm	3A F 20mm

### Panel Indicators and Controls

External indicators	Mains On, General Fire, Zone Fire, Zone Fault (indicates S/C, head out, O/C & zone disabled) Sounder Fault, Processor Fault, Battery/Power Supply Fault, Aux. Outputs Disabled; Fault Sounder (indicates fault, silenced fire and delayed alarm sounders).
Internal indicators	One Man Detector Test; Sounder Walk Test
External controls (keyswitch operated)	Reset/Test Scroll; Silence Alarm/Fault Sounders; Evacuate; Disable.
Internal controls	One Man Detector Test; Sounder Walk Test; Sounder Isolate; Sounder Delay; Revert to short = fire; Non-latching zones

### Dimensions

Approx. dimensions of enclosure (W x H x D)	405 x 267 x 92mm	521 x 334 x 140mm
Battery volume dimensions (W x H x D)	310 x 110 x 67mm	350 x 110 x 105mm
Weight (without batteries)	5.0 Kg	9.5 Kg

### Repeater Specification

Max. number of repeaters	One repeater transmitter PCB (part no. FF596T) fitted at the main panel allows the connection of up to eight monitored MFP Repeaters.
Repeater wiring	Two wires (power and data). Star or daisy chain wiring.

### Battery Stand-By Times

	MFP4	MFP8	MFP12	MFP16	MFP20	MFP24	MFP28
Quiescent current	45mA	60mA	75mA	90mA	105mA	120mA	135mA
Max. load current	1.4A	1.4A	1.4A	3A	3A	3A	3A
Stand-by time in hours using 2.0 A hr batteries	40	30	25	20	18	16	14
Stand-by time in hours using 2.6 A hr batteries	55	40	35	30	25	22	19
Stand-by time in hours using 6.0 A hr batteries	130	100	80	65	55	50	45
Stand-by time in hours using 10.0 A hr batteries	220	165	130	110	95	80	75
Stand-by time in hours using 12.0 A hr batteries	260	200	160	130	110	100	85

The quiescent currents are given for the following conditions - no mains supply, fault beeper active, no aux. output connections, end of line devices and resistors only fitted to detector and sounder loops. The battery stand-by times are guidelines only based on the above conditions. Additional loads that increase the quiescent current in the normal state and sounder loads must be considered when calculating stand-by time. Batteries in poor condition greatly reduce stand-by time.

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## MFP Range Panels

FF504	MFP 4 zone microprocessor fire panel, extends to 12 zones	FF501Z	MFP 4 zone extender pcb kit (use to increase number of zones on MFP master panels)
FF508	MFP 8 zone microprocessor fire panel, extends to 12 zones	FF596	MFP Repeater panel, 8 zones, extends to 28 zones (batteries not required)
FF512	MFP 12 zone microprocessor fire panel, does not extend	FF596R	MFP Repeater, 8 zone extender pcb kit. Use to increase number of zones on MFP Repeater panels
FF516	MFP 16 zone microprocessor fire panel, extends to 28 zones	FF596T	MFP Repeater transmitter CB kit. One required per repeater system (fit at master panel).
FF520	MFP 20 zone microprocessor fire panel, extends to 28 zones		
FF524	MFP 24 zone microprocessor fire panel, extends to 28 zones		
FF528	MFP 28 zone microprocessor fire panel, does not extend		

## MFP Range Ancillaries

FF574X	MFPX expansion loom and terminals
FF502P	Universal 4 zone monitored sounder extender kit
FF385	Flush bezel for MFP4, MFP8, MFP12 and MFP Repeaters
FF387	Flush bezel for MFP16, MFP20, MFP24 and MFP28

## Battery Packs

BC283/2	24V 1.2 Amp Hr battery pack
BC284/2	24V 2.1 Amp Hr battery pack
BC285/2	24V 2.8 Amp Hr battery pack
BC286/2	24V 7.0 Amp Hr battery pack

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