OPERATORS MANUAL

RESIDENTIAL FIRE PANEL

MODEL RFP12/18

Index   *Page*

1.   Introduction

1.1   Design Philosophy and the Brooks Approach

The general growing awareness of the need for early warning detection of fire, coupled with a push by legislators, has led to a wider acceptance within the community.

Brooks is a specialist fire detection company offering 20 years experience in design, manufacture, installation, service and maintenance of commercial fire detection systems. These years of fire engineering experience and expertise have now been focused upon the area of Residential fire safety.

In keeping with our philosophy of innovation, flexibility, reliability and quality, Brooks now offers a complete and comprehensive range of Smoke Alarms and Smoke Alarm Systems.

Australian Standard 3786 has established a performance standard for smoke alarms for Domestic/Residential applications. Not content to just offer individual products, Brooks has developed a range of domestic fire alarm panels to enable fire system engineering principles, normally applied to commercial premises, to now be adapted to residential situations.

The vast majority of fire fatalities - particularly residential - occur due to the inhalation of smoke and toxic fumes. A correctly designed and installed Residential Smoke Alarm System provides an effective **LIFE SAFETY SYSTEM,** which raises the alarm and maximises your opportunity to escape.

1.2   General Description

The Brooks RFP Series of Residential Fire Indicator Panels complete with the compatible smoke/heat alarms provides an automatic fire detection system designed to meet the requirements of Australian Standard AS3786-1993 and Building Code Australian Compliance.

An automatic Residential fire alarm system is comprised of components for automatically detecting a fire, and the initiation of local warning devices.

The Residential Fire (RFP) system employs smoke and/or heat sensitive alarms with electronic interconnect signalling, to initiate both audio and visual means of fire alarm warning. It has the added important feature of supervising the zone circuitry for a fault condition. The Defect Mode output provides a means of monitoring whenever the system is placed either deliberately or accidentally into a non standard condition. ie. Mains fail, Panel switched off, detection device line fault, ancillary outputs isolated.

Since the applications for such systems are indeed diverse, it was decided to offer a Residential Fire Panel where the necessary features for the majority of applications came standard within the one panel. The system features and/or configuration, is user definable. This allows true flexibility of design and ease of future upgrading or modifications. The RFP6, RFP12 and RFP18 systems have options such as independent zone operation, independent smoke alarm operation, fire emergency override, alarm confirmation period, remote indication.

Each zone is limited to 12 smoke/heat alarms and facilities are provided for control of ancillary equipment, eg., alarm bells, security interface, panic input, fire doors, air conditioning shutdown, visual indicators, etc.

Control of ancillary equipment is effected by means of relay contacts, or a DC voltage output which operates on receipt of an alarm signal.

The Residential Panel employs all solid state electronic circuit design and is housed in attractive powder coated steel cabinet. This provides not only high reliability, ease of installation and aesthetic appearance but are extremely rugged product.

In combining proven technology, quality manufacture and aesthetically pleasing appearance, Brooks Australia has produced a Residential Fire System currently not available from other manufacturers.

1.3   Smoke / Heat Alarms

1.3.1 Basic Information about your Smoke / Heat Alarm

A Smoke Alarm is an early warning device. Used correctly it can give the occupants valuable time to escape. Heat Alarms are used supplementary to Smoke Alarms for those areas where Smoke Alarms would not be suitable.

Notes :-

*   When the power is first connected the Smoke / Heat Alarm may sound for 2-3 seconds and/or the LED may flash quickly for 10 seconds - **this is normal.**

*   A Smoke / Heat Alarm does not prevent fires.

*   Install in correct position (refer to section 1.3.8).

*   Test monthly.

*   When the Smoke / Heat Alarm beeps every 40 seconds **and** LED flashes at the same time the battery backup is low, restore mains power as soon as possible.

*   For the Photo-electric model PFS-PCX, if the Smoke Alarm beeps **without** the LED flashing at the same time then clean the unit (refer to Owners Manual) as this is the automatic test feature telling you the chamber is degraded.

*   Plan your escape route.

*   Proper protection may require more than one Smoke / Heat Alarm.

*   If you have any doubt or query about Smoke / Heat Alarms consult the nearest Brooks Australia Fire and Warning Systems Office.

1.3.2 Technology Available

Brooks offers a full range of detection technologies.
- Ionisation
- Photo electric
- Heat

1.3.2.1   Ionisation model

Ionisation Smoke Alarms are certainly the most popular in domestic situations, due in no small measure to the fact that they are the least costly to produce. They respond to a sufficiently wide range of fire to be of general use and they are particularly responsive to fast flaming fires where little visible smoke may occur. They are seldom troubled by dust or insect contamination. However, ionisation alarms are vulnerable to irritating nuisance alarms caused by cooking fumes, or portable gas heaters. Excessive nuisance alarms may lead to the alarm being disconnected. Furthermore ionisation alarms will be slower to respond to smoke

produced by slow smouldering fire. This type, with consideration to the above, can be installed in passageways and areas leading to bedrooms.

Operating Principle

Radioactive source ionises the air molecules within the sensing chamber.

Advantages

- Least expensive to produce
- Dual chamber compensates for changing ambient conditions
- Less prone to false alarms due to dust and steam
- Suitable for general use

Disadvantages

- Contain radioactive material
- Cannot be disposed of in landfill
- Must be returned to supplier or Health Department
- Cannot be sent via the post
- Prone to false alarms due to fumes from cooking or gas/oil heaters
- Not sensitive to dark smoke from a slow smouldering fire

1.3.2.2   *Photo-Electric model*

Optical Smoke Alarms on the other hand sense visible smoke particles, again they respond to a sufficiently wide range of fires to be of general use, but they are particularly responsive to smouldering fires and the dense smoke given off by foam filled furnishings or overheated PVC wiring. They are much less prone to nuisance alarms from cooking, and furthermore, contain no radioactive material. However, all optical smoke alarms are prone to nuisance alarms caused by dust or insect contamination. Mesh screens are effective in reducing insect ingress, but it is impossible to make the alarms dust proof, since they would then be effectively smoke proof! For this reason it is essential that optical smoke alarms are always kept clean. This type, with consideration to the above, should be installed within bedrooms and living areas adjacent to kitchens.

Operating Principle

Light scattering - transmitter produces pulses of light which are detected by a receiver when smoke enters the sensing chamber.

Advantages

- No radioactive material
- No legal requirements for disposal
- Particularly responsive to smouldering fires and dense smoke given off from foam filled furnishings, bed linen or over-heated PVC wiring
- Less prone to false alarms due to fumes from cooking or gas/oil heaters
- Ideally suited adjacent to kitchens and bedrooms

- Suitable for general use

Disadvantages

- More expensive to produce
- Prone to false alarms due to dust build up or steam - must be kept clean

1.3.2.3   Heat model

Residential type **Heat Alarms** require the least maintenance of any alarm, because they are virtually impervious to contamination. There are instances where a smoke alarm installation is not recommended, the kitchen being the prime example. Yet this area of a house is the source of some 40% of fires. An alternative method of fire detection is in the opinion of many fire officers and specifiers, essential in this and other vulnerable locations of residential properties. Fixed temperature heat alarms are designed to trigger when the temperature reaches 58 degC. (136 degF.) The alarms are not sensitive to smoke, but in a closed room with a vigorous fire they will tend to respond faster than a smoke alarm out in the hallway. A heat alarm **must** be interconnected to your smoke alarms so that the alarm can be heard throughout the building. This type, with consideration to the above, can be installed in kitchens, laundry's and garages.

Operating Principle

Thermistor sensor - resistance value varies with temperature.

Advantages

- Ideal for those areas where protection is deemed necessary but where the use of smoke alarms will cause constant false/nuisance alarms, ie., kitchens, garages, laundries
- Whilst not sensitive to smoke, in a closed room with a vigorous fire this alarm would tend to 'alarm' faster than a smoke alarm in an adjacent hallway

Disadvantages

- More expensive to produce
- Not an early warning device, should <u>always</u> be interconnected to other smoke alarms within the residence.

1.3.3 Nuisance/False Alarms

If, when the alarm goes off, there is no sign of smoke / heat to indicate that there is a fire, you should get your family into a safe place, before you start investigating.

Check the house carefully in case there is a small fire smouldering somewhere.

Check whether there is some source of smoke or fumes, for example cooking fumes being drawn past the Smoke Alarm by an extractor.

Fanning vigorously with a newspaper or similar to clear sensing chamber and silence the alarm.

If there are frequent nuisance/false alarms, it may be necessary to re-locate the device away from the source of the fumes. If for some reason the alarm continues to sound (due to insect infestation or contamination build up for example) the units can be silenced by opening the cover on the interface card inside the unit.

1.3.4   Looking after your Smoke / Heat Alarm

1.3.4.1 Automatic Self-Test (Photo-electric Model)

The smoke chamber automatically tests itself every 40 seconds. If the chamber is degraded it will beep **without** the LED flashing at the same time. If this happens clean the unit (refer to section 3.4.3). If the beeping persists and the beep does not coincide with an LED flash, return the unit for service.

1.3.4.2 Manually Testing your Smoke / Heat Alarm

It is recommended that you test your Smoke / Heat Alarm at least once a month to be sure the unit is working. It will also help occupants to become familiar with the sound of the Alarm. **Note:** You may wish to isolate the ancillary outputs of the Residential Panel prior to this test.

When you press the Test Button it simulates the effect of a real fire. So, there is no need to test the Alarm with smoke / heat.
Press and hold the Test Button until the Alarm sounds (it may take up to 10 seconds), (figure 1). The alarm will stop sounding shortly after the button is released. If the alarm fails to sound, follow this checklist:

- Check wiring connections to be sure they are firmly screwed into place.

- Check that the test button flashes once each minute. This indicates power "ON" and Smoke Alarm functioning. If the test button is not flashing, check power from the panel (10.0 - 13.1 VDC).

- If the test button still not flashing, check and adjust nylon screw located in   top cover to ensure operation of the isolate switch on the interface   card   inside   the Smoke Alarm.

WARNING: Do not test with flame.

If you wish to use smoke, allow the smoke from a joss-stick or newly extinguished taper to drift up to and into the smoke alarm from immediately below it. As soon as the alarm sounds, fan the smoke away vigorously (for example with a newspaper) to clear the chamber.

It can take up to 10 seconds after the smoke has entered the unit for the alarm to sound.
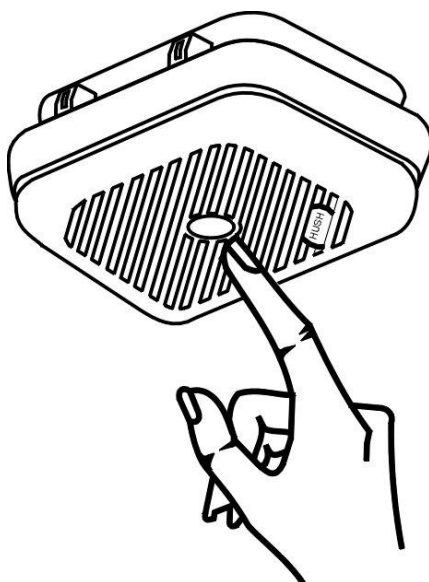
Figure 1.   Testing

1.3.4.3 Cleaning your Smoke Alarm

Clean your Smoke Alarm regularly. Use a soft bristle brush or the brush attachment of your vacuum cleaner to remove dust from the sides and cover slots where the smoke enters. Keep cover closed while cleaning. Do not vacuum or brush inside the Smoke Alarm. To clean the cover, remove it completely and use only mild soap and water. Dry cover thoroughly before replacing it.

WARNING: Do not paint your Smoke Alarm.

Other than the maintenance and cleaning described in this manual, no other customer servicing of this product is required. Repairs, when needed, must be performed by Brooks Australia Fire and Warning Systems.

1.3.5   Smoke / Heat Alarm Additional Features

The Brooks 'X' series smoke / heat alarms have features not available in standard smoke/heat alarms.
Remote Indicator Output - This enables an LED to be located outside a locked room to indicate the origin of the alarm.
Isolate - This enables a faulty smoke alarm to be temporarily isolated in order to prevent continued nuisance alarms.

1.3.6   Important Safeguards

When using household protective devices, basic safety precautions should always be followed, including those listed below:

- Familiarise yourself with the residential systems operation.

- Rehearse emergency escape plans so everyone knows what to do in case the alarm sounds.

- NOTE: Constant exposure to high or freezing temperatures or high humidity may reduce the life of the batteries.

- Do not disconnect wires to stop alarm sounding. (Fanning vigorously with a newspaper or similar will remove nuisance smoke from the Smoke Alarm and stop it sounding.)

- To maintain sensitivity to smoke, do not paint or cover smoke alarm in any manner; do not permit any accumulation of cobwebs, dust or grease.

- If unit has been damaged in any way or does not function properly, do not attempt a repair.

- Smoke / Heat Alarms are not a substitute for insurance. The supplier or manufacturer is not your insurer.

1.3.6.1 Limitations of Smoke Alarms

Smoke / Heat alarms have significantly helped to reduce the number of fire fatalities in countries where they are widely installed.

However independent authorities have stated that they may be ineffective in up to 35% of all fires. There are a number of reasons for this:
- Smoke Alarms will not detect fire if sufficient smoke does not reach the alarm. Smoke may be prevented from reaching the alarm if the fire is too far away, for example, if the fire is on another floor, behind a closed door, in a chimney, in a wall cavity, or if the prevailing air draughts carry the smoke away. Installing smoke alarms on both sides of closed doors and installing more than one smoke alarm as recommended in the Installers Manual very significantly improves the probability of early detection.

- Smoke / Heat Alarms which are not maintained or are tampered with may not function reliably.

- The Smoke Alarm may not be heard.

- A smoke alarm may not wake a person who has taken drugs or alcohol.

- Smoke Alarms may not detect every type of fire to give sufficient early warning. They are particularly ineffective with fires caused by escaping gas, violent explosions, poor storage of flammable rags and/or liquids, (for example petrol, paint, spirits etc) overloaded electrical circuits, arson, children playing with matches.

- Smoke/Heat Alarms which are not maintained or has been tampered with, may not function reliably.

- Smoke Alarms don't last indefinitely. The manufacturer recommends replacement after 10 years as a precaution.

1.3.6.2 Getting your Smoke Alarm Serviced

If your Smoke Alarm fails to work after you have carefully read all the instructions, check the unit has been installed correctly, and is receiving power, return it for repair or replacement in a padded box to "Customer Assistance and Information" at your nearest Brooks Australia Fire and Warning Systems Office. State the nature of the fault, where the Smoke Alarm was purchased and the date of purchase.

1.3.7 Fire Safety

1.3.7.1 Planning your Escape for when the alarm goes off

Use the Smoke Alarm test button to familiarise occupants with the alarm sound and to practice fire drills regularly. Draw up a floor plan that will show each resident at least 2 escape routes from each room. Children tend to hide when they don't know what to do. Teach children how to escape, open windows, and use roll up fire ladders and stools without adult help. Make sure they know what to do if the alarm goes off.

1.3.8 Locating your Smoke / Heat Alarm

Ionisation and Photo-Optical Alarms
Sufficient smoke must enter your Smoke Alarm before it will respond. Your Smoke Alarm needs to be within 10 paces (7 metres) of the fire to respond quickly. It also needs to be in a position where its alarm can be heard throughout the residence, so it can wake all occupants in time for all to escape. A **single** Smoke Alarm will give some protection if it is properly installed, but most residences will require **two** or more Smoke Alarms to ensure that a reliable early warning is given. For maximum protection you should put individual Smoke Alarms in all the rooms where fire is most likely to break out.
Your first Smoke Alarm should be located between the sleeping area and the most likely sources of fire (living room or kitchen for example). But it should not be more than 10 paces (seven metres) from the door to any room where a fire might start and block your escape from the house.

1.3.1.8 Single Storey Dwelling

If your home is on one level (a bungalow or mobile home for example) you should put your first Smoke Alarm in a corridor or hallway between the sleeping and living areas. Place it as near to the living area as possible, but make sure you can hear it loudly enough to wake you in the bedroom (for example, see figure 1).

If your home is very large and the corridor or hallway is more than say 22 paces (15 metres) long, one Smoke Alarm will not be sufficient. This is because no matter where it is located it will be more than 7.5 metres from potential fires.

Recommended Protection Figures (1 to 3)

■ Minimum protection
> each storey
> each sleeping area
> every 7.5 metres (25 ft) or hallways and rooms

☐ Maximum protection
> All rooms (except bathroom)

In houses with more than one sleeping area, Smoke Alarms should be placed between each sleeping area and the living area (for example, see figure 2).

1.3.8.2 Multi Storey Dwelling

If your home is on more than one level you will require at least 2 Smoke Alarms. The best place for your first Smoke Alarm is in the downstairs hallway near the stairs. (for example see figure 3). This is because smoke is likely to be detectable in the hallway before it reaches the upstairs landing and bedrooms.

Your second Smoke Alarm should be upstairs, because the downstairs Smoke Alarm is unlikely to detect the smoke from a fire in a bedroom upstairs. Both Smoke Alarms should be interconnected to ensure the earliest possible warning.

1.3.8.3 Maximum Protection

For maximum protection you should put individual Smoke Alarms in all the rooms where fire is most likely to breakout (apart from the locations to avoid, mentioned below). The living room is the most likely place for a fire to start at night, followed by the kitchen and then the dining room. You should also consider putting Smoke Alarms in any bedrooms where fires might occur, for instance, where there is an electrical appliance such as an electric blanket or where the occupant is a smoker. You could also consider putting Smoke Alarms in any rooms where the occupant is unable to respond very well to a fire starting in the rooms, such as an elderly or sick person or a very young child.

1.3.8.4 Checking you can hear your Smoke Alarm

With the Smoke Alarm sounding in its intended location, check you are able to hear it in each bedroom with the door closed, above the sound of your radio. The radio should be set to a reasonably loud conversation level. If you can't hear it over your radio the chances are that it wouldn't wake you.

If a Smoke Alarm is too far way for it to wake you, it is best to place another Smoke Alarm near the bedroom. The Interconnection Facilities on the Smoke Alarms are designed for this, when one alarm senses smoke all connected alarms respond.

Note: Options within the Smoke Alarm and Residential Fire Panel enable customising of the installation.

Figure 1.   **Single Storey Dwelling**
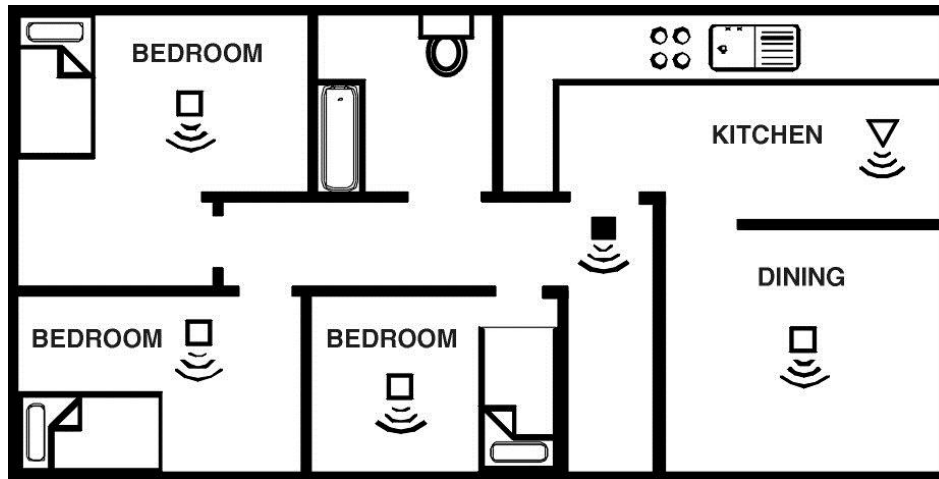
Figure 2.   **Single Storey Dwelling with separate sleeping areas**

Figure 3.   **Multi Storey Dwelling**

1.3.9   *Positioning your Smoke Alarm*

Hot smoke rises and spreads out, so a central ceiling position is the preferred location. The air is "dead" and does not move in corners, therefore Smoke Alarms must be mounted away from corners. Place the unit at least 30cm (12 inches) from any light fitting or decorative object which might obstruct smoke entering the Smoke Alarm. Keep at least 15cm (6 inches) away from walls and corners. (see figure 4).

1.3.9.1 Wall Mounting

When a ceiling position is not practical (for example on a ceiling having exposed beams or joists, or built-in radiant heating) put the top edge of your Smoke Alarm between 15 and 30 cm (6 and 12 inches) below the ceiling. Keep at least 15cm (6 inches) from corners. (see figure 4).

1.3.9.2 On a Sloping Ceiling

In areas with sloping or peaked ceilings install your Smoke Alarm 90 cm (3 feet) from the highest point measured horizontally (see figure 4), because "dead air" at the apex may prevent smoke from reaching the unit.

Figure 4.   Mounting

1.3.9.3 Locations to Avoid

Don't place your Smoke Alarm in any of the following areas:

- **Kitchens, Bathrooms, shower rooms, garages** or other rooms where the smoke alarm may be triggered by steam, condensation, normal smoke or fumes.

- **Attics** or other places where extremes of temperature may occur (below 4°C/34°F or above 40°C/104°F).

- Near a **decorative object, door, light fitting, window moulding** etc., that may prevent smoke from entering the Smoke Alarm.

- Surfaces that are normally **warmer** or **colder** than the rest of the room (for example attic hatches, uninsulated exterior walls etc), Temperature differences might stop smoke from reaching the unit.

- Next to or directly above **heaters** or **air conditioning vents, windows, wall vents** etc. that can change the direction of airflow.

- In very high or **awkward areas** where it may be difficult to reach the alarm (for testing, maintenance etc).

- Locate unit at least 1.5m (5 feet) and route wiring at least 1m (3 feet) away from **fluorescent light fittings** as electrical "noise" and/or flickering may affect the unit.

- Locate away from very **dusty** or **dirty areas** as dust build-up in the chamber can make unit too sensitive and prone to alarm. It can also block the insect screen mesh and prevent smoke from entering the chamber.

- Do not locate in **insect infested areas.** Small insects getting in to the chamber can cause intermittent alarms.

1.3.10   Limitations of Smoke Alarms

Smoke / Heat alarms have significantly helped to reduce the number of fire fatalities in countries where they are widely installed.

However independent authorities have stated that they may be ineffective in up to 35% of all fires. There are a number of reasons for this:

- Smoke Alarms will not detect fire if sufficient smoke does not reach the alarm. Smoke may be prevented from reaching the alarm if the fire is too far away. Installing smoke alarms on both sides of closed doors and installing more than one smoke alarm as recommended in this handbook very significantly improves the probability of early detection.

- Smoke / Heat Alarms which are not maintained or are tampered with may not function reliably.

- The Smoke Alarm may not be heard.

- A smoke alarm may not wake a person who has taken drugs or alcohol.

- Smoke Alarms may not detect every type of fire to give sufficient early warning. They are particularly ineffective with: fires caused by escaping gas, violent explosions, poor storage of flammable rags and/or liquids, (for example petrol, paint, spirits etc) overloaded electrical circuits, arson, children playing with matches.

Smoke Alarms don't last indefinitely. The manufacturer recommends replacement after 10 years as a precaution.

2. Residential Fire Panel

2.1 Functional Description

The Residential Fire Panel provides the necessary control, monitoring and power supply functions required by the Residential Alarm System.

2.1.1 Power supply

2.1.1.1 Primary Power Supply / Battery Charger

The primary power supply is fully regulated and has mains surge suppression fitted. Nominal output is 13.7V DC, maximum current 900mA. Higher current power supply may be used on request. In an alarm condition any additional current is supplied by the secondary supply (battery). The power supply is a standalone 10 watt switch mode power supply, output is 15V DC adjustable.

2.1.1.2 Secondary Supply

The secondary supply is a 12V 7AH Sealed Lead Acid Battery which under normal operating conditions will be continuously charged by the primary power supply, larger batteries available on request. If the primary power supply fails the secondary supply will provide sufficient current to maintain the system fully operational in quiescent condition for 72 -168 hours and 4 minutes in alarm the number of smoke/heat alarms and the battery size used (refer to table 1 to calculate the battery capacity for fully loaded systems).

2.1.2 Termination of Field Wiring

All field wiring enters the panel via knock outs on either the top or rear of the panel and is then terminated on the Termination Boards. An optional zone output card for each group of six zones may also be fitted.

2.1.2.1 Smoke Alarm Inputs

The termination board (one for each group of six zones is clearly labelled for positive supply (+), negative supply (-) and interconnect (I) for Zone 1 to Zone 6, zone 7 to zone 12 and zone 13 to zone 18 (for RFP18). When terminating each zone disconnect the End Of Line device and reterminate it at the last Smoke / Heat Alarm on the zone. Figure 6 shows how the field wiring is terminated on the termination boards for RFP12 and figure 7 for RFP18.

2.1.2.2 Mains Voltage Input

The 240V AC mains cable terminates at the mains isolating switch located on the inside rear of the cabinet.

2.1.2.3 Battery Input

Leads for the connection of the lead acid battery are already connected to the power supply. Ensure correct fitting of the battery, connect the Black lead to the negative terminal and the Red lead to the positive terminal.

2.1.3 Panic Input

This input allows for the manual activation of the Residential Fire Alarm System. On operating this input, all alarms and ancillary equipment will be activated into the full fire alarm condition. Activation is via any normally open dry contact, such as a Break Glass alarm or panic button. These should be mounted on adjacent to the panel itself.

2.1.4   Common Alarm Outputs

The RFP12/18 has a 12 volt dc output (maximum 1 Amp) and a set of Changeover Dry Contacts. Any zone facility entering an alarm condition will activate these outputs. In supplying both Voltage and Voltage free contacts the user has the design flexibility to control any ancillary function required.

e.g. the 12 volt output could be used to operate an external audio/visual warning device. The Changeover Dry Contacts could be used to control a magnetic door holder power supply or to signal a Remote Monitoring Station. In this way your residential fire system can be monitored on a 24 hour, 7 day basis.

2.1.5   Alarm Confirmation Period (Selectable)

The common alarm outputs respond with 3 options: no delay (standard), 30 second or 60 second time delay. Time delay is selected by a 4 way dip switch mounted on the back of the main board (refer to figure 8). This provides a means of delay to enable the occupant to remove a known false alarm, ie. burnt toast, before a remote warning is given.

2.1.6 Defect Mode Output

The Defect Mode Output responds to a system fault such as mains fail, line fault (short or open circuit), activation of the ancillary isolate switch or panel switched off. The defect mode provides a set of changeover dry contacts. These can be used for either local and / or remote warning of a system fault.

2.1.7   Zone Facility (ZF)

The Zone Facility (ZF) contains all the necessary circuitry to connect the smoke alarms to the Residential Fire Panel (RFP12/18). This is normally a three wire system. Two wires supply power to the smoke alarm, the third wire is an interconnect. An end of line (EOL) device provides a means of monitoring these three lines for either an open circuit or short circuit condition. A fault indication, audio (chirps) and visual (LED), will be indicated on the relevant zone.

2.1.8   Mimic Panel (Optional)

An Individual Smoke / Heat Alarm Mimic Panel is available for where the exact location of the actuated Smoke / Heat Alarm is required. The mimic panel is available with either 24, 48, or 72 mimic indicators as a standard product, or can be custom built to reflect the building layout. The Remote Indication output on each Smoke / Heat Alarm is wired back to the mimic panel using two wires.

2.1.9 Zone Output Facility (Optional)

An optional card which allows for separate zone outputs for each group of six zones is available when ancillary devices are required to operate on an activated zones basis only. A set of voltage free contacts is supplied for each zone which can be used to control equipment such as bells, sirens, or flashing lights, strobes and door holders etc. Also available on this card is the ability to group zones such that combinations of zones can operate together. This is achieved by dip switch selection. The possible configurations are detailed in Figure 7.

2.2   Specifications

No. of zones   :   12 or 18

No. of Smoke/Heat Alarms: 144 max for RFP12 (12 per zone)
                                 216 max for RFP18 (12 per zone)

Power Supply   :   Input 240V AC
                                 Output 12.3 -13.8 VDC, Typical 13.70 VDC
                                 current 0.9A
                                 Note: *larger power supplies available*

Standby Supply   :   12V/7AH sealed lead acid battery
                                 Larger batteries available (10AH & 17AH)

Battery low setting   :   12.3 VDC

Keyswitch Operation   :   "ON" System ON - Charger ON
                                 "OFF" System OFF - Charger ON
                                 "FIRE" activates all smoke/heat alarms

System Monitoring   :   Wiring loop in and loop out to Smoke/Heat
                                 Alarms monitored by active End of Line Device

Defect Mode   :   Initiated by an abnormal system condition:
                                 * Mains Fail
                                 * Ancillary output (common alarm) Isolated
                                 * Short circuit line fault
                                 * Open circuit line fault
                                 * System switched off

Defect Output (Fault)   :   1 set changeover dry contact

Alarm Outputs   :   12V DC 1 Amp maximum
                                 1 set changeover dry contact

Panic Input   :   N/O dry contact - activates all S/H Alarms
                                 Note: Not monitored

Sounder Silence Switch :   Acknowledges panel sounder
                                 Alters tone from continuous to chirp (for
                                 battery low and line fault)

Ancillary Isolate Switch :   Isolate common alarm outputs
                                 Initiate Defect Mode

Alarm Locate Switch   :   Silences all Smoke/Heat Alarms except those
                                 initiating the alarm . Interlocked to fire mode
                                 to prevent accidental operation

Visual Indications   :   Individual zone alarm - Red

Individual zone fault - Amber
Ancillary isolate - Amber
Locator activated - Amber
Sounder silence - Amber
Power ON - Green

Smoke/Heat Alarms　　　　:　　Remote indication output - latching or non
(Refer to jumper　　　　　　　　　latching.
set up Fig. 6)　　　　　　　　　　Standalone or common alarm operation

Panel Features　　　　　　　:　　Common or independent zone operation
 (Refer to Dip Switch　　　　　　Latching or non latching alarm indication
set up on Fig. 7)　　　　　　　　Alarm confirmation period:
　　　　　　　　　　　　　　　　　0 Sec, 30 Sec or 60 Sec
　　　　　　　　　　　　　　　　　Common Alarm Output latching or non latching

OPTIONS

Zone Output Card　　　　:　　　1 set changeover dry contact per zone
　　　　　　　　　　　　　　　　　　single or multiple zone operation - user
definable, max 6 zones per card

Mimic Panel　　　　　　　:　　　24 Smoke/Heat Alarm indication or
　　　　　　　　　　　　　　　　　　48 Smoke/Heat Alarm indication or
　　　　　　　　　　　　　　　　　　72 Smoke/Heat Alarm indication

Cabling　　　　　　　　　:　　　3 core 16/0.20 red sheath (standard)
　　　　　　　　　　　　　　　　　　4 core 16/0.20 red sheath (maximum options)
　　　　　　　　　　　　　　　　　　2 core 16/0.20 red sheath (for RIL or Mimic)

2.3 Familiarisation

The purpose of this section is to make you familiar with the operating and construction of the RFP range of Residential Fire Panels.

Panel Overlay
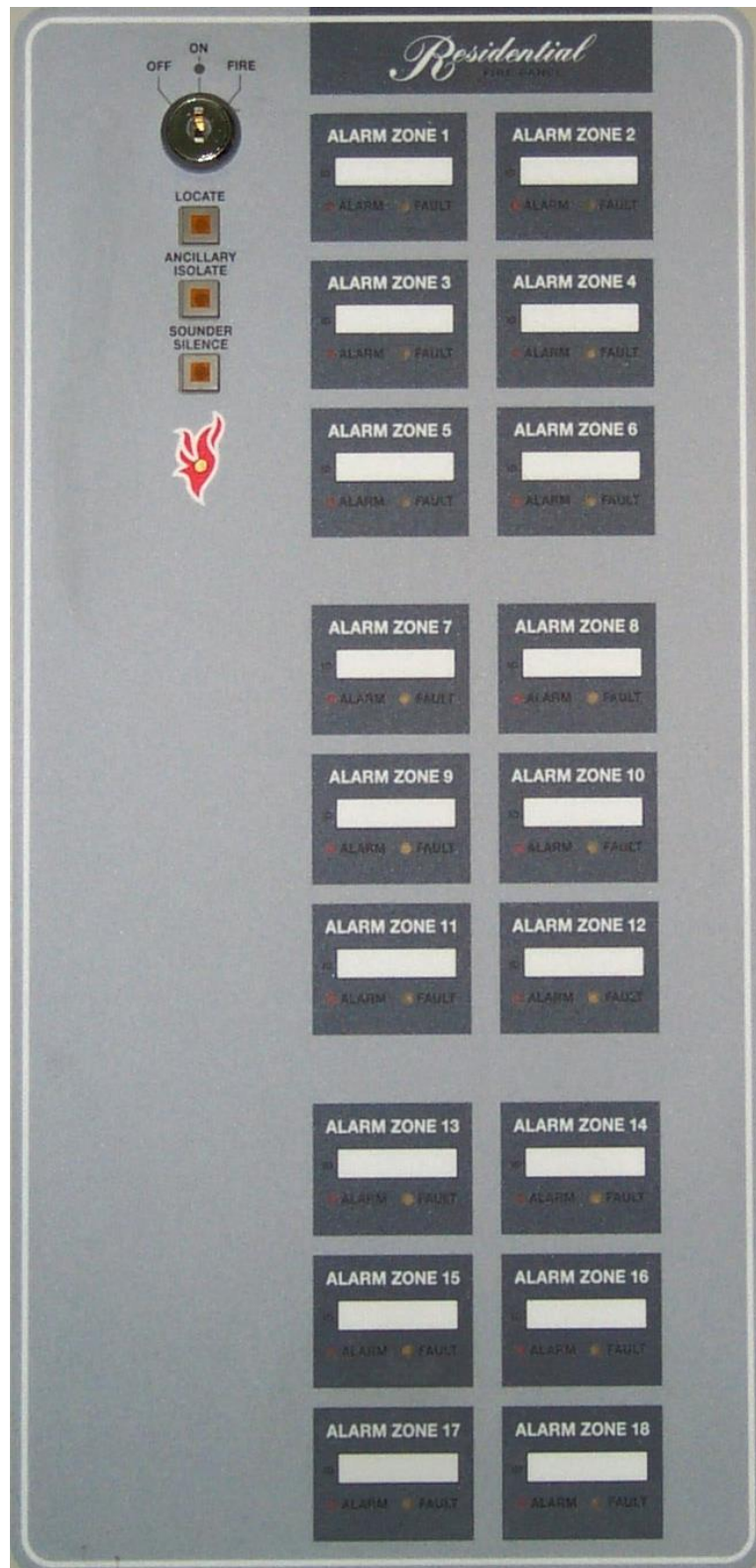
Figure 5

2.4   Compatible Equipment

Smoke / Heat Alarms:	Brooks ionisation smoke alarm	EIPFSICX6
	Brooks photo-electric smoke alarm	EIPFSPCX6
	Brooks heat alarm	EIPFSTCX6
Sounders:	Roshni electronic sounder shallow base	MRORSDC
	Roshni electronic sounder deep base	MRORDDC
	Askari electronic sounder compact	MACWMULTI
	Askari electronic sounder flange	MACFO3W
	Askari electronic sounder panel	MAPOO3R
	Squashni electronic sounder	MSQO3C
Strobes:	Brooks strobe shallow base	MSBE2012C
	Brooks strobe deep base	MSBE2012CD
	TK-30 strobe	BSSTK3012C
Combined Sounder & Strobe:	Squashni sounder & strobe	MSQBE12C
	Roshni sounder & strobe	MROBE12C

Figure 6

Figure 7

RFP6 MAIN BOARD SWITCH SETTING

COMMON ALARM

INDEPENDENT ALARM

LATCHING ALARM

NON LATCHING ALARM

ALARM TIME DELAY — 0 SEC — 30 SEC — 60 SEC

COMMON ALARM OUTPUT — NONLATCHING — LATCHING

NOTES :

1) EACH ZONE CAN BE SET WITH DIFFERENT COMBINATIONS

2) FACTORY SET UP COMMON ALARM, LATCHING ZONE ALARM, 0SEC TIME DELAY FOR ALL ZONES & NONLATCHING
   COMMON ALARM (FOR RFP6D ONLY)

TITLE

DIP SWITCH SETTING FOR
RFP6/18 MAIN BOARD

BROOKS AUSTRALIA

DRAWING No. F499

ISSUE No. 2

DRAWN A.S. 1/10/96

CHECKED A.S. 1/10/96

DATE	ISSUE		REVISION	DRN	CHK
17/1/2003	2	DELETE DIP SWITCH SETTING OF ZONE OUTPUT CARD	A.S.	A.S.
1/10/96	1	ORIGINAL	A.S.	A.S.

Figure 8

2.5   Panel Status

2.5.1   Normal

All ancillary 'off'
All sounders 'off'
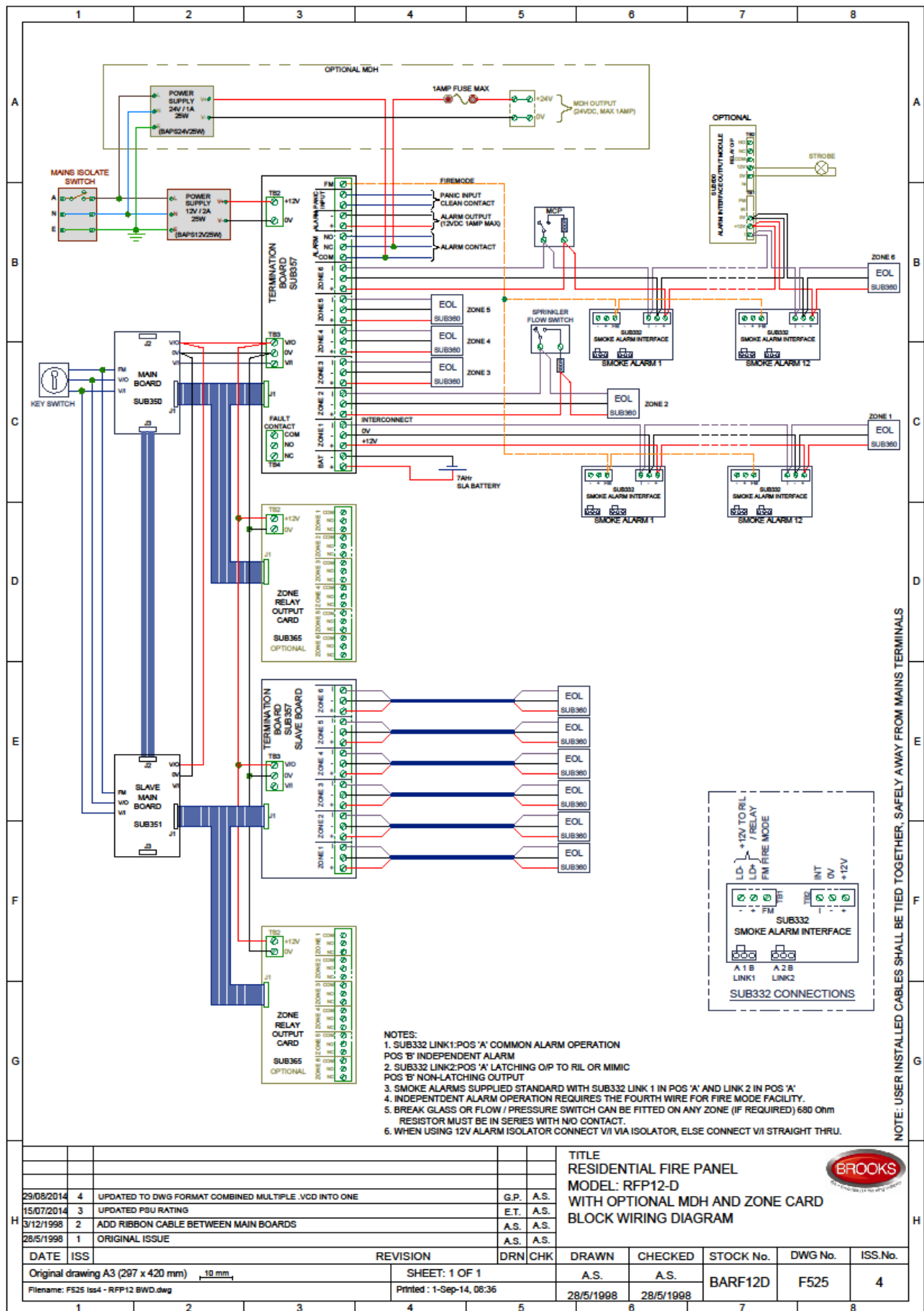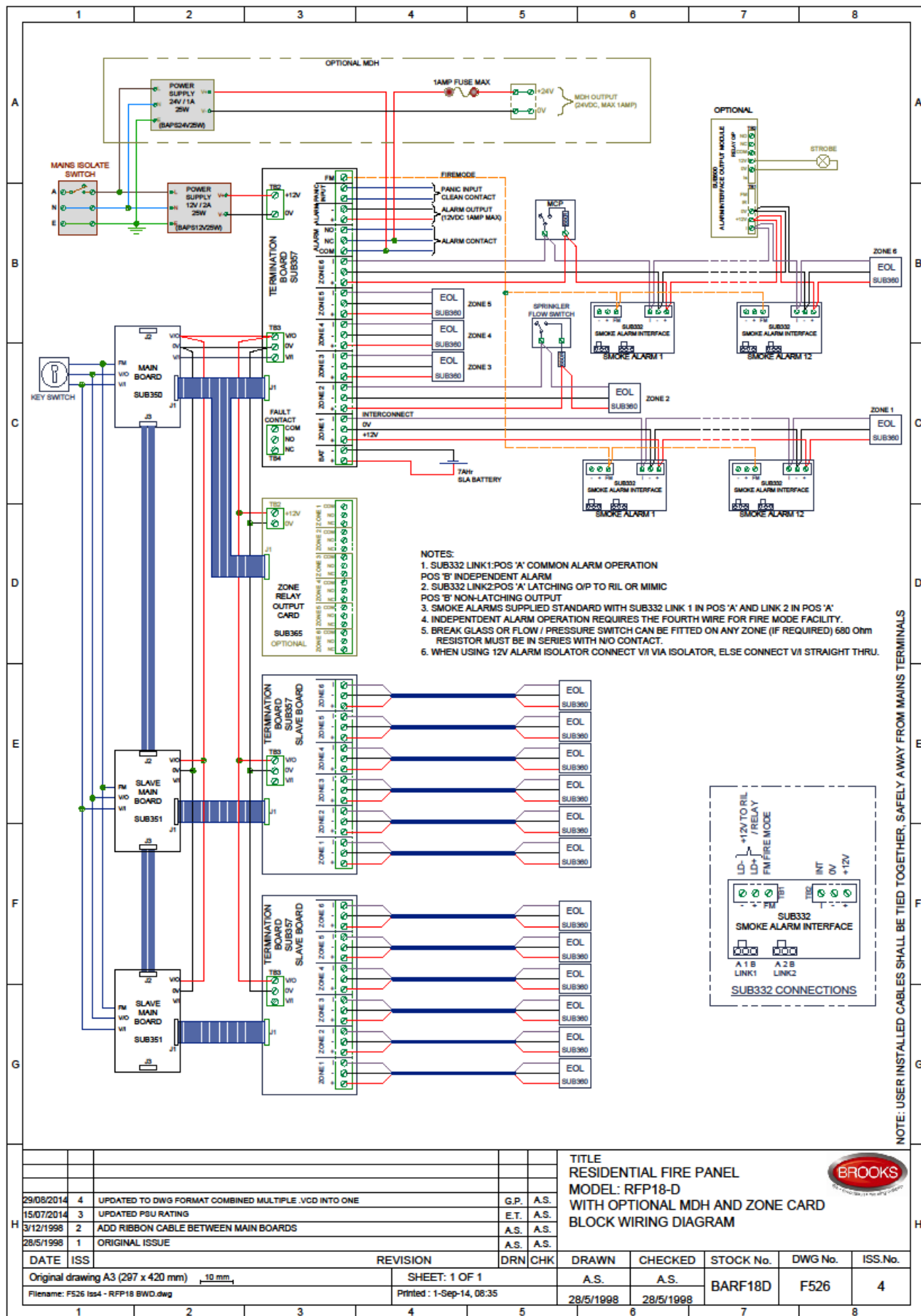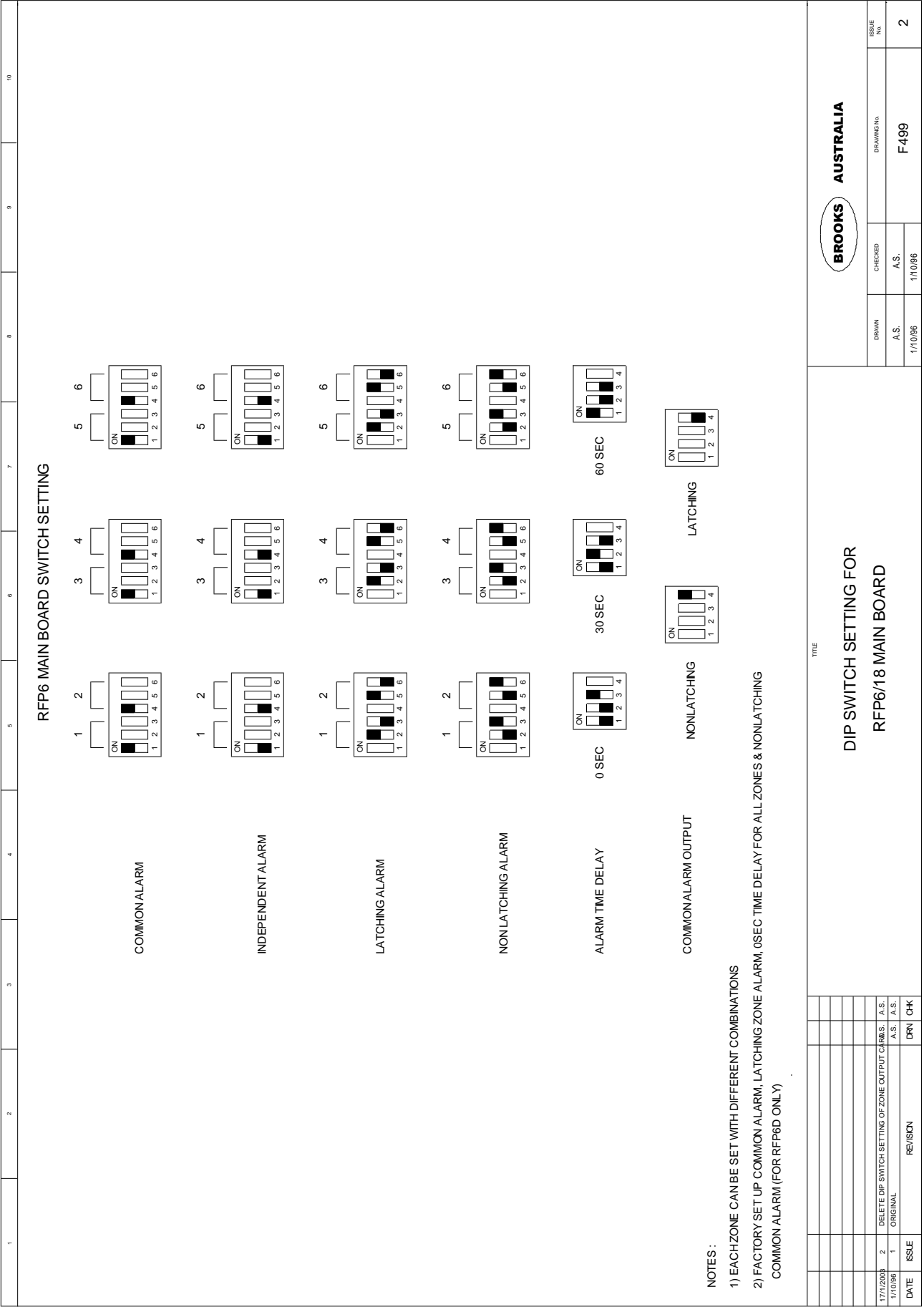All yellow indicators 'off'
All red indicators 'off'
One green indicator 'on'

Note: When panel is first switched "on", all zone fault LEDs will illuminate for few seconds. This is normal.

2.5.2   Zone Alarm

Zone alarm indicator 'on' (Red LED);
Panel/Smoke Alarms Sounding;
Ancillary outputs activated.

The red indicator will show the zone and thereby the general location of the fire alarm. In case of false alarms see Trouble Shooting in section 6.

2.5.3   Zone Fault

Zone fault indicator 'on' (amber LED);
Panel sounder sounds continuously (activate the Sounder Silence switch, sounder will sound (chirp) once every 40 seconds until fault is cleared);
Defect Mode output activated.

2.5.4   Low Battery

With the mains disconnected, the panel operates solely off the battery. Once the battery reaches a preset low level 12.3Vdc then the fault sounder will pulse once every 40 seconds to give an audible indication that the system is running low on capacity (all zone fault indicators must be off). Mains should be restored as a matter of urgency.

2.5.5   Ancillary Isolate

Ancillary (alarm) outputs can be isolated from the panel using the ancillary isolate switch. When isolated, an amber LED built in the switch body will be illuminated, the sounder will sound continuously and the defect mode activated.

2.5.6   Alarm Locate Switch

This mode enables the smoke/heat alarm which originated the alarm signal to be identified. Press the 'Locate' switch, the amber indicator built into the switch body will illuminate. Now place the key into the keyswitch and turn to 'Fire'. All Smoke/Heat alarms will now silence except the unit(s) which have of themselves activated.

2.5.7   Sounder Silence Switch

Used only to silence alarm or fault sounder. For a fault condition the sounder changes from continuous output to chirp once per minute. This chirp cannot be silenced and acts as a continuous audible warning that the sounder is silenced and a fault condition still remains. When activated the amber indicator built into the switch body will illuminate.

3.   TESTING

This section describes the procedure to ensure that your RFP system is fully functional and is not intended as the commissioning test procedure (Refer to section 5).

3.1   Before You Test Your RFP System

Before you can test your RFP system it is important to ensure that any ancillary equipment i.e. a security system, fire/smoke doors, A/C shutdown etc, has been isolated by the ancillary isolate switch on the front of the panel. The switch will illuminate when it has been isolated. If you wish to test any ancillary equipment it is advised that any relevant people i.e. tenants or a security / fire monitoring company, be notified before continuing as the defect mode will be initiated.

3.2   Panel Test

Step 1.   Turn the key switch to the 'Fire' position. All smoke alarms should activate.
(If ancillary equipment has not been isolated they will also activate)

Step 2.   Once all alarms have been verified press the Locate switch on the panel. All the alarms should silence.

Step 3.   Go to the last alarm (this alarm will contain the End of Line device) for each zone and press the Test button for 15 seconds. During this time only the detector you are testing should activate.

Step 4.   Return the key switch to the "On" position and press the Locate switch ensuring that the switch illumination turns off.

Step 5.   Randomly press the Test button on over 50% of the alarms ensuring that the alarm activates and the alarm indicator for the zone under test illuminates on the panel, and, if panel is configured for common zone operation all other alarms activate. If the panel is configured for separate zone operation only the alarms in the zone being tested activate.
Note: If a mimic panel or RIL is connected to the alarm being tested check that it also illuminates at this time.

Step 6.   Proceed to the smoke alarm containing the end of line (EOL) device, this is the last smoke alarm wired onto each zone. Remove the end of line (EOL) device, the panel should now sound a fault signal (continuous sound), and the fault LED for this zone will illuminate.
Restore the EOL and the fault signal stops. This test should be done for each zone.

Step 7.   If there is a device connected to the defect mode output, check that the device is activated when:

* Power is switched "off"
* Ancillary Isolate Switch is "on"
* Following procedure in step 6 and fault LED is illuminated

Step 8. Return the panel to its normal operating condition and reset any latching indicators by switching the key switch to the "Off" position and then back to the "On" position.

> **Note:** *If latching ancillary devices are used these will need to be individually reset.*
> *If system has been customised the functions selected may require additional testing.*

If during testing any of the above steps fail, refer to the "**Trouble Shooting**" section 6 in this book. If you are unsure of any test results please do not hesitate to contact Brooks Australia on 1300 65 8000.

4. Installation

The Residential Panel is factory pre-wired and fully tested before delivery. After receipt of the panel, the unit should be carefully checked for any possible mechanical damage during transportation. Report any damage to your supplier immediately.

4.1 Surface Mounting Instructions

Step 1.   Locate the position where the panel is to be sited.

Step 2.   Mark the position of the two mounting holes (160mm apart) and the cable cut-outs, 5 knockouts available between the two mounting holes. **Note that Power and ELV cables are to be kept segregated**.

Step 3.   Select the appropriate mounting hardware and prepare the two mounting holes.

Step 4.   Fix the top two points, leaving approximately 6 mm of the protrusion from the wall. Mount the Panel and secure all mounting hardware.

4.2 Recommended Mounting Hardware

Masonry
Drill - 6.5 mm
Rawlplug - Green
Fastener - 8 gauge x 25 mm zinc plated self-tapping screws

Plaster Board
Drill - 8 mm
Fastener - Hollow wall anchors type SWA416 or equivalent

Solid Timber
Drill - 3 mm
Fastener - 8 gauge x 25 mm zinc plated self-tapping screws

4.3 Cable Terminations

4.3.1 AC Power

The 240V AC input is terminated on the mains isolate switch and earth stud provided on the rear inside of the enclosure.

NOTE: *This panel can be wired to the AC Power Input or connected to a GPO via a 3-core flex cable, whichever is the more appropriate.*

4.3.2 Field Wiring

All field cabling is to be terminated on the Terminals provided as per Fig 6 and Fig 7. The Figures show the conventional Block Wiring Diagram using 3 or 4 core cable for each zone as per options selected.
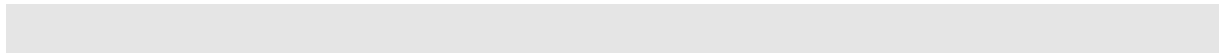
Cables should be terminated as required. Ensure all cables are neat and secured using approved plastic ties.

4.3.3 Battery

Fit Battery into bottom of enclosure.

RED   - POSITIVE
BLACK   - NEGATIVE

Using the mounting hardware provided, secure the front panel to the enclosure.

5. Commissioning of Installation

5.1 General

The fire alarm installer shall ensure that all documentation, logbook, handbook (operators and installers manuals), as-installed drawings, and check list are available at the time of commissioning.

The fire alarm system installer shall rectify any faults in the fire detection and alarm installation, as appropriate, where the results of the commissioning tests are outside the manufacturer's limits.

5.2 Commissioning Tests

The following tests shall be performed:

5.2.1 System Configuration

Step 1.   Ensure that the smoke alarm locations and the Residential Fire Control Panel are appropriate for the type of site and usage.

Step 2.   Check that all smoke alarms used in the system are:
- listed in this manual
- compatible with the installed zone facility, particularly that the permitted
- number of Smoke Alarms for each zone is not exceeded; and
- installed in an environment for which they are suitable

Step 3.   Check that the AC mains power supply for the system has been provided in accordance with AS3000.

Step 4.   Visually check all field wiring terminations (refer to the panel wiring instructions).

Step 5.   Ensure the End of Line Devices are in correct location, visually confirm wiring is correct (refer to the smoke alarm wiring instructions).

Step 6.   Check that the battery is fitted. It should be of a suitable type and capacity (refer to Table 1)

Step 7.   Check that all zone facilities have been labelled and that the alarm zone is immediately apparent from the labelling.

Step 8.   Check that as-installed drawings have been correctly marked up and that they are consistent with the installation.

Step 9.   Record the results of the commissioning test on the commissioning sheet in this Handbook.

5.2.2 Ancillary Functions

'PANIC' - Disconnect the 'Panic' input and using a multi-meter set to ohms check for an Open Circuit across the field wiring. Operate the 'Panic' device and ensure meter reads short circuit, reset the panic device if necessary and ensure it again reads open circuit. Reconnect the wiring.

'12 Volt' - Disconnect the field wiring and using a multi-meter set to ohms ensure that there is no short circuit between the field wiring inputs. (The exact field resistance will be a function of the device connected i.e., Fire Bell - 150 ohms). Reconnect the wiring.

5.3 Panel Testing

5.3.1 General

- Connect Battery Leads: Red - Positive
                             Black - Negative

- Connect Power and Switch ON the Mains. All zone fault LEDs will   illuminate for a few seconds and sounder will sound

- Power 'on' LED should light green, no other facility or indicator should function

5.3.2 Alarm Test

- Ensure control panel is in the "Normal" condition, keyswitch in the "ON" position. Power on - Green LED.

- Turn the key switch to place the panel in 'FIRE' mode

- Check:

  1.   No Alarm LED illuminates
  2.   All smoke alarms sound
  3.   Ancillary Outputs activate.   Check operation of all ancillary equipment.

- Switch to "FIRE/LOCATE" by pressing the Locate switch to 'ON' while key is still in Fire Mode. Amber LED illuminates. All alarms are silenced.

- Return Key switch to 'ON'. Turn Locate switch off. (i.e. amber LED extinguishes).

NOTE: *Some ancillary equipment may be latching or simply require re-setting. This should be done before proceeding.*

5.3.3 Fault Test

Step 1.   On the termination board disconnect any wire of the three wires (Positive, Negative, Interconnect) to the smoke alarms of zone 1. Ensure:

> * Zone1 fault LED illuminates
> * The panel buzzer will sound continuously.
> * Activate the sounder silence switch. The buzzer will pulse once every 40 seconds (chirp).
> * Defect Mode relay contact will changeover.

Step 2.   Restore the wire, amber fault LED extinguishes. The Panel buzzer will be silenced and defect mode contacts return to normal.

Step 3.   Repeat steps 1 and 2 for each zone.

Note: Many options on the Residential Panel are user selectable. Additional testing may be required if the system has been customised. Refer to system as installed details.

5.3.4 Power Supply

Power supply voltages are pre-set at the factory to 13.7V DC.

Operate the AC supply switch off and on at least five times to check that the system will not false alarm from AC power interruptions.

5.3.5 Field Testing

With the Control Panel in its NORMAL MODE:

Step 1.   Proceed to the smoke alarm on zone 1 which contains the end of line (EOL) device. Remove the EOL and ensure that the control panel has registered a fault condition. For this zone reconnect the EOL and the fault condition clears.

Step 2.   Press and hold the test button for at least 5 seconds, Smoke alarm will activate, ensure that an alarm has registered at the panel. All ancillary outputs should activate.

Step 3.   Turn keyswitch to 'OFF' then back to 'ON'. The alarm led will extinguish and all ancillary outputs will reset.

Step 4.   Repeat steps 1 - 3 for each zone.

Step 5.   Press 'Locate' and turn key switch to 'Fire' (FIRE/LOCATE MODE). Press Ancillary Isolate. Proceed to each smoke alarm on each zone in turn and activate the Test button. The individual smoke/heat alarm will sound standalone. Check any associated Remote Indicator lights.

Release Test button and smoke alarm will silence. If selected, check remote indicator remains lit. (This can be reset from the panel as per Step 3 above.)

Step 6.   If there is a device (e.g. strobe) connected to the defect mode

* Control Panel is switched off
* Mains supply is switched off
* Ancillary Isolate switch is activated
* Fault LED illuminates during step 1.

5.4   As-Installed Diagrams and Installer's Statement

An as-installed diagram of the wiring layout of the complete installation, including the positions of the Smoke Alarms and zone facilities, should be provided before a final inspection is made.

5.5   Log Book

A log should be kept by the person on-site responsible for the fire alarm system. The responsible person's name and contact details should be kept at the RFP. This log shall include provision for recording all known alarms (genuine, false, practice, or test), and all faults and disconnections. All alarms and tests recorded shall remain in the log and shall be available at all times. A separate section of the owners manual or book shall be provided to record all service/maintenance details.

5.6   Maintenance

For the continuous reliability of the system, provision shall be made for the regular maintenance of the installation.

A properly designed and installed detection system offers effective life and property protection.   However, for ongoing reliability the system must be maintained at its peak performance. A poorly maintained system can lead to nuisance alarms or complete system failure.

Under these conditions, you have wasted your initial investment and do not have the level of protection needed.

1.   It is recommended that the owner test each smoke alarm every month.
        The panel alarm test should also be performed.

2.   It is also recommended that each 6 months a full system test be performed by a suitably qualified servicing company. Battery and power supply voltages should be checked and adjusted, if necessary, at this time.

6.   Trouble Shooting

6.1   False Alarms

In the event of a "false alarm" - it is imperative that the cause is determined and corrective action taken.

Condition: False Alarm - System is fully activated
   - Red Alarm LED 'ON'

Step 1.   Operate the **LOCATE** switch so that it is illuminated and turn key to **FIRE**. This silences the panel and all the smoke alarms except the one which initiated the alarm. Listen and you will be able to determine where this smoke alarm is located.
NOTE: The panel does not latch in alarm (depends on system set up) , so when the smoke alarm resets, the panel resets.

Step 2.   Try to determine the cause of the alarm It may be a "simulated condition" such as dust, steam, insect spray, cooking fumes, gas heater etc. Fan the smoke alarm vigorously with a newspaper or cloth to try and clear any contaminant from inside the sensor. If the smoke alarm silences return to the panel and go to Step 3..

If the Smoke Alarm cannot be silenced pull open its cover and find the isolation switch as shown in the diagram below. (Some alarms may not have this type of switch; in that case, simply leave the cover open). Slide the switch to the OFF position. You have deactivated the alarm and it will no longer be capable of sensing smoke. Also, any interconnected smoke alarms between this one and the smoke alarm at the end of the line on the zone will not be able to send an alarm signal back to the panel. **Call the service technician responsible immediately.** Return to the Control Panel and ensure that all switches are in the normal position. A fault will be indicated. Activate the Sounder Silence switch.

Smoke Alarm with cover open:

ISOLATION SWITCH
(SHOWN IN ON POSITION)
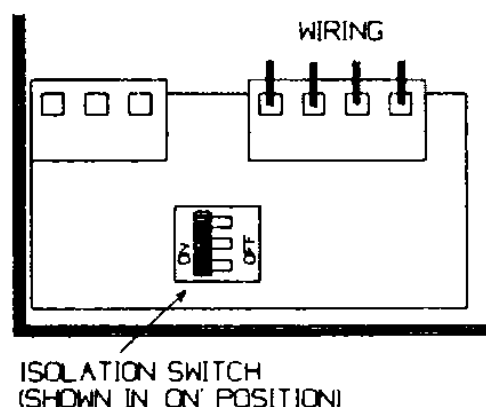
Step 3. Turn the Panel key switch to "OFF'; wait approximately 10 seconds, then turn the system back on.

6.2   Faults

A fault is present when the sounder in the Control Panel sounds continuously (or beeps about every 30 seconds with the Sounder Silence switch activated) and no red alarm LED is illuminated.

6.2.1 Line Fault

If a zone fault (amber) LED is illuminated and the sounder is sounding continuously, then an Open Circuit or Short Circuit has occurred. If a Short Circuit has occurred then the fuse on the zone will be blown. If an Open Circuit has occurred the fuse will be intact. The field wiring should be disconnected and metered to locate the source of the fault.

6.2.2 Low Battery

If the Control Panel sounder emits a short beep about every 30 seconds and no red or amber LED is illuminated and the Sounder Silence switch is not activated, a low battery condition is indicated. This may be caused by the 240 volt Mains being off for more than 24 hours. Mains power should be restored as a matter of urgency. If the Mains has not been off, **call the service technician responsible immediately.**

FOR FURTHER ASSISTANCE PLEASE DO NOT HESITATE TO CONTACT YOUR LOCAL DISTRIBUTOR OR BROOKS FIRE AND WARNING SYSTEMS

6.3   Spare Parts

6.3.1 Main Panel

ITEM	STOCK No.
1. RFP6 Master Board	SUB350/PCB130/3
2. RFP6 Slave Board	SUB350S/PCB130/1
3. RFP6 Master Termination Board	SUB356/PCB134/1
4. RFP6 Slave Termination Board	SUB355/PCB132/1
3. End of Line Device	SUB360/PCB132/1
4. Zone Output Card	SUB365/PCB133/0
5. Lead Acid Battery	BBAT12V6.5
	BBAT6V10
	BBAT12V17
6. 003 Key Switch	SK150
7. Mains Isolate Switch	SW160
	SW161
	SW162
8. Ribbon Cable & Connectors	CA115
9. Fuse Fast Blow 1.5Amp	FU155
10. Fuse Fast Blow 1Amp	FU160

6.3.2 Smoke / Heat Alarms

11.	Ionisation Smoke Alarm	EIPFSICX6
12.	Photo Electric Smoke Alarm	EIPFSPCX6
13.	Thermal Alarm	EIPFSTCX6
14.	S/H Alarm Interface Card	SUB332/PCB116/4

To obtain any of the spare parts shown or equipment service, please contact your nearest local distributor or Brooks Australia Fire and Warning Systems.

TABLE 1: *CALCULATING BATTERY CAPACITY*

Quiescent Current I_Q:

Panel ....RFP12 60 mA
                                         RFP18 80 mA
With only End of Line Devices connected

PFS-ICX _____ x .135   _____mA

PFS-PCX_____ x.135   _____mA

PFS-TCX_____ x.135   _____mA

                        TOTAL I_Q _____mA

Standby duration T_1 _____ Hrs

Alarm Current I_A:

Panel ....RFP12 110 mA
                                          RFP18 130 mA
With only End of Line Devices (6 off)

PFS-ICX _____ x 10mA   _____ mA

PFS-PCX_____ x10mA   _____ mA

PFS-TCX_____ x10mA   _____ mA

Total Ancillary Loads (Max 500mA)   _____mA
                                          _____

                        TOTAL I_A _____

Alarm Duration T_2 _____ minutes.

Battery Capacity = $\underline{[(I_Q \times T_1) + (I_A \times T_2)/60\} \times 1.2}$
                                1000
                  =   AH

LOCAL FIRE ALARM SYSTEM

INSTALLERS STATEMENT

1. Name of Building_____

2. Situated at _____

3. Is the system monitored   YES/NO

    If YES, by whom _____

4. Name of nearest Fire Brigade Station_____

    Phone_____

5. Type of Panel_____   Serial No. _____

6. Number of smoke alarms connected_____

7. Describe any ancillary equipment installed and connected to the Residential Fire Panel.

    _____

    _____

8. Main Supply Voltage_____

9. Battery Type and Capacity_____

10. Nominal Battery Voltage_____

11. Maintenance Agreement held by _____

12. Has Log Book been supplied YES/NO_____

13. Have as-installed drawings been supplied YES/NO _____

LOCAL FIRE ALARM SYSTEM

INSTALLERS STATEMENT

Additional Comments

_____

_____

_____

_____

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_____

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_____

_____

_____

_____

_____

_____

_____

RESIDENTIAL FIRE PANEL
TEST REPORT

SYSTEM CONFIGURATION

.   **As installed Diagrams**   Correct/Incorrect

.   **Log Book Details**

.   **SMOKE ALARMS**   **Layout**   Correct/Incorrect
                                  Number   Correct/Incorrect
                                  Type Selection   Correct/Incorrect

.   **Panel Position**   _____

IF INCORRECT, COMMENT_____

_____

_____

PANEL

.   **Alarm Test**   Correct/Incorrect

.   **Fault Test**   Correct/Incorrect

.   **Battery Voltage**   Correct/Incorrect

.   **Mains Connection**   Correct/Incorrect

         Field Wiring Termination   Correct/Incorrect

IF INCORRECT, COMMENT_____

_____

_____

FIELD DEVICES

.   **End of Line Fault Test**   Correct/Incorrect

.   **Smoke Alarms All Operational**   Correct/Incorrect

.   **Manual Call Points All Operational**   Correct/Incorrect

.   **Ancillary Equipment All Operational**   Correct/Incorrect

IF INCORRECT, COMMENT_____

_____

_____

INFORMATIVE EXAMPLE

RESIDENTIAL FIRE PANEL
LOG BOOK REPORT

MONTH/YEAR _____

INSPECTION, TESTING AND MAINTENANCE PROCEDURES

Premises _____

Address _____

Note   Give details of all unsatisfactory items in report section. Refer to owners manual for commissioning test report.

☐   Place a tick in box where item is satisfactory   ☐   Place a cross in box where item is unsatisfactory

SIX MONTHLY CHECK	CHECKED		CHECKED
All RFP equipment clean and operative	☐	Visual inspection of all Smoke/Heat Alarms	☐
Battery condition and terminals	☐		
Indicator lights correct operation	☐	Zone facility operation	☐
Correct initiation of each Smoke/Heat Alarm Fault condition simulation on all zones and ensure:	☐	Correct operation of all ancillary control devices	☐
. Fault annunciation operative Modifications to the system -	☐	Operation of manual call points	☐
. Smoke/Heat Alarm condition	☐		
. Building modifications	☐	Spare glasses for manual call points	☐
Correction of items previously recorded for action	☐	All controls returned to normal condition ☐	

REPORT(S)

_____

_____

_____

_____

SIGNED: _____   **SERVICE PERSON:** _____

For owner or his agent   Print Name

Product Guarantee

Brooks Fire Detection Products are guaranteed for a period of either fifteen (15) months from the date of purchase or twelve (12) months from the date of operation, whichever is the lesser. If the product has any defect due to faulty workmanship or material it will upon return to Brooks be repaired or replaced free of charge.

On returning a component or complete product, proof or purchase will be required. If returning the complete product all accessories and documentation MUST be returned.

This guarantee does not cover damage caused to the product or its components as a result of incorrect installation, misuse, careless handling or where repairs have been made or attempted by others. On site warranty repairs will be carried out at the discretion of the manufacturer.

No other guarantees written or verbal are authorised to be made on behalf of Brooks. All other conditions and warranties whether expressed or implied are, to the extent permitted by law, hereby excluded.

As Brooks has no control over the system's design, installation to the relevant Australian Standard or maintenance, the Company and its agents take no responsibility for any damage, financial loss or injury caused to any equipment, property or persons resulting from the use of the Residential Fire Panels.

NSW   4 Pike Street, Rydalmere, NSW 2116
Ph: 02 9684 1466
Fax: 02 9684 4146

VIC   19 Stewart Street, Mt Waverley, VIC 3149
Ph: 03 9802 2422
Fax: 03 9802 6766

SA   729A Port Road, Woodville, SA 5011
Ph: 08 8347 0000
Fax: 08 8347 0600

QLD   2/49 Boyland Avenue, Coopers Plains, Qld 4108
Ph: 07 3373 8222
Fax: 07 3373 8022

TAS   Parmic Pty Ltd., 8 Jannah Court, Mornington, TAS 7018
Ph: 03 6245 0776
Fax: 03 6245 0778

WA   13A Halley Road, Balcatta, WA 6021
Ph: 08 9344 1156
Fax: 08 9344 1872

OR NATIONAL SALES NUMBER: 1300 65 8000

FOR THE COST OF A LOCAL CALL