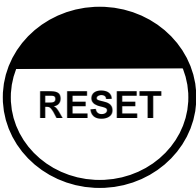


# FIRE FIGHTER'S GUIDE



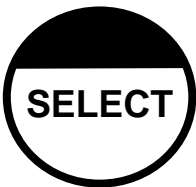
- 1. SILENCING BELLS**  
Press "SILENCE" key once.
  - ALL flashing red "ALM" LEDs will go steady
  - Local Bells will be silenced
  - The internal sounder will be silenced if no fault condition exists.
  - **Any new alarm will cause the bells to ring again and the appropriate zone alarm LED to flash.**



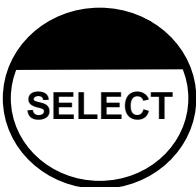
- 2. RESETTING ALL ZONES IN ALARM**  
Press "SELECT" key, if required, until all green "SEL" LEDs are OFF, then press "RESET" key once.
  - ALL flashing or steady red "ALM" LEDs turn OFF.
  - Zone(s) still in alarm will be indicated again.



- 3. ISOLATING ALL ZONES IN ALARM**  
Press "SELECT" key, if required, until all green "SEL" LEDs are OFF, then press "ISOLATE" key once.
  - ALL flashing red "ALM" LED indicators will go steady and amber "ISO" LEDs will turn ON.
  - **DE-ISOLATING ZONE WILL RE-ACTIVATE BELLS**



- 4. ISOLATING SELECTED ALARM ZONE**  
Press "SELECT" key until the required zone's green "SEL" LED is ON, then press "ISOLATE" key once.
  - Amber "ISO" LED will turn ON.
  - **IF A FALSE ALARM, CALL THE MAINTENANCE COMPANY RESPONSIBLE FOR THE FIRE ALARM SYSTEM.**



- 3. RING SILENCED BELLS**  
Press "SELECT" key until a ZONE IN ALARM is SELECTED. (Green "SEL" LED is ON)

If amber "ISO" LED is ON, press "ISOLATE" key ONCE.  
If amber "ISO" LED is OFF, press "ISOLATE" key TWICE.



- Amber "ISO" LED indicator will be OFF.
- Bells are operated.

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**F08 FIP**  
**OPERATOR'S MANUAL**

F08 PRODUCT MANUAL  
DOCUMENT: LT0054 (A5 Bound)  
DOCUMENT: LT0080 (A4 Loose)

Issue 3.05; 24 March 2006

**- APPROVALS -**

F08 PANEL APPROVALS TO AUSTRALIAN STANDARDS AS1603.4 1987 AMDT 1 & 2  
SSL LISTING NUMBER afp380

The F08 Fire Indicator Panel is manufactured for

**Tyco Services Fire & Safety**  
47 Gilby Road  
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AUSTRALIA

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## INSTALLATION DETAILS

### 3. WARNING –

The F08 is approved to AS/NZS 3548 Class A. In a domestic environment it may cause radio interference in which case the user may be required to take adequate measures.

For your reference please complete the following information on the F08 Fire Indicator Panel supplied.

PANEL TYPE	F08
PANEL SUPPLIED BY	
PANEL SERIAL NUMBER	
PANEL DATE OF MANUFACTURE	
INSTALLED BY	
AS INSTALLED DRAWING NUMBER	ISSUE:
COMMISSIONED DATE	
CONTRACT / JOB NUMBER	
OWNER / ADDRESS	
OWNERS REPRESENTATIVE	
TELEPHONE	B.H.                      A.H.
SERVICE COMPANY	
SERVICE CONTACT	
TELEPHONE	B.H.                      A.H.

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<b>AMENDMENT LOG</b>
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ISSUE	DATE	AMENDMENT	ECN
2	04/05/92	Revised and upgraded from Document 696-002 (Issue 1 Amdt 1) to VIGILANT Document LT0054.	
2.0	27/05/98	Converted to WORD format.	
3.0	27/10/98	Modified for V3.00 software, 15V MCP and M614 detectors. New circuit delay types added. Programmable mode for zone open collector outputs to override zone isolate. 5 second reset time for new M614 detector types.	2769
3.01	03/12/98	Appendix A Approved Detectors Revised.	ECS543
3.02	31/07/02	Prefix and Appendix A revised	3322
3.03	01/03/05	Appendix A – added 614CH, 614I & 614P	3635
3.04	28/10/05	Appendix A – added System Sensor detector 885WP-B	ECS1181
3.05	24/03/06	Appendix A – added 614T	3731

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# **1 SYSTEM DESCRIPTION**

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## 1.1 OVERVIEW

The F08 Fire Indicator Panel (FIP) is a compact, self-contained fire indicator panel, which performs the functions of the Control and Indicating Equipment (CIE), as specified by the Australian Standard AS1603.4 Automatic Fire Detection and Alarm Systems.

It is microprocessor based and provides a maximum of eight detection zones using approved compatible actuating devices. A general view of the F08 Fire Indicator Panel, illustrating its various components, is shown in Figure 1.1.

The fire alarm system consists of fire detectors and/or manual call points installed in various locations throughout the building, or area to be protected, linked to the F08 FIP.

When any detector or manual call point is operated, a signal is received by the FIP. The F08 panel reacts to the alarm condition as programmed, and may provide visual and audible indications. Other signals to remote functions may also be generated. Examples include:

- a) Mechanical ventilation plant shutdown
- b) Local Alarm
- c) Alarm to Fire Control Station.

The F08 fire indicating panel consists of:

- a) A Wall-Mounting Cabinet
- b) One Processor Main board, including Power Supply/Charger
- c) One Display/Control Board.

The panel is a standard part that can be interchanged in the field. The door of the panel contains display electronics and controls, whilst the rear of the cabinet contains processing electronics, and input and output terminals.

The F08 FIP provides a range of programmable options. These are: disable unused circuits; latching or non-latching circuits; ten types of circuit timing delays, including AVF and 1668 control; 'mapping' of zones to outputs; and ancillary output supervision.

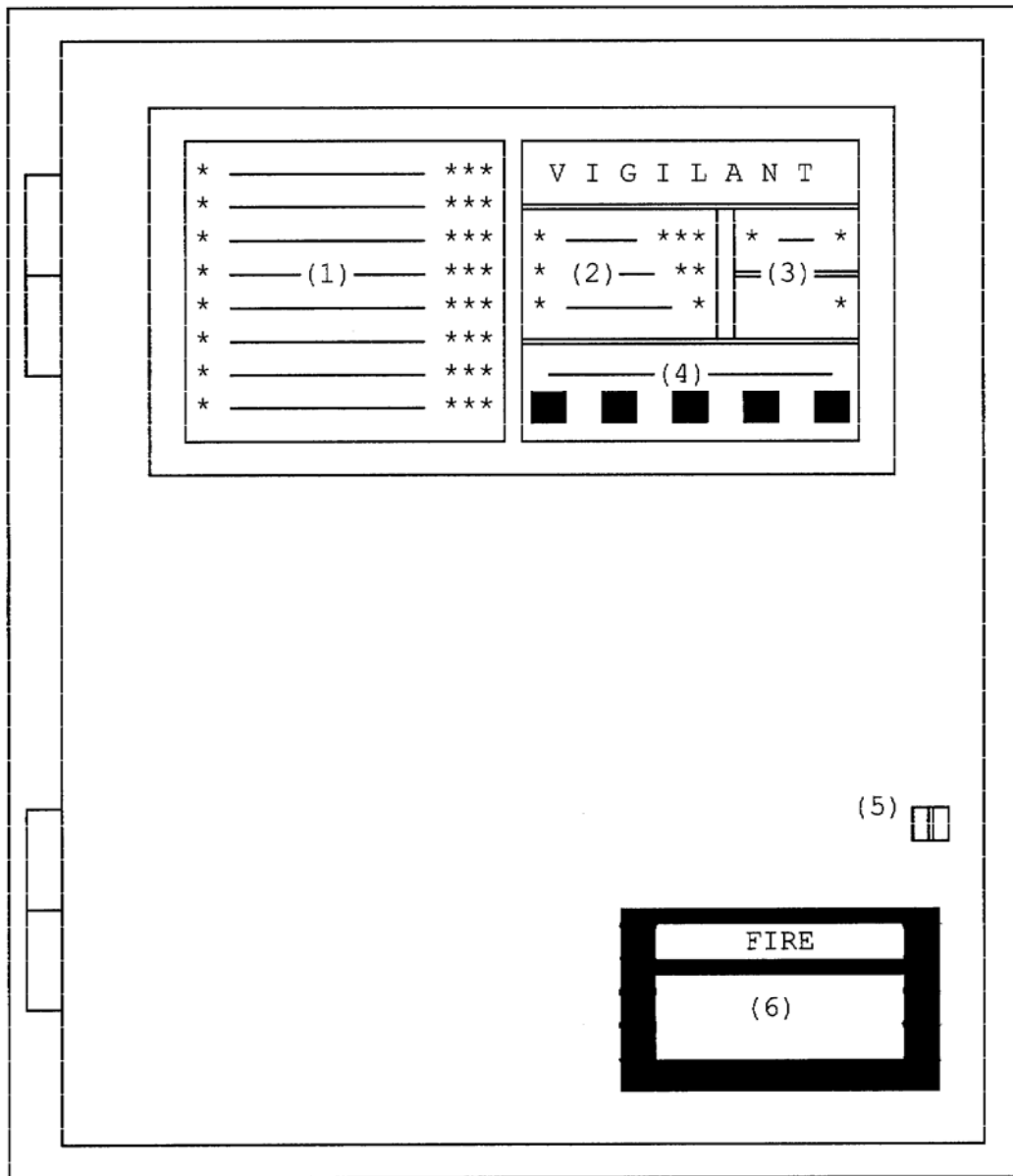
**NOTE:** If your requirements have changed, the F08 FIP will require reprogramming, so please consult your installation or service company.

The following F08 product manuals are available:

**Volume 1, F08 Operator's Manual**, provides a complete guide to the operation, and maintenance of the F08 Fire Indicator Panel, according to Australian Standards AS1603 Part 4. This manual is provided as standard with the F08 FIP. Part Numbers are LT0080 in A4 size, or LT0054 in A5, that will fit inside the F08 FIP.

**Volume 2, F08 Technical Manual**, provides complete technical details on the F08 system and components, according to Australian Standards AS1603 Part 4, for servicing purposes. Part Number is LT0081.

**Volume 3, F08 Installation Manual**, provides complete installation and programming instructions for the F08 system. Part Number is LT0082.



- LEGEND
- (1) Zone Display )
  - (2) Output Display )
  - (3) Battery/Charger ) VIEWED THROUGH CABINET WINDOW
  - and Mains Status Display )
  - (4) Command Keypad )
  - (5) Cabinet Key Lock
  - (6) Manual Call Point

**Figure 1.1**  
F08 Fire Indicator Panel

## 1.2 DISPLAY PANEL

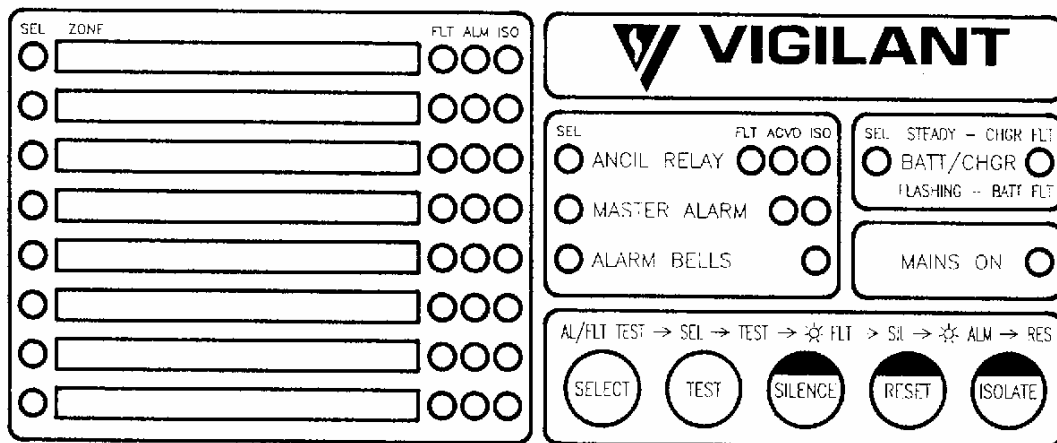
### 1.2.1 GENERAL

The F08 FIP display panel and keypad is shown in Figure 1.2.

The LEDs on the display show the status of each alarm zone circuit (AZC), the power supply and the outputs.

An internal sounder (buzzer) is used to alert the operator of certain conditions. By pressing the control keypad the operator can perform such functions as: silence the bells; isolate zones or outputs; test circuits; test the battery; test outputs; and reset zones when the fire or fault condition has been removed.

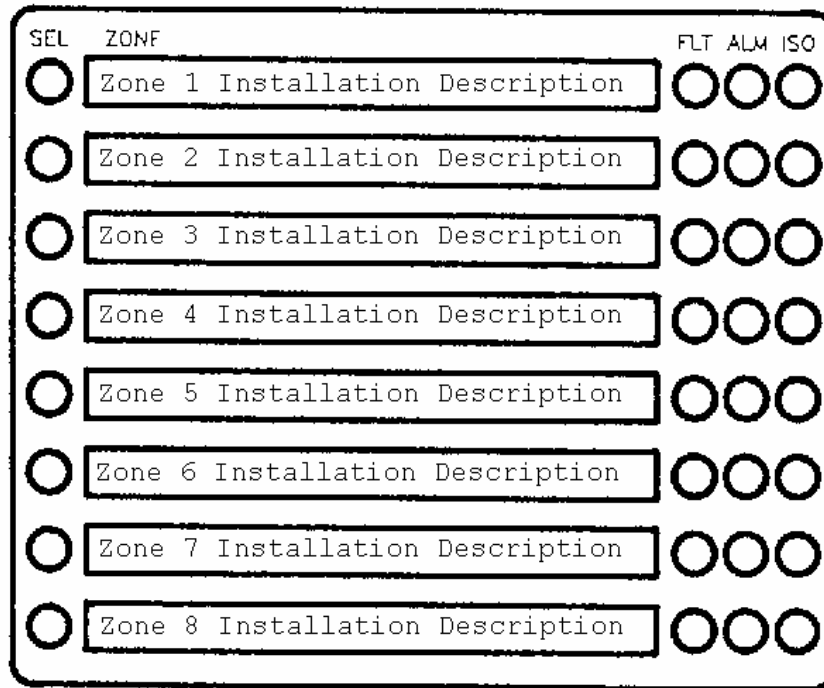
A title written next to the Green Select LED of each zone tells personnel which area the fire is in.



**Figure 1.2**  
F08 FIP Keypad & Display Panel

### 1.2.2 ALARM ZONE INDICATORS

The 8 zone LED indicators are at the left-hand side of the display. Each zone has four indicators and space for an installation dependent identification text. Figure 1.3 shows the eight zone block.



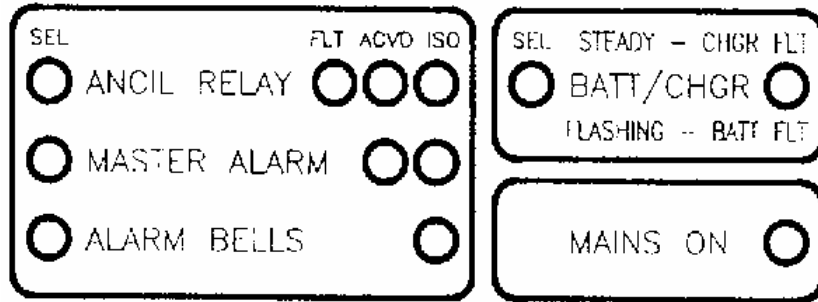
**Figure 1.3**  
F08 Alarm Zone Indicators

The LED indicators may be unlit, flashing, or lit steadily. Unlit LEDs indicate normal operation. The meanings of indications are:

- |     |                           |   |
|-----|---------------------------|---|
| (a) | Green "SEL" LED steady:   | Zone has been SELECTED.   |
| (b) | Green "SEL" LED flashing: | Zone has been SELECTED as AUTO-RESET or Zone test has been activated. |
| (c) | Amber "FLT" LED steady:   | FAULT in zone.  |
| (d) | Red "ALM" LED flashing:   | New ALARM in zone.  |
| (e) | Red "ALM" LED steady:     | Acknowledged ALARM in zone.   |
| (f) | Amber "ISO" LED steady:   | Zone ISOLATED.  |
| (g) | Amber "ISO" LED flashing: | Zone in AUTO-RESET mode.  |

### 1.2.3 PANEL STATUS & OUTPUT INDICATORS

The two banks of panel status and common output LED indicators (located on the right-hand side of the display) indicate the general state of the system with respect to the function described alongside.



**Figure 1.4**  
F08 FIP Status & Common Output LED Indicators

The LED indicators may be unlit, flashing, or lit steadily. In normal operation all LEDs are unlit, with the exception of the green "MAINS ON" LED indicator which is steadily lit. The meaning of the indications are:

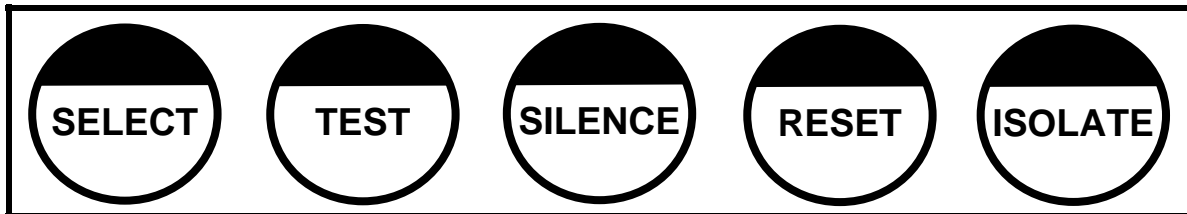
- |     |                         |   |
|-----|-------------------------|---|
| (a) | Green "SEL" LED steady: | Output or Battery/Charger is SELECTED.  |
| (b) | Amber "FLT" LED steady: | FAULT in Ancillary Circuit Output.  |
| (c) | Red "ACVD" LED steady:  | Output Activated. If output is isolated, the output relay will not be operated. |
| (d) | Amber "ISO" LED steady: | Output ISOLATED.  |
| (e) | Amber "CHGR/BATT FLT":  |   |
|     | - LED Steady:           | FAULT in Battery Charger Output.  |
|     | - LED flashing:         | Battery FAULT.  |

### 1.2.4 INTERNAL SOUNDER

Steady Tone	:	Zone/System Fault
Fast Pulsing Tone	:	Panel Fault
Pulsing Tone	:	Zone Alarm
Long Single Beep	:	Keypad Illegal Keypress
Short Single Beep	:	Keypad Valid Keypress

## 1.3 COMMAND KEYS

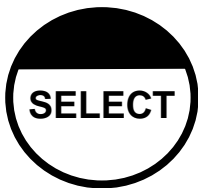
There are five keypad switches (keys) on the F08 control panel. These are from left to right, SELECT, TEST, SILENCE, RESET and ISOLATE.



**Figure 1.5**  
F08 FIP Command Keys

The sounder will give a short beep whenever a key is pressed, unless the key press is not valid. A longer duration error beep will sound to draw attention to certain illegal key presses.

Unless indicated otherwise, all key operations require momentary presses of the control keys. The functions of each key are:

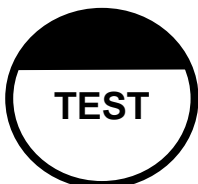


From **GLOBAL** mode (ie no "SEL" LED indicators ON), pressing this key will:

- (a) Select the first non-isolated zone in alarm or fault (if no alarm); OR
- (b) Select the last selected zone, output or battery/charger, if the FIP had automatically timed out to global mode; OR
- (c) Select zone 1.

Each successive press of the "SELECT" key will step the green "SEL" indicator to the next zone, then each output, then battery/charger, and finally back to global mode. When a zone is selected; a test, reset, or isolate operation may be performed on that zone. When an output is selected; an output test and mapping display operation may be performed. When battery/charger is selected; a battery test may be performed.

The F08 FIP will automatically TIME-OUT to GLOBAL mode if no key is pressed for four (4) minutes and there are no alarms or faults on non-isolated zones.



In GLOBAL mode pressing the "TEST" key will initiate a system test.

With a zone, output, or battery selected, pressing this key will initiate a zone test, output test, or battery test respectively.

## COMMAND KEYS (CONTINUED)



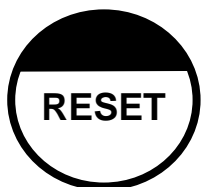
This key is for FIRE FIGHTER'S use.

In an ALARM condition pressing this key will acknowledge all zones in alarm. It will also de-activate the "ALARM BELLS" output and silence the pulsing-tone alarm sounder.

In a FAULT condition pressing this key will silence the steady-tone fault sounder.

During a zone fault test pressing this key will silence the fault sounder and step the test to alarm test. For latching zones a double press will silence the sounder and hold the zone test in fault.

During a zone alarm test pressing this key will de-activate the "ALARM BELLS" output, silence the sounder and hold the zone test in alarm.



This key is for FIRE FIGHTER'S use.

In a GLOBAL ALARM condition pressing this key will RESET all zones in alarm.

When a zone is selected pressing this key will perform an individual zone RESET for both alarm and fault conditions.

When "ANCIL RELAY" is selected pressing this key will reset a supervision fault.

When "BATT/CHGR" is selected pressing this key will terminate any battery test and reset any battery fault indication.

This key is for FIRE FIGHTER'S use.



In a GLOBAL ALARM condition pressing this key will ISOLATE all zones in alarm.

When a zone or output is selected pressing this key will toggle the zone or output between ISOLATE and NON-ISOLATED states.  
Note : The "MASTER ALARM" output cannot be isolated.

When the last enabled zone is isolated, the fault buzzer and fault relay will turn on.

The internal sounder provides the following audible tones in order of priority:



---

## **2 SPECIFICATIONS**

---

## **2.1 SYSTEM**

### **2.1.1 CAPACITY**

Maximum Input Circuits                    8

### **2.1.2 OPERATING CONDITIONS**

Ambient temperature Range               -5°C - 45°C

Maximum Relative Humidity               95% at 40°C    Non-Condensing

### **2.1.3 DETECTOR CIRCUITS**

Cable Termination Size                   0.75 to 2.5 Square Millimetres

Voltage with EOL                         22.5 to 22.80Vdc (22.7Vdc nom)

Loop Resistance                         0 to 30 Ohm, up to 760Ω for hard contacts only.

Quiescent Detector Load                0 to 4.0mA

Alarm Current Limit                       15.1mA -1.5/+1.1mA

High Current Pulse                       47mA ± 3.0mA

AZC Input Time Delays                   - Default Recognition Delay: 2 sec  
- Alarm Verification Delay:    16 sec  
- AVF Acceptance Period:      150 sec  
- Flow Switch Alarm:           \* 20 sec

- **Note\*:**            Detector must be in continuous  
                              alarm for entire delay period for an  
                              alarm to be registered on the F08.

### **2.1.4 OUTPUTS**

Extended Alarm                            8 Open Collector "AUX 1" to "AUX 8"  
-            Must be isolated from external equipment.  
-            An open collector output may be isolated when  
                              the corresponding zone is isolated depending  
                              on programming.

Brigade Outputs                            4 Changeover Relays  
"STANDBY", "FAULT", "ISOLATE", & "ALARM"

Ancillary Output                           2 Changeover Relays  
"ANCIL" & "ALARM"

**OUTPUT (CONTINUED)**

Supervised Output	The Ancillary Output "ANCIL" can be wired for supervision of the load and the wiring to it.
Output Supplies	0 VDC +VB - Battery Backed +VNB - Non Battery Backed
Bells Output	1 switched VB "BELLS" 1A max load, fused : 1.6 A

**2.2 PHYSICAL**

Panel Dimensions (mm)	555 (H) x 380 (W) x 124 (D) (Excludes MCP)
Panel Shipping Weight	12 kg (Excludes Batteries)
Battery Space	Typically 9 AHr (Depending on brigade transmission device)
Cabinet Material	1.2 mm Zintex
Cabinet Construction	Welded cabinet, Hinged inner & outer doors
Cabinet Finish	Baked Epoxy painted
Cabinet Colour	Cream Wrinkle BFF998 CW
Cabinet IP Rating	IP51
Mounting	Wall mount (4 x 7 mm OD Holes)
Cabinet Access	Outer door left hinged. L003 key.
Cabinet Earthing	M4 Stud located adjacent to mains switch.

## 2.3 ELECTRICAL

Mains Supply	240 VAC, +6% -10%, 50Hz, 100 VA (0.4A) MAX
VB & Charger Voltage	27.3* VDC nominal at 20°C Battery-Backed Output
VNB Output	27.9* VDC nominal at 20°C Non Battery-Backed
* Temperature Compensation	-36 mV per °C
Current Limit	2.5 Amp to 3 Amp (DC)
Total Allowable Load	2.0 Amp (DC)
Bells & Ancillary Load	1.5 Amp (DC)
Internal Battery	24 VDC (nominal) Sealed lead-acid. Recommended: Sonnenschein Dry Fit 2 x A212/5.75
Quiescent Current	117mA - Includes EOL termination, no detector load. - Excludes Output Loads
Alarm Current	170mA (TWO ZONES IN ALARM) - Excludes Output Loads
Standby relay drop out	20.35 to 21.95 Volts

## 2.4 INDICATORS

Zone Indicators	8 red LEDs for alarm indication 8 green LEDs for zone select indication 16 amber LEDs for fault and isolate indication
Common Status	5 green LEDs for Output or Battery/Charger Select & Mains On
Aural Indicators	Piezoelectric Alarm, Fault, Key Click, Key Error Sunder

## 2.5 SWITCHES

On Display Panel	SELECT, TEST, SILENCE, RESET, ISOLATE pushbuttons.
On Main Panel	PROGRAM pushbuttons.

---

## **3 INTERPRETING THE DISPLAYS**

---

## **3.1 SYSTEM NORMAL**

The Fire Indicator panel is normal when it is not sensing any alarms or faults in the system wiring, the mains power supply is operating normally and the battery is at normal charge voltage.

This is indicated on the panel by the following:

The green "MAINS ON" indicator is illuminated.

All other visual indicators are off and the audible sounders are silent (and not isolated).

## **3.2 RESPONDING TO ALARMS**

WHEN ANY RED ZONE "ALM" LED INDICATOR IS FLASHING, PERFORM THE FOLLOWING OPERATIONS:

- STEP 1**      **DO NOT PRESS "SILENCE", "RESET" OR "ISOLATE" KEYS ON THE PANEL** until the Fire Brigade arrives.
  
- STEP 2**      INVESTIGATE THE ALARM (if possible by Fire Safety Crew) and implement appropriate fire control and extinguishing measures.  
The **FIRE SEARCH AREA** will be indicated by the red flashing "ALM" LED indicator(s) adjacent to the location description of the alarm zone(s).
  
- STEP 3**      Evacuate the area if necessary.
  
- STEP 4**      **ADVISE THE FIRE CONTROL STATION** of both fires and false alarms.
  
- STEP 5**      **KEEP A MEMBER OF THE FIRE SAFETY CREW ON STANDBY** to direct fire fighters to the source(s) of alarm and inform them of measures already taken.
  
- STEP 6**      **RECORD ALL EVENTS IN THE LOG BOOK PROVIDED.**

---

**\*\* PLEASE NOTE \*\***

---

The above procedure should only be executed by a trained fire officer and may need to be modified in accordance with any special conditions applying to your Fire System installation or local Fire Brigade requirements.

---

## **3.3 DEALING WITH FAULTS**

### **3.3.1 WHAT IS A FAULT?**

A fault is anything which prevents the panel from correctly performing its functions. Possible faults include defects in external wiring or power feed to the detectors and outputs, faulty detectors, component failures, faulty charger and low battery voltage.

In normal operation the only indicator that should be on is the green "MAINS ON" LED.

Only one green "SELECT" indicator should be ON if a zone, output or battery/charger is selected. This will extinguish after four (4) minutes if no key is pressed. All other active indicators should be reported and promptly investigated.

### **3.3.2 RESPONDING TO FAULTS**

The sounder will generate a steady tone if any fault condition exists. If any 'off normal' condition is shown on the panel apply the basic trouble-shooting guidelines provided in this manual and then call your service company.

The sounder will also generate a steady tone if all enabled zones are isolated.

The "SILENCE" key may be pressed in order to stop the panel's fault sounder until a service technician arrives.

---

#### **\*\* PLEASE NOTE \*\***

---

- (a)** Subsequent faults on the system will operate the fault sounder again.
  - (b)** RECORD ALL EVENTS IN THE LOG BOOK PROVIDED.
-

## **3.4 ZONE INDICATIONS**

### **3.4.1 ZONE "SEL" LED INDICATOR**

The green "SEL" indicator for each zone is interpreted as:

- OFF - Normal, zone not selected.
- FLASHING - Indicates zone has been selected for AUTO-RESET test mode ("ISO" LED also flashing) or Zone test has been activated.
- ON - Indicates that the zone has been selected for Zone Test, Reset, or Isolate functions.

### **3.4.2 ZONE "ALM" LED INDICATOR**

The red "ALM" indicator for each zone is interpreted as:

- OFF - Normal, no alarm state.
- FLASHING - Indicates a new alarm yet to be acknowledged.
- ON - Indicates the alarm condition has been acknowledged, and if the zone is non-latching that the alarm condition still exists.

### **3.4.3 ZONE "FLT" LED INDICATOR**

The amber "FLT" indicator for each zone is interpreted as:

- OFF - Normal, no fault state.
- ON - Indicates a FAULT condition in that zone.

### **3.4.4 ZONE "ISO" LED INDICATOR**

The amber "ISO" indicator for each zone is interpreted as:

- OFF - Non-isolated state; indicates that the zone is not isolated and that any alarm or fault condition detected on that zone will generate the Brigade signals, bell operation and ancillary device operation as programmed for that zone.
- FLASHING - Indicates that the zone has been selected for AUTO-RESET test mode ("SEL" LED also flashing).
- ON - Indicates that the zone is isolated. Any alarm or fault condition will still be displayed but will not initiate any brigade, bell or ancillary output functions.



## **3.5 SYSTEM STATUS INDICATORS**

### **3.5.1 "MAINS ON" LED INDICATOR**

The green "MAINS ON" indicator is interpreted as:

- ON - Normal condition indicating mains power is present.
- OFF - Indicates that the mains supply to the FIP has been interrupted.
  - Possible reasons are:
    - i. The council mains supply is out.
    - ii. The MAINS ON/OFF switch is turned OFF.
    - iii. The Transformer Secondary Fuse is BLOWN.
    - iv. The overload protection device on the switchboard has tripped.
    - v. Power Supply Rectifier fault.

### **3.5.2 BATT/CHGR "SEL" LED INDICATOR**

The green BATT/CHGR "SEL" indicator is interpreted as:

- OFF - Normal, Battery/Charger not selected.
- ON - Indicates that the Battery/Charger has been selected and a battery test or reset may be carried out.

### **3.5.3 BATT/CHGR "FLT" LED INDICATOR**

The amber BATT CHGR "FLT" indicator is interpreted as:

- OFF - Normal condition, indicating that the FIP's standby battery supply and its associated charger are both normal, if the mains supply is on.
- FLASHING - BATTERY FAULT; The battery is in a poor state of charge as the charger voltage is less than 24 VDC. This may be expected after an extended period of operation of the system in a mains failure condition, or may be abnormal, indicating a battery or charger fault.
  - A Battery Test has failed. Wait 24 hours and re-test.
  - Call Service if the problem will not clear.
- ON - BATTERY CHARGER FAULT; The battery charger circuitry is not working correctly or is wrongly set up.
  - Call for Service.

## **3.6 OUTPUT INDICATORS**

### **3.6.1 OUTPUT "SEL" LED INDICATOR**

The three green "SEL" indicators for ANCIL RELAY, MASTER ALARM and ALARM BELLS can be interpreted as:

- OFF - Normal, output not selected.
- ON - Indicates that the output has been selected and that Test, Reset or Isolate functions may be carried out.
- Note: The MASTER ALARM cannot be ISOLATED.

### **3.6.2 OUTPUT "ACVD" LED INDICATOR**

The red "ACVD" indicators for ANCIL RELAY and MASTER ALARM can be interpreted as:

- OFF - Normal, output not activated.
- ON - Indicates the output is Activated.
- If the output is isolated the output relay will be not be operated.

### **3.6.3 OUTPUT "ISO" LED INDICATOR**

The three amber "ISO" indicators for ANCIL RELAY, MASTER ALARM and ALARM BELLS can be interpreted as:

- OFF - Normal, output is not isolated.
- FLASHING - ALL three OUTPUT "ISO" flashing together indicates that the system is in the "PROGRAM" mode.
- All outputs automatically isolated.
- ON - Indicates that the output is isolated.
- Note: MASTER ALARM cannot be manually ISOLATED.

### **3.6.4 ANCIL RELAY "FLT" LED INDICATOR**

The amber "FLT" indicator for ANCIL RELAY is interpreted as:

- OFF - Normal, no fault state.
- ON - Indicates a FAULT in the Ancillary Circuit Output wiring or load.

---

## **4 BRIGADE OPERATING FUNCTIONS**

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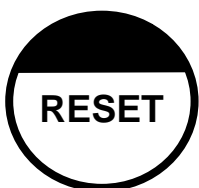
## 4.1 RESETTING ZONE(S) IN ALARM OR FAULT

### 4.1.1 FUNCTION

Pressing the "RESET" key performs the following functions:

- (a) In GLOBAL mode it will:
- RESET ALL ZONES IN ALARM
  - Silence the alarm sounder
  - Exit from System Test
  - Return all Auto-Reset zones to normal.
- (b) With a Zone selected it will, for the selected zone only:
- RESET ANY ZONE ALARM OR FAULT
  - Silence the alarm and fault sounder if no other alarms or faults exist.
  - Cancel any Zone Test
  - Return the zone from Auto-Reset mode to normal.

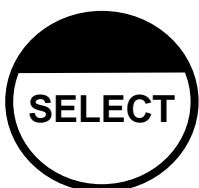
### 4.1.2 OPERATING SEQUENCE - GLOBAL RESET



Press the "RESET" key once.

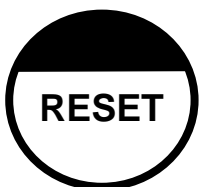
- Any red alarm indicators that were showing will be extinguished and the alarm reset.
- If the detector is still in alarm then after the zone input delay the zone will return to alarm.

### 4.1.3 OPERATING SEQUENCE - SELECTED RESET



Press the "SELECT" key once.

- The lowest numbered non-isolated zone in alarm or fault (if no alarm) will be selected first.
- If this is not the zone to be reset then press the "SELECT" key until the desired zone has its green "SEL" LED indicator illuminated.



Press the "RESET" key once.

- If a red zone alarm indicator or amber fault indicator was showing on the selected zone it will be extinguished and the zone reset.

---

#### **\*\* NOTES \*\***

---

1. If the red zone alarm or amber fault indicator reappears then isolate the zone and call service.
-

## 4.2 SILENCING ZONE(S) IN ALARM OR FAULT

### 4.2.1 FUNCTION

Pressing the "SILENCE" key performs the following functions:

- (a) IN ALARM CONDITION:
- i. Acknowledges all ALARMS shown on the panel;
  - ii. Silences the pulsing-tone alarm sounder
  - iii. Turns off the ALARM BELLS output.
- (b) IN FAULT CONDITION:
- i. Silences the steady-tone fault sounder.

### 4.2.2 OPERATING SEQUENCE



Press the "SILENCE" key once.

- For ALARM conditions all flashing red "ALM" LED indicators will go steady.
- Local bells (if any) will be silenced.
- Sounder will be silenced if in pulsing alarm tone.

IF SOUNDER IS IN STEADY FAULT TONE:



Press the "SILENCE" key once again.

- Sounder will be silenced.

---

#### \*\* NOTES \*\*

---

1. Subsequent non isolated zone ALARMS and/or FAULTS on the system will re-operate the sounder.
  2. If FAULT conditions exist the sounder will continue to indicate fault as it is overrides the pulsing alarm tone.
-

## 4.3 ISOLATING ZONE(S) IN ALARM

### 4.3.1 FUNCTION

Pressing the "ISOLATE" key performs the following functions:

- (a) In GLOBAL mode it will ISOLATE ANY ZONE(S) IN ALARM.
- (b) With a Zone, Ancillary Relay or Alarm Bells selected it will toggle the zone or output between isolated and non-isolated states.

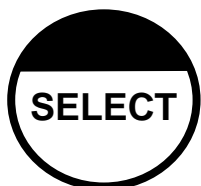
### 4.3.2 OPERATING SEQUENCE - GLOBAL ISOLATE



Press the "ISOLATE" key once.

- All zones in the alarm state will be isolated.
- ALL flashing red "ALM" LED indicators will go steady.
- Local bells (if any) will be silenced.
- Sounder will be silenced if in pulsing alarm tone.

### 4.3.3 OPERATING SEQUENCE - SELECTED ISOLATE



Press the "SELECT" key until the green "SEL" LED indicator of the required zone or output is illuminated.



Press the "ISOLATE" key once.

- The amber "ISO" LED indicator will be illuminated and the zone isolated.

---

#### \*\* NOTES \*\*

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1. Any isolated zone(s) will register alarm and faults but are prevented from operating system outputs. An isolated zone in alarm may or may not operate the zone auxiliary output depending on programming.
-

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## **5 SYSTEM OPERATING FUNCTIONS**

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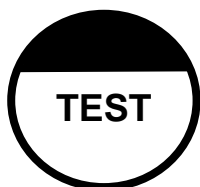
## 5.1 SYSTEM TEST

### 5.1.1 FUNCTION

With the F08 FIP in GLOBAL mode (ie. all "SEL" LED indicators OFF), pressing the "TEST" key will perform the following functions as part of the System Test.

- (a) All outputs are isolated;
- (b) The system memory is tested;
- (c) The internal sounder and LED display are tested;
- (d) Each enabled and non-isolated zone is fault tested;
- (e) Each enabled and non-isolated zone is alarm tested. Zone open collector outputs are NOT operated by a system test for F08 software V3.00 or later, but may be operated by earlier versions of software.

### 5.1.2 OPERATING SEQUENCE



Press the "TEST" key once.

- The amber "ISO" LED indicators for Ancillary Relay, Master Alarm and Alarm Bells will illuminate.
- After 5 seconds all indicators will illuminate and the internal sounder will generate a steady tone for a period of 2 seconds.
- A fault test of each enabled and non-isolated zone will proceed, stepping through each zone and illuminating the "SEL" and "FLT" LED indicators.
- An alarm test of each enabled and non-isolated zone will proceed, stepping through each zone and illuminating the "SEL" and "ALM" LED indicators.
- All System indicators return to the status prior to the test commencing.

---

#### \*\* NOTES \*\*

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1. System Test is not possible if any zone is in a non-isolated alarm or fault state, or is in AUTO-RESET mode.
  2. System Test bypasses any programmed zone input time delays.
-

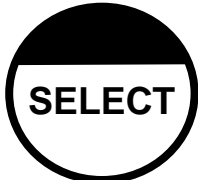


## 5.2 BATTERY TEST

### 5.2.1 FUNCTION

When Battery/Charger is selected pressing the "TEST" key performs a 1 minute test of the battery.

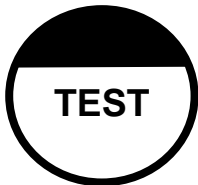
### 5.2.2 OPERATING SEQUENCE



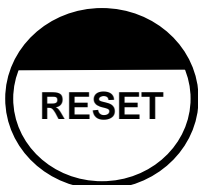
Press the "SELECT" key until the green "SEL" LED indicator of "BATT/CHGR" is illuminated.

Press the "TEST" key once.

- The Battery/Charger "SEL" LED indicator will flash for the duration of the test.
- The Battery Test period is 1 minute.



If a battery fault condition is detected the test will terminate, the Battery Charger "SEL" LED will stop flashing and the Battery Charger "FLT" indicator will flash for the rest of the 1 minute test period. The "RESET" key may be pressed to cancel the test.



Press the "RESET" key once to clear the fault.

- Perform another "Battery Test" after 24 hours and if the test fails again please call your service company.

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### \*\* NOTES \*\*

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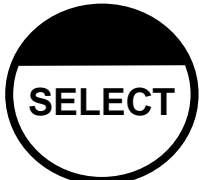
1. To exit from this test before the one minute test is up press the "RESET" key.
  2. Any unsilenced alarms or faults will terminate the battery test.
  3. It is not possible to initiate a Battery Test until one minute after the end of a previous battery test. A KEY ERROR tone will be sounded if this is attempted.
-

## 5.3 OUTPUT ISOLATE/DE-ISOLATE

### 5.3.1 FUNCTION

When Ancillary Relay, or Alarm Bells is selected, pressing the "ISOLATE" key will toggle the selected output between the isolated or non-isolated states.

### 5.3.2 OPERATING SEQUENCE



Press the "SELECT" key until the green "SEL" LED indicator of the ANCIL RELAY or ALARM BELLS output is illuminated (as required).



Press the "ISOLATE" key once.

- If the amber "ISO" LED indicator was off it will be illuminated and the output isolated so that it will not be operated.
- If the amber "ISO" LED indicator was illuminated it will be extinguished and the output de-isolated.

---

#### \*\* NOTES \*\*

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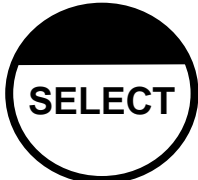
1. Isolated Ancillary Relay outputs will indicate active and/or fault, however the active state will not operate the relay and the fault state will not activate the fault sounder.
  2. The Master Alarm Output CANNOT be manually ISOLATED. A Key-Error will be sounded if this is attempted.
-

## 5.4 ANCILLARY RELAY FAULT RESET

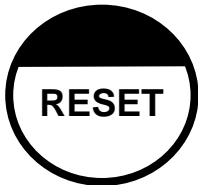
### 5.4.1 FUNCTION

When Ancillary Relay is selected pressing the "RESET" key will reset the fault indication on the Ancillary Relay Output if it was illuminated.

### 5.4.2 OPERATING SEQUENCE



Press the "SELECT" key until the green "SEL" LED indicator of Ancillary Relay is illuminated.



Press the "RESET" key once.

- If the amber ANCIL RELAY "FLT" indicator was showing it will be extinguished and the fault reset.

---

#### \*\* NOTES \*\*

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1. If the fault is still present on the wiring then the fault indication will return. Press "SILENCE" to stop the fault sounder and call the service company.
-

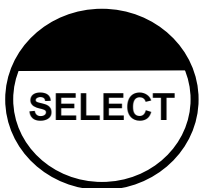
## 5.5 OUTPUT TEST & MAPPING DISPLAY

### 5.5.1 FUNCTION

When the Ancillary Relay, Master Alarm or Alarm Bells is selected pressing the "TEST" key performs the following functions:

- (a) Displays the zones programmed (mapped) to activate the selected output.
- (b) Activates the selected output, with the exception of Master Alarm Brigade Relay.

### 5.5.2 OPERATING SEQUENCE



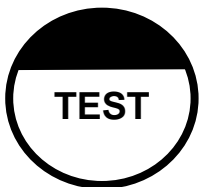
Press the "SELECT" key until the green "SEL" LED indicator of the required output is illuminated.

**OPTION:** To prevent the Ancillary Relay or Alarm Bell outputs from operating:



- Press the "ISOLATE" key once
- The amber "ISO" indicator will illuminate.

Press and hold the "TEST" key.



- The red "ACVD" LED indicator will illuminate.
- Unless isolated, the output will be operated with the exception of the Master Alarm output.
- During the output test all zones mapped to operate the selected output are indicated by the red zone "ALM" LED indicator being illuminated.

---

### \*\* NOTES \*\*

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1. The Output Test is non-latching and is operational only for the time that the "TEST" key is held down.
  2. During an Output Test existing alarm indications are turned off and are restored after the test.
  3. During an Ancillary output test the Ancillary Activated LED will turn on even if the Ancillary is isolated, but the relay will not operate.
  4. It is not possible to initiate this test if any non-isolated zone has an unsilenced alarm or fault condition. A KEY ERROR tone will be sounded if this is attempted.
-

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## **6 ZONE OPERATING FUNCTIONS**

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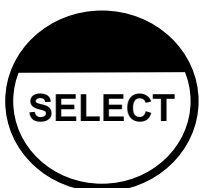
## 6.1 ZONE TEST

### 6.1.1 FUNCTION

When a zone is selected, indicated by the zone's green "SEL" LED being illuminated, pressing the "TEST" key will perform a fault and then an alarm test on the zone input.

**WARNING:** This test performs a true zone test, time delays operate (including AVF & AS1668), and all mapped outputs operate, including MASTER ALARM OUTPUTS. Note: zone open collector outputs may operate even if the zone is isolated, depending on programming.

### 6.1.2 OPERATING SEQUENCE

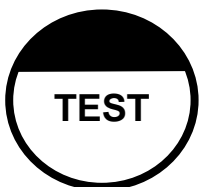


Press the "SELECT" key until the green "SEL" indicator of the required zone is illuminated.



**OPTION:** To prevent any mapped outputs from operating isolate the zone:

- Press the "ISOLATE" key once
- The amber "ISO" LED indicator will illuminate.



Press the "TEST" key once.

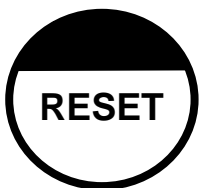
- The green "SEL" LED indicator will flash.
- The amber "FLT" LED indicator will illuminate.
- The Internal Sounder will produce a steady fault tone if the zone is not isolated.



Press the "SILENCE" key to proceed to Alarm Test.

- After 2, 16 or 20 seconds the red "ALM" LED indicator will flash, depending on the programmed zone time delay.

### 6.1.3 EXIT TEST



Press the "RESET" key to exit from the test.

- This may be done at any time to cancel the test.

#### 6.1.4 EXIT TEST - LEAVE IN FAULT



When the zone is in FAULT TEST, double press the "SILENCE" key.

- The amber "FLT" LED indicator will remain illuminated (FOR LATCHING ZONES ONLY).
- "SELECT" may now be used to test other zones.
- To continue to alarm test re-select the zone and press the "TEST" key.



#### 6.1.5 EXIT TEST - LEAVE IN ALARM



When the zone is in ALARM TEST, press the "SILENCE" key once.

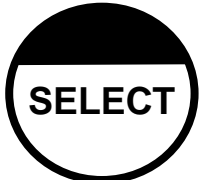
- The red "ALM" LED indicator will remain illuminated if it is on (LATCHING ZONES ONLY).
- The "SELECT" key may now be used to test other zones or restart the test some time later. This may be done to verify AVF, AS1668 or flow switch delays.
- To clear the alarm press the "RESET" key after re-selecting the zone.

## 6.2 ZONE ISOLATE/DE-ISOLATE

### 6.2.1 FUNCTION

When a zone is selected pressing the "ISOLATE" key will toggle the zone between isolated or non-isolated states or vice versa.

### 6.2.2 OPERATING SEQUENCE



Press the "SELECT" key until the green "SEL" LED indicator of the required zone is illuminated.



Press the "ISOLATE" key once.

- If the amber "ISO" LED indicator was off it will be illuminated and the zone isolated.
- If the amber "ISO" LED indicator was illuminated it will be extinguished and the zone de-isolated.

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#### \*\* NOTES \*\*

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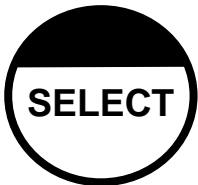
1. Isolated zone(s) will display alarm and faults, but are prevented from operating system outputs. An isolated zone in alarm may or may not operate the zone auxiliary output depending on programming.
  2. If the zone was in ALARM and/or FAULT when the zone is De-Isolated then the ALARM and/or FAULT will be treated as a new condition and any mapped outputs will be activated.
  3. When the last enabled zone is isolated (i.e. all zones isolated) the fault buzzer and fault relay will turn on steady.
-



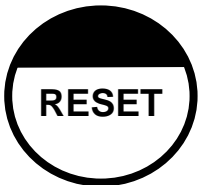
**6.3****AUTO-RESET MODE  
(One Person Detector-in-Situ Test)****6.3.1 FUNCTION**

The Auto-Reset Test allows testing of all detectors on a zone without the need for a second person resetting the alarms at the FIP. One or more zones can be set to AUTO-RESET mode at the same time.

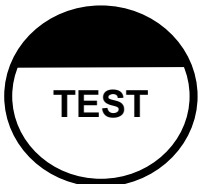
During Auto-Reset test the zone is isolated from any outputs. When an alarm is detected on the zone the alarm bell will operate for 2 seconds, unless the bells output is isolated or the zone is not mapped (programmed) to operate the bells. Then the zone is automatically reset to clear any detectors in alarm on the zone being tested.

**6.3.2 OPERATING SEQUENCE**

Press the "SELECT" key until the green "SEL" indicator of the zone to be tested is illuminated.



Press and hold the "RESET" key.



Press and hold the "TEST" key as well until the amber zone "ISO" LED indicator starts flashing. (Approx. 1 second). Release both keys.

- The green "SEL" LED indicator will be on until the "SELECT" key is pressed and will then start flashing to indicate Auto-Reset test.
- The amber zone "ISO" LED indicator also flashes.

**SELECT ANY OTHER ZONES AS ABOVE**

- Zones set to AUTO-RESET mode will flash both "SEL" and "ISO" LED indicators.
- Detectors in the Zone are now ready for "IN-SITU TESTING".

### 6.3.3 OPERATION

On alarm operation of a detector and after the 2 second transient suppression delay the zone will go into the alarm condition and stay in that condition for 8 seconds to allow the detector LED to be checked. The detector circuit is then reset for 15 seconds to allow smoke or heat to clear.

To assist with identification of the detectors that are wired to particular alarm zones the zone alarm indicators latch in this mode of operation, flashing when an alarm condition is present on the circuit and steady on the removal of the alarm condition. Pressing the Reset key turns off any steady fire alarm zone indicators and cancels the auto-reset mode.

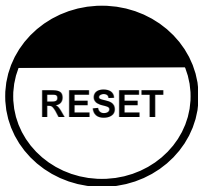
If a fault occurs on a zone in Auto-Reset mode then the Fault LED latches on steady until the end of the auto-reset mode even if the zone is programmed as non-latching.

### 6.3.4 EXITING AUTO-RESET MODE

#### - WARNING -

Please check that there are no alarms on any zones that were not part of the Auto-Reset test.

If there are unexpected alarms **DO NOT GLOBALLY RESET THE FIP** but refer to the "RESPONDING TO ALARMS" section of this manual for details.



Press the "RESET" key once.

- If in GLOBAL mode, all zones will be removed from "AUTO-RESET" testing mode and RESET.
- If a zone is selected, only that zone will be removed from "AUTO-RESET" testing and RESET.

---

#### \*\* NOTES \*\*

---

1. Zones set to Auto-Reset mode are not effected by the pressing of "ISOLATE" or "TEST" keys. A KEY ERROR tone will be sounded.
  2. Auto-Reset mode can be entered even if the zone is currently in the alarm state or fault state.
  3. Any programmed input alarm verification or time delay is overridden to allow the basic operation of the detectors to be easily tested.
  4. To exit the Auto-Reset Mode press "RESET" key.
  5. All zones in Auto-Reset mode will automatically return to normal operation ONE HOUR after the last alarm is received.
  6. When the last enabled zone is isolated or put in Auto-Reset mode (i.e. all zones isolated) the fault buzzer and fault relay will turn on steady.
-

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## **7 PLACING INTO OPERATION**

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## 7.1 GENERAL

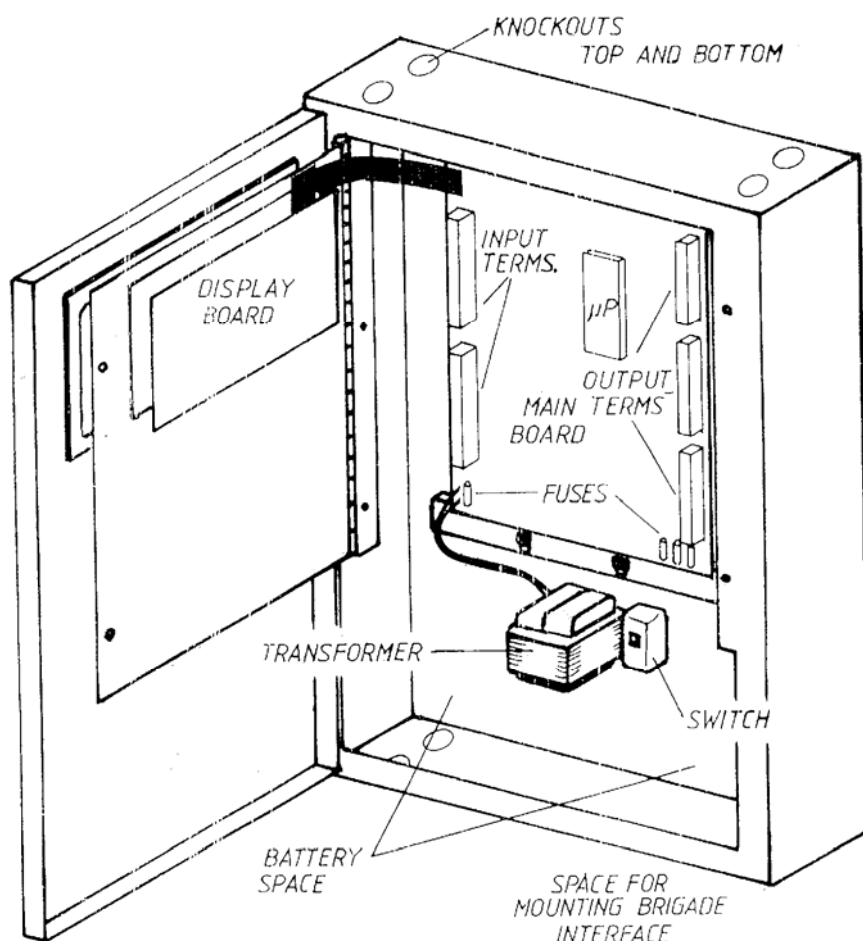
Before undertaking any activities visually inspect the interior and check that all panel equipment is securely mounted and that all cables are connected to the appropriate points (see Figure 7.1).

## 7.2 MAINS ISOLATE SWITCH

To switch the F08 FIP ON or OFF open the front protective door. The "MAINS ISOLATE SWITCH" is located below the main board, to the right of the mains transformer. This switch controls the mains power supply to the panel, including the battery charger.

The normal position of this switch is ON, and should only be turned OFF (ie MAINS ISOLATED), when testing that the FIP will run on battery or by maintenance personnel only.

**NOTE:** The Battery is not disconnected by the "MAINS ISOLATE SWITCH".



**Figure 7.1**  
F08 FIP Internal View

**7.3 POWER UP**

To place a correctly installed F08 FIP into operation perform the following steps:

- STEP 1:** Ensure that the Mains Isolate Switch is OFF.
- STEP 2:** Ensure that 240 VAC is available to the panel from the mains distribution switchboard.
- STEP 3:** Turn Mains Isolate Switch ON.
- STEP 4:** Check that the green "MAINS ON" LED indicator is illuminated and all other LED indicators are OFF.
- STEP 5:** Perform a System Test.
- STEP 6:** Install Batteries.
- STEP 7:** Perform a Battery Test. If the test fails, check the battery connections and if the battery is flat, leave for 24 hours and retest.

**7.4 COMMISSIONING CHECKLIST**

The following commissioning checklist should be copied and completed upon commissioning of the F08 FIP and placed with other System Configuration Information.

Please place a tick in the space provided if the check is correct.

**7.4.1 PHYSICAL**

Cabinet colour - Standard Cream Wrinkle BFF 998 CW	<input type="checkbox"/>
Cabinet undamaged (no paint chips)	<input type="checkbox"/>
Doors aligned OK	<input type="checkbox"/>
Windows undamaged and fitted correctly	<input type="checkbox"/>
MCP fitted and undamaged	<input type="checkbox"/>
Cabinet Door locks firmly	<input type="checkbox"/>
Key Lock - 003 Type	<input type="checkbox"/>
Cabinet Sealed - To dust level only (check top entries)	<input type="checkbox"/>
Display LEDs aligned OK and all intensities similar	<input type="checkbox"/>
Command Keys aligned OK and operate easily	<input type="checkbox"/>
Zone Identification fitted behind mylar	<input type="checkbox"/>
Zone Identification as per client specifications	<input type="checkbox"/>
Display and Main Boards fitted correctly	<input type="checkbox"/>

### 7.4.2 ELECTRICAL

Transformer fitted and outputs wired correctly  
Mains Switch fitted & wired correctly, Cover secured  
All cabinet earths wired correctly and securely fitted  
"Mains Isolate Switch" and "Mains Earth" labels fitted  
Mains Earth wired correctly and securely fitted  
Display FRC cable neat and plugged firmly into main board  
Bells fuse - F1: Fitted & Rated at 1.6 A  
VB fuse - F2: Fitted & Rated at 1.6 A  
VNB fuse - F3: Fitted & Rated at 1.6 A  
AC fuse - F4: Fitted & Rated at 5.0 A  
Charger Voltage at Batt+ (27.25 - 27.35 VDC) (no battery 20°C)  
Quiescent Panel Current (FROM BATTERY)  
Panel ALARM current (TWO ZONES FROM BATTERY)  
Battery Fitted - Type :Rating

VDC
A
A
AH

**7.4.3 OPERATION**

- NORMAL OPERATION - Green "MAINS ON" LED only ON
- System Test OK
- Battery Test OK
- MCP wired to Zone 1; Other: Operation OK
- "ALM" LED on MCP Zone flashes & pulsing tone sounder
- Pressing "RESET" key clears ALARM condition OK
- Zones Enabled as programmed
- Zone Input Delays as programmed
- Ancillary Relay mapped as programmed
- Ancillary Relay supervised NO / YES (Operation OK)
- Ancillary Relay Operation OK - & "ACVD" indication
- Master Alarm mapped as programmed
- Master Alarm Operation OK - & "ACVD" indication
- Alarm Bells mapped as programmed
- Alarm Bells output - 24 VDC and operation OK
- Table 7.1 completed for all zones
- Operation includes ALARM & FAULT tests
- Isolate functions and indication


ZONE	ZONE DESCRIPTION	TIMER DELAY	OPERATION OK
1			
2			
3			
4			
5			
6			
7			
8			

**Table 7.1**

**7.4.4 FINAL CHECK**

As Installed Information Drawings Provided	
As Installed Device Connection List Provided	
Installation Information completed on page ii of Operator's Manual	
Presentation (Interior neat, clean)	
Rating Label completed	
System Configuration Chart (Appendix D) Completed	
Operator's Manual Provided (STANDARD)	
Technical Manual Provided (OPTIONAL)	
Log Book Provided (Commissioning Details Entered)	
Copy of this check list completed	
Panel Serial Number	
Main Board Serial Number	
Display Board Serial Number	

COMMISSIONING CHECKLIST COMPLETE → PASSED

Date of Test: \_\_\_\_\_

Name of Tester: \_\_\_\_\_

Signature: \_\_\_\_\_

Owner Representative: \_\_\_\_\_

Signature: \_\_\_\_\_



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## **8 SYSTEM MAINTENANCE & TROUBLE-SHOOTING**

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## **8.1 SYSTEM MAINTENANCE**

The F08 FIP is designed for high reliability and minimum maintenance. However, in order to comply with the requirements of AS1851.8, the owner/occupier (or a nominated representative) must carry out system tests on a regular basis.

### **8.1.1 WEEKLY TESTING**

- STEP 1:** Advise the local Fire Control Station, if required, that you are about to undertake a routine test of the fire system. Inform all building occupants that the fire bells will be tested.
- STEP 2:** Perform a System Test. With no zone selected press "TEST".
- STEP 3:** Perform a Battery Test. Select Battery/Charger and press "TEST".
- STEP 4:** Record the results of these tests in the Log Book.
- STEP 5:** Inform the local Fire Control Station and all others concerned that the test is concluded.

### **8.1.2 MONTHLY TESTING**

In addition to the Weekly Testing described above perform the following monthly tests:

- STEP 1:** Test each zone in turn for alarm and fault.
- STEP 2:** Test outputs.
- STEP 3:** Visually inspect the cabinet and panel to ensure it is clean, operable and intact. Inspect the dust seal and ensure that it is undamaged.
- STEP 4:** Record the results of these tests in the Log Book.
- STEP 5:** Inform the local Fire Control Station and all others concerned that the test is concluded.

### **8.1.3 ANNUAL TESTING**

Australian Standard AS1851.8 requires that all fire detection and alarm systems be thoroughly tested each year by a competent maintenance company. The service company should ensure that the performance of the procedure set out in AS1851.8 is witnessed by the owner of the F08 FIP or their authorised agent.

### **8.1.4 SYSTEM REPAIR**

If the F08 panel develops a fault condition which cannot be solved by following Basic Trouble-Shooting, please call your maintenance company. It is strongly advised that "ON SITE" repair of the Main or Display boards should not be done.

## 8.2 TROUBLE-SHOOTING

### 8.2.1 PRELIMINARY INVESTIGATIONS

These preliminary investigations are to prevent unnecessary service calls, or in the event of a genuine call, to save time and provide the service company with accurate data.

It is desirable that the owner/occupier carry out the following checks before requesting service:

- a) **UNWANTED ALARMS:** Make a note of the affected zone(s). It will also be helpful if you record the time of the unwanted alarm.
- b) **FAULTS:** If the fault sounder operates make a note of all indicators alight at the time. Press the "SILENCE" key to silence the fault sounder if necessary.

Table 8.1 gives a summary of typical fault conditions, reasons, and advised actions to be taken.

### 8.2.2 PREVENTION OF UNWANTED ALARMS

All fire detection systems rely on their ability to identify atmospheric or environmental changes brought about by the presence of fire. They employ various types of sensors to monitor specific conditions. These devices signal a warning when an abnormal condition exists, indicating either the actual presence of a fire or the immediate likelihood of one.

Detectors monitor a number of phenomena, which include smoke, heat, flame, pressure, or the presence of combustion products such as gases. However, some or all of these conditions may appear in different locations when there is no fire present. For example:

- (a) **HEAT SOURCES;** The sudden increase in local temperature when a furnace door is opened can trigger heat sensors.
- (b) **DRAUGHTS;** Wind-induced surges of steam or dust can cause smoke detectors to generate an alarm signal.
- (c) **ENVIRONMENT CHANGES;** Changes to wall partitions, Air-Duct position or air velocity can cause detectors to be forced into continuous alarm.
- (d) **UNUSUAL ACTIVITIES;** Portable welding units can activate flame detectors, while spray-painting 'drift' can trigger smoke detectors.

It is therefore highly recommended that the service company be notified of any proposed changes to the premises or its occupancy.

CONDITION	REASON	ACTION
"MAINS ON" LED OFF	MAINS SWITCH OFF	Turn Mains Switch ON
	REPORTED POWER BLACKOUT	Check that LED turns ON when power is restored
	ACCIDENTAL TRIPPED CIRCUIT BREAKER	Reset Circuit Breaker & check "MAINS ON" LED
	NONE OF ABOVE	CALL SERVICE COMPANY
BATT/CHGR "FLT" LED - STEADY	CHARGER VOLTAGE HIGH - Damage to battery possible	CALL SERVICE COMPANY
	CHARGER VOLTAGE LOW - Battery will not charge correctly	
BATT/CHGR "FLT" LED - FLASHING	BATTERY DISCONNECTED	Connect battery leads
	BATTERY CHARGE LOW	Check again in 24 hours
	BATTERY MALFUNCTION	CALL SERVICE COMPANY
ANCIL RELAY "FLT" LED - STEADY	Ancillary Output Circuit is open circuited	Check load device Check terminal wiring
	Ancillary Relay faulty or shorted	Check external wiring CALL SERVICE COMPANY
ZONE IN ALARM OR FAULT - Cannot clear by zone reset	FAULTY DETECTOR FAULTY EOL DEVICE WIRING FAULT	CALL SERVICE COMPANY
<b>REMEMBER IF IN DOUBT, CALL THE SERVICE COMPANY</b>		

**Table 8.1**  
Trouble-Shooting

## APPENDIX A COMPATIBLE ACTUATING DEVICES

OLSEN RANGE		Iq uA	MAX NO. OF DETECTORS PER ZONE
TYPE	DESCRIPTION		
C23BEx *	Ionisation Smoke Detector (IS Version)	100	40
C24B	Ionisation Smoke Detector	20	40
C29B	Ionisation Smoke Detector	45	40
C29BEx	Ionisation Smoke Detector (IS Version)	45	40
P24B	Photoelectric Smoke Detector	100	40
P29B	Photoelectric Smoke Detector	120	33
P76B	Photoelectric Smoke Detector Non-Latching	200	20
P136	Duct Sampling Unit	500	8
R23B &	InfraRed Flame Detector	130	30
R24B	Dual Spectrum Infrared Flame Detector	250	5
R24BEx	Dual Spectrum Infrared Flame Detector (IS)	250	5
T56B	Heat Detector Types A, B, C, D	0	40
DL01191A #	Beam Detector	2800	1

\* & See Notes. With the Z54 Mk2, Z56, Z500, Z72 and Z23 bases as appropriate.

OTHER DETECTORS		Iq uA	MAX. NUMBER WITH EOL
TYPE	DESCRIPTION		
614P	Photoelectric Smoke Detector	104	38
614I	Ionisation Smoke Detector	67	40
614CH	Carbon Monoxide & Heat Detector	80	40
614TA	Heat Detector Type A	100	40
614TB	Heat Detector Type B	100	40
614TC	Heat Detector Type C	100	40
614TD	Heat Detector Type D	100	40
MD614	Heat Detector	60	40
MF614	Ionisation Smoke Detector	100	40
MR614	Photoelectric Smoke Detector	100	40
MR614T	High Performance Optical Smoke Detector	100	40
MU614	Carbon Monoxide Detector	50	40
T614A or T614A Mk2	Heat Detector Type A	100	40
T614B or T614B Mk2	Heat Detector Type B	100	40
T614C or T614C Mk2	Heat Detector Type C	100	40
T614D or T614D Mk2	Heat Detector Type D	100	40
S121	Infra-red Flame Detector	100	40
MS302Ex	Infra-red Flame Detector	100	40

With M614 or 5B base as appropriate.

DETECTORS CERTIFIED WITH THE F08 FOR HAZARDOUS AREA APPLICATIONS			MAX NO. OF DETECTORS PER ZONE
TYPE	DESCRIPTION	Iq uA	
C29BEx #	Ionisation Smoke Detector Z94C Base	45	40
R24BEx #	Dual Spectrum InfraRed Flame Detector	250	5
T54B	Probe Type E Heat Detector	0	40
T56B #	Heat Detector Types A, B, C, D Z500N Base	0	40
MS302Ex #	IS InfraRed Flame Detector	100	40
	Short Circuit Device	-	40

With Pepperl & Fuchs KFDO-CS-Ex 1.51P (or 2.51P) Isolating Repeater  
 # F08 Input type must be programmed as Type 1 or Type 4.

OLSEN RANGE			MAX NUMBER WITH EOL
TYPE	DESCRIPTION	Iq uA	
B111B	Beam Type Smoke Detector	0	40
T54B	Probe Type E Heat Detector	0	40
V41B	Ultraviolet Flame Detector	0	40
V42B	Ultraviolet Flame Detector	0	40
FW81B	Heat Detector Cable	0	1000m

SIMPLEX RANGE			MAX NUMBER WITH EOL
TYPE	DESCRIPTION	Iq uA	
4098-9601EA	Photoelectric Smoke Detector	100	40
4098-9603EA	Ionisation Smoke Detector	100	40
4098-9618EA	Heat Detector Type A	100	40
4098-9619EA	Heat Detector Type B	100	40
4098-9621EA	Heat Detector Type D	100	40
All with 4098-9788EA Base			

SYSTEM SENSOR RANGE			MAX NUMBER WITH EOL
TYPE	DESCRIPTION	Iq uA	
885WP-B ^@	Weatherproof Heat Detector Type B	50	40

## NOTES

- 1) The maximum number of detectors per AZF/AZC allowed by code is 40.
- 2) Not all detectors listed are approved to the appropriate Australian Standard.
- 3) For use in HAZARDOUS AREAS, the listed Intrinsically Safe (IS) detectors must be used in conjunction with the listed isolating repeaters, or flame proof detectors be used with flame proof wiring. Refer to the Installation Manual LT0082.
- 4) Detectors indicated by a "\*" are not current models and should not be used for new installations.
- 5) Early version of detectors indicated by a "&" used an incandescent lamp. These may not light with full brightness when in alarm. Later versions have LEDs.

**NOTES (CONTINUED)**

- 6) Allowable line resistance with detectors is 30 Ohms. Hard Contact only circuits may have a line resistance up to 760 Ohms. If a 15V zener is included for operation in the 13-17V band, a maximum of 30 Ohms line resistance applies.
- 7) For IS applications the maximum number of detectors per circuit may be further reduced due to the cable length required. Refer to LT0082 F08 Installation & Programming Manual for details.
- 8) For IS applications with the listed isolating repeaters there are special programming requirements for the F08. Refer to LT0082 F08 Installation & Programming Manual for details.
- 9) The maximum detector quiescent current allowed is 4 mA.
- 10) Detectors indicated by a “^” have not been SSL/CSIRO accessed for compatibility.
- 11) Detectors indicated by a “@” cannot have their remote indicator outputs wired in common with Tyco 614 series or the Minerva M614 series (and most other Tyco/Olsen detectors).

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## **APPENDIX B COMPATIBLE BATTERIES**

The following series of batteries are compatible with the F08 FIP:

- (a) Sonnenschien A200 series
- (b) Sonnenschien A300 series
- (c) Power-Sonic PS12 series
- (d) Yuasa NP Series

**Note:** For large size batteries a battery box may be required.

## APPENDIX C SYSTEM CONFIGURATION

- C.1 System Name: \_\_\_\_\_
- C.2 Battery Type: \_\_\_\_\_
- C.3 Battery Rating: 2 x 12 Volt \_\_\_\_\_ AH
- C.4 Complete Table C.1

### NOTES:

1. Each zone enabled is indicated by a "X".
2. Zone is either non-latching or latching, indicated by a "X".
3. Zone Delay is indicated by an "X".
4. Front panel MCP is wired to zone indicated by an "X".
5. Each zone mapped to the corresponding output is indicated by an "X".

PROGRAMMING		ZONE NUMBER							
		1	2	3	4	5	6	7	8
1.	ZONE INPUT ENABLED:								
2.	ZONE INPUTS:								
2.1	Latching								
2.2	Non-Latching (Tracking)								
3.	INPUT TIME DELAY TYPE:								
3.1	Standard, delay into alarm 2 seconds. 15V MCPs allowed on circuit.								
3.2	AVF/RAD (Return Air Detector). Delay 16 seconds into Alarm, MCP 2 seconds.								
3.3	SAD (Supply Air Detector) Delay 2 seconds into alarm, 60 seconds out.								
3.4	AVF/SAD - AVF into alarm (delay 16 seconds), 60 seconds out of alarm.								
3.5	Flowswitch, 20 second delay into alarm, no delay out of alarm.								
3.6	Standard, delay into alarm 2 seconds, line leakage fault detect, no MCPs.								
3.7	AVF delay into alarm 16 seconds. Line leakage fault defect, no MCPs.								
3.8	Fast alarm (0.5 seconds) for supervisory contact with 15V zener.								
3.9	Loop powered circuit (15V). Fast alarm (0.5 seconds).								
3.10	Normally closed circuit, Alarm = 13-17V, Delay = 2 seconds.								
4.	F08 MCP WIRED TO ZONE:								
5.	OUTPUT MAPPING:								
5.1	Ancillary Relay Output								
5.2	Master Alarm Output								
5.3	Bell Output								
6.	ANCILLARY RELAY OUTPUT SUPERVISION - Enable or Disabled								
7.	ZONE OPEN COLLECTOR MODE - ZONE ISOLATE = OUTPUT OFF Y/N:								

**Table C.1**  
System Configuration Table

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