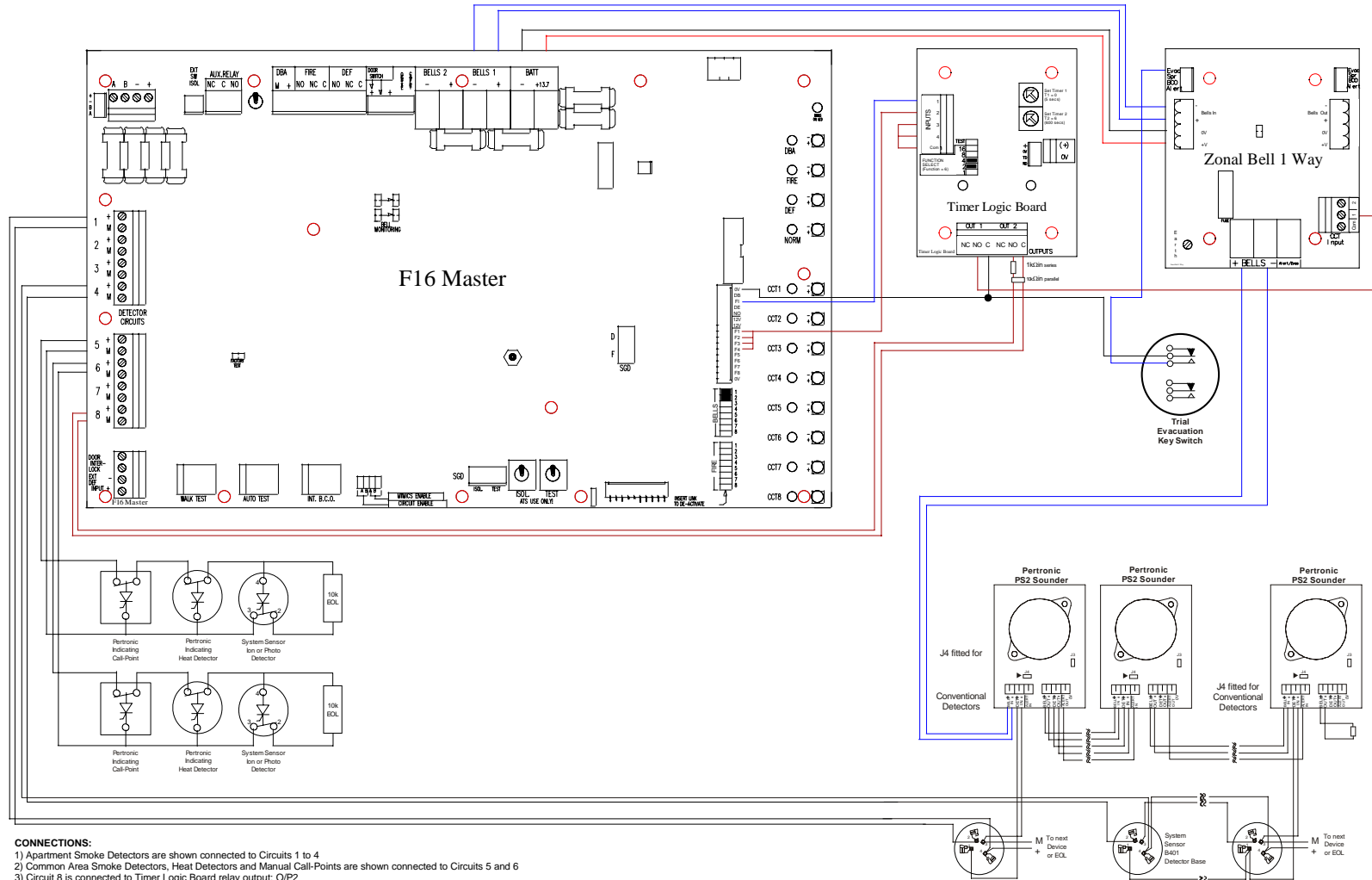


F16 Conventional Panel

Type 5: Delayed with Timer Logic Board and Zonal Bell Board

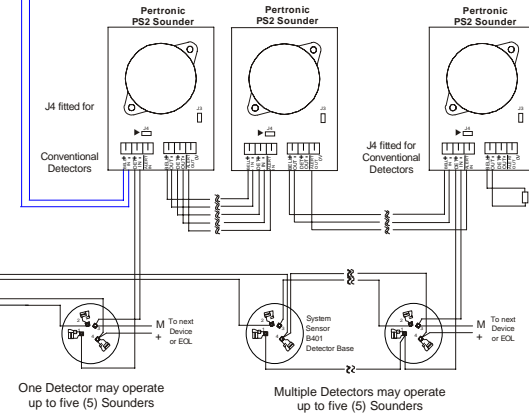


CONNECTIONS:

- 1) Apartment Smoke Detectors are shown connected to Circuits 1 to 4
- 2) Common Area Smoke Detectors, Heat Detectors and Manual Call-Points are shown connected to Circuits 5 and 6
- 3) Circuit 8 is connected to Timer Logic Board relay output: O/P2
- 4) Timer Logic Board is set to Function 6 : Delay Before Relay Activation
- 5) Timer Logic Board Timer 1 is set to 0 : 5 second delay
- 6) Timer Logic Board Timer 2 is set to 6 : 600 second delay
- 7) Timer Logic Board Input 1 is connected to the F16 'Common Fire' open-collector output
- 8) Timer Logic Board Input 2 is connected to each of the F16 FET open-collector outputs configured for 'Indicator Only' mode.
- 9) Zonal Bell Board Bells are connected to the Panel 'Bell' output
- 10) Zonal Bell Board Circuit Enable 1 is connected to the F16 'Common Fire' open-collector output

OPERATION:

- 1) When a Smoke Detector on Circuit 1 - 4 operates:
 - (a) Sounder(s) within the affected apartment operate
 - (b) the Circuit Input triggers
 - (i) the 'Fire', 'Bell1' and 'Bell2' relays remain inactive
 - (ii) the Circuit FET operates
 - (iii) Timer Logic Board Input 2 is activated - the TLB IP2 operates while the Smoke Detector remains active
 - (iv) if the Smoke Detector remains activated for the pre-determined period (600 seconds):
 - (a) Timer Logic Board Relay 2 operates after Timer 2 times out
 - (b) Circuit 8 is activated, triggering the Brigade outputs and the 'Common Fire' FET
 - (c) Timer Logic Board Input 1 is activated
 - (d) after Timer 1 times out, the Zonal Bell Board is activated and all Sounders activate (General Alarm)
 - (v) if the Smoke Detector resets before the pre-determined period (600 seconds) times out:
 - (a) Timer Logic Board Input 2 resets and there is no further activity
- 2) When a Heat Detector or Manual Call-Point on Circuit 1 - 4 operates:
 - (a) the Circuit Input triggers
 - (i) the 'Fire', 'Bell1' and 'Bell2' relays activate
 - (ii) the Circuit FET does not operate, therefore the Timer Logic Board Input 2 remains inactive
 - (iii) Timer Logic Board Input 1 is activated
 - (a) after Timer 1 times out, the Zonal Bell Board is activated and all Sounders activate (General Alarm)
- 3) When Circuit 5 or 6 operate - Manual Call-Point, Heat Detector or Smoke Detector:
 - (a) the Circuit Input triggers
 - (i) the 'Fire', 'Bell1' and 'Bell2' relays activate
 - (ii) the Circuit FET does not operate, therefore the Timer Logic Board Input 2 remains inactive
 - (iii) Timer Logic Board Input 1 is activated
 - (a) after Timer 1 times out, the Zonal Bell Board is activated and all Sounders activate (General Alarm)



CIRCUIT ASSIGNMENT GUIDE			
Link	Apartment (Smokes)	Apartment (Heats & MCPs)	Common Area (Smokes, Heats & MCPs)
Configuration	Indicator Only	Normal	Normal
Bells	IN	OUT	OUT
Fire	IN	OUT	OUT

Note that this Table is indicative only
- settings will vary according to system requirements.

Title:	F16 Conventional Panel, Type 5 Delayed using Timer Logic and Zonal Bell Board
Issue Number:	Issue 1.2
Date:	02 September, 2005
Drawing:	G M Tustin
Checked:	B A Pells