

Operation & Installation Manual RFP V2 Series Rev 0

Residential Fire Alarm Panels RFP V2 Series

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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 40 years experience in design, manufacture and service of commercial and residential fire detection and warning systems.

In keeping with our philosophy of innovation, flexibility, reliability and quality, Brooks now offers a complete and comprehensive range of Smoke / Heat Alarms and Residential Fire Panels (RFP).

Australian Standard AS3786 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 residential fire alarm panels to enable fire system engineering principles, normally applied to commercial premises, to 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 RFP system provides an effective LIFE SAFETY SYSTEM, which raises the alarm and maximises your opportunity to escape.

1.2 System Overview

The Brooks RFP Series of Residential Fire Alarm Panels complete with the compatible Smoke / Heat Alarms provides an automatic fire detection and warning system designed to meet the requirements of Australian Standard AS3786-2014 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 Panel (RFP) employs smoke 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. i.e. total power loss, 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 RFP. The system features and/or configuration, is user definable. This allows true flexibility of design and ease of future upgrading or modifications. The RFP system has options such as independent zone operation, independent smoke alarm operation, fire emergency override, alarm confirmation period, remote indication.

RFP Main Board DIP switch settings are master settings that take precedence over the interface card SUB1012. Each zone is limited to a maximum of 12 Smoke / Heat Alarms and ancillary equipment for control, e.g. 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 uses discrete electronics for its circuit design and is housed in a powder coated steel cabinet. This provides high reliability and ease of installation.



2 Smoke / Heat Alarms

2.1 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 and may cause nuisance alarms.

Notes:

- When the power is first connected to the Smoke / Heat Alarms, it 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 correctly, in the centre of the ceiling if possible.
- Test monthly or after servicing any existing fault.
- When the panel chirps every 20 seconds, it means that either the backup battery has reached the low battery threshold (below 12V) or a wiring fault exists in one or more zones. Restore the mains power immediately or call for technical support for wiring fault.
- For the Photo-electric model EIB650iWX, if the Smoke Alarm beeps <u>without</u> the LED flashing at the same time then clean the unit as this is the automatic test feature telling you the chamber is degraded.
- Plan your escape route.
- Proper protection requires more than one Smoke / Heat Alarm.
- If you have any doubt or query about Smoke / Heat Alarms consult the nearest Brooks Office as shown in the last page.

2.1.1 Photoelectric Model

Photoelectric Smoke Alarms senses visible smoke particles. 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 less prone to nuisance alarms from cooking fumes. Furthermore, they contain no radioactive material. However, all photoelectric 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 or insect proof since they would then be effectively smoke proof! For this reason, it is essential that photoelectric Smoke Alarms are always kept clean. The recommended areas to install photoelectric Smoke Alarms are in bedrooms and living areas adjacent to kitchens. Refer to the EIB650iWX leaflet.

Operating Principle

Light scattering – a 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 for bedrooms.
- Suitable for general use.



Disadvantages

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

2.1.2 Heat Model

Residential type Heat Alarms require less maintenance than photoelectric Smoke Alarms. 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. It is the opinion of many fire officers and specifiers that as an alternative method of fire detection, the use of Heat Alarms is essential in kitchens and other vulnerable locations of residential properties. Fixed temperature Heat Alarms are designed to trigger when the temperature reaches 58°C. The Alarms are not sensitive to smoke, but in a closed room with a vigorous fire, they will tend to respond faster than a remote Smoke Alarm in the hallway. A Heat Alarm must be interconnected to your Smoke Alarms so that the alarm can be heard throughout the building. Recommended installation locations: kitchens, laundries 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 frequent false / nuisance alarms, i.e. kitchens, garages, etc.
- Whilst not sensitive to smoke, in a closed room with a vigorous fire this Alarm would tend to trigger an alarm faster than a Smoke Alarm in an adjacent hallway.

Disadvantages

• Not an early warning device, should always be interconnected to other Smoke Alarms within the residence.

2.1.3 Ionisation Model

Ionisation Smoke Alarms are not available for Residential Fire Panels.

2.2 Locating your Smoke / Heat Alarms

Sufficient smoke must enter your Smoke Alarm before it will respond. Smoke Alarm activates within 7.5 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 to escape. A single Smoke Alarm will give some protection if it is properly installed but most residence will require two or more Smoke Alarms to ensure a reliable early warning. For maximum protection you should put individual Smoke Alarms in all the rooms where fire is most likely to break out.

Note: Some state legislation mandates a Smoke Alarm in every room and hallway in the dwelling.

Your first Smoke Alarm should be located between the sleeping area and the most likely sources of fire e.g. living room or kitchen. However, these should not be more than 7.5 metres from the door to any room where a fire might start and block your escape route.

For maximum protection, you should put individual Smoke Alarms in all the rooms where fire is most likely to breakout and put heat alarms in kitchens, laundries and garages. 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, sick person or a very young child.

Refer to the Smoke Alarm EIB650iWX and the Heat Alarm EIB603CX leaflets for more details.

2.2.1 Checking Audibility of Smoke / Heat Alarms

With the Alarm sounding in its intended location, check that 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 it would not wake you.

The Smoke / Heat Alarms are interconnectable meaning that when one alarm within a zone senses smoke or heat, all connected Alarms will go into alarm.

Note: Options within the Smoke Alarm and Residential Fire Panel enable customising of the installation. However, the sound levels are fixed and cannot be adjusted.

2.3 **Positioning your Smoke Alarm**

Hot smoke rises and spreads out, so a central ceiling position is the recommended 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 300mm (1 metre if a dimer is used) from any light fitting or decorative object which might obstruct smoke entering the Smoke Alarm. Keep at least 300mm away from walls and corners.

2.3.1 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. Keep at least 6 metres away from sources of normal smoke/fumes.
- Places where the normal temperature can exceed 45°C or be below 5°C (e.g. attics, furnace rooms, directly above ovens or kettles etc.) as the heat/steam could cause nuisance alarms.
- 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 and route wiring at least 1m 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.
- Locate the Alarm at least 1m from dimmer controlled lights and wiring as some dimmers can cause interference.



2.4 Nuisance/False Alarms

- Should the alarm goes off when 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.
- Fan the sensing chamber vigorously with a newspaper or similar to clear 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), there are a few things you can do:
- Remove the Smoke / Heat Alarm causing nuisance alarm. For EIB650iWX and/or EIB603CX, remove the head by disconnecting the adapter board off the Alarm, panel will go into fault. Push the Sounder Silence button on the panel to stop the panel from beeping if it occurs at night while you are sleeping. Replace your alarm next earliest as soon as possible.

Note: When an Alarm is removed, all other Alarms in the zone will continue working and communicate with the RFP.



Figure 1 Removing Alarm Heads from EIB603CX or EIB650iWX

• For discontinued Alarms EIPFSTCX6, EIPFSPCX6, or EIPFSICX6, open the cover and set the DIP switch to all OFF position.



Figure 2 DIP Switch (SW1) inside Obsoleted Smoke Alarms



2.5 Smoke / Heat Alarm Additional Features

The new series of Smoke (EIB650iWX) and Heat (EIB603CX) Alarms have similar features to the previous X series Alarms in addition to some new added features:

- Remote Indicator Output (RIL) output: This enables an RIL to be located outside a door to indicate the origin of the alarm.
- Alarm can be isolated be removing the head from the base.
- Removing the head will keep the Alarms downstream intact i.e. does not remove the interconnection across any zone.
- EIB650iWX is a microprocessor based design which allows for more features.

2.6 Important Safeguards

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

- Familiarise yourself with the RFP system operation.
- Rehearse emergency escape plans so everyone knows what to do in case the alarm sounds.
- 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 manufacturer is not your insurer.

2.6.1 Limitations of Smoke / Heat Alarms

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

However, independent authorities have stated that they may be ineffective in some circumstances. There are a number of reasons for this:

- Smoke / Heat Alarms will not work if they are not connected to the RFP system.
- Smoke / Heat Alarms will not detect fire if sufficient smoke / Heat does not reach or prevented to reach the Alarm.
- Smoke / Heat Alarms which are not maintained or are tampered may not function reliably.
- Smoke / Heat Alarms may not be heard.
- A Smoke / Heat Alarms may not wake a person who has taken drugs or alcohol.
- Smoke / Heat Alarms may not detect every type of fire to give sufficient early warning.
- Smoke / Heat Alarms do not last indefinitely. The manufacturer recommends replacement after 10 years as a precaution.



2.7 Fire Safety

2.7.1 Planning Your Escape

Use the Smoke / Heat Alarm test button to familiarize 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.

2.7.2 Fire Safety Hints

- Store petrol and other flammable materials in proper containers.
- Discard oily or flammable rags.
- Always use a metal fireplace screen and have chimneys cleaned regularly.
- Replace worn or damaged sockets, switches, home wiring and cracked or frayed electrical cords and plugs.
- Do not overload electrical circuits.
- Keep matches away from children.
- Never smoke in bed. In rooms where you do smoke, always check under cushions for smouldering cigarettes and ashes.
- Service central heating systems regularly.
- Be sure all electrical appliances and tools have a recognised approval label.
- Smoke Alarms cannot protect all persons at all times. It may not protect against the three most common causes of fatal fires:
 - $\circ \quad \text{Smoking in bed.}$
 - Leaving children at home alone.
 - Cleaning with flammable liquids, such as petrol.

Further information can be obtained from Brooks Australia's Guide to Residential Fire Safety.



3 Residential Fire Panel

3.1 **Familiarisation**

The purpose of this section is to make you familiar with the operating and construction of the RFP V2 range of Residential Fire Panels. The zones are repeated with multiples of 6 up to 18.



Figure 3 RFP6V2 Overlay for 6 Zones

NO.	AREA NAME	NO.	AREA NAME
•			

Figure 4 Standard Mimic Overlay (Optional)

3.2 Zone Facility

Each Zone has separate terminals to interface the RFP to Smoke/Heat Alarms, zone power to the Alarms is protected with 1.5A fuse. This is normally a three-wire system, two wires to supply power to the Smoke / Heat Alarms and the third wire is the interconnect signalling line. A forth wire will be required for fire mode if the Smoke Alarm is set to independent.

The three wires are fully supervised by the RFP for open or short circuit fault via either EOL device SUB360 or by setting the DIP switch on the last Alarm in a zone.

A yellow fault indicator (LED) is provided for each zone to indicate zone fault. The panel buzzer will also sound in fault condition. When the buzzer is silenced, a chirp every 20 second will be given.



	P and	idential
LOCATE	ALARM ZONE 1	ALARM ZONE 2 ID ALARM PAULT
SOUNDER SILENCE	ALARM ZONE 3	ALARM ZONE 4
6	ALARM ZONE 6	ALARM ZONE 6
	ALARM ZONE 7	ALARM ZONE 8
	ALARM ZONE 8	ALARM ZONE 10 ID ALARM O PAULT
	ALARM ZONE 11	ALARM ZONE 12 D ALARM PAULT
	ALARM ZONE 13	ALARM ZONE 14 D ALARM O FAULT
	ALARM ZONE 16	ALARM ZONE 18 D ALARM PAULT
	ALARM ZONE 17	ALARM ZONE 18 D ALARM PAULT

Figure 5 RFP12V2 / RFP18V2 Overlay for 12 or 18 Zone



3.3 Compatible Equipment

3.3.1 New Smoke / Heat Alarms

Smoke / Heat Alarm:	Part No:
Photoelectric Smoke Alarm for Residential Panels	EIB650iWX
Heat Alarm for Residential Panels	EIB603CX

3.3.2 Discontinued Smoke / Heat Alarms

Smoke / Heat Alarm:	Part No.	Replacement
Brooks ionisation smoke alarm	EIPFSICX6 No Replaceme	
Brooks photo-electric smoke alarm	EIPFSPCX6	EIB650iWX
Brooks heat alarm	EIPFSTCX6	EIB603CX

Note: If Discontinued Smoke/Heat Alarms already exist, they can still be used provided they are not over 10 years old and are still working. It is highly recommended to avoid mixing new with old Alarms

3.3.3 Other Equipment

Optional:	Part No:
RED MCP C/W RES.+ BB RESET + BROOKS GLASS	MRCSRR
Mimic Panel 24 – 72 LED's	Custom build
Zone Output Relay Card (Z1-Z6)	SUB365
Relay / 12V output card	SUB600

Note: Limit 2 MRCSRRs. Any sounder, strobe or combo, use the Zone Output Card SUB365.

3.4 Power Supply

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

3.4.1 Primary Power Supply / Battery Charger

The primary power supply for RFP V2 series is fully regulated switch mode power supply 15VDC / 50W. Nominal output is adjusted to14.5VDC (13.8VDC on the battery terminals), maximum current 3.4A @ 14.5V. The power supply is capable of supplying the max. alarm current without relying on battery.

3.4.2 Secondary Supply

The secondary supply is one or two 12V Sealed Lead Acid Batteries which under normal operating conditions will be continuously charged by the primary power supply. Battery capacity is dependent on the number of Smoke / Heat Alarms fitted.

Up to 2 X 15AH batteries connected in parallel can be fitted within the standard enclosure.

Note: When two batteries are used, it must be connected in parallel to increase the battery back time. All Brooks residential panels are 12V systems.



3.5 Termination of Field Wiring

All field wiring enters the panel via knock-outs on either top or rear of the cabinet and is then terminated on the Termination Board. An optional zone output card SUB365 may also be connected utilising the same ribbon cable between the main and termination boards.

3.5.1 Smoke/Heat Alarm Inputs

The termination board is clearly labelled for positive supply (+), negative supply (-) and interconnect (I) for Zone 1 to Zone 6 for RFP6. When RFP12 or RFP18 are required, additional termination boards are added for zone 7-12 or 13-18.

The RFP is supplied with End-Of-Line device (EOL) SUB360 connected to every zone however, when Smoke/Heat Alarms are connected to a zone, the EOL should be moved to the last Alarm in the zone. The new EIB650iWX and EIB603CX interface board SUB1012 has built-in EOL. The built-in EOL can replace the hardwired SUB360 by setting the DIP switch position S3, refer to Table 1 Page 21 for correct DIP switch setting.

Note: EOL device SUB360 cannot be used if the DIP switch is used to set the Alarm to be the last Alarm in a zone and vice versa. This will lead to a zone fault.

3.5.2 Mains Voltage Input

The $230V_{AC}$ mains cable terminates at the mains isolating switch located on the inside rear of the cabinet then to the switch mode power supply.

3.5.3 Battery Input

Battery Leads are already connected to the termination board to connect the lead acid battery. Ensure correct fitting of the battery, connect the Black lead to the negative terminal and the Red lead to the positive terminal. When the battery capacity is required to increase, two batteries will be connected in parallel, use the supplied lead to interconnect the two batteries.

3.5.4 Panic Input

This input allows for the manual activation of the Residential Fire Alarm System. On operating this input, all Smoke / Heat Alarms and ancillary equipment will be activated. Activation is via a normally open dry contact, such as a manual call point or panic button. These should be mounted adjacent to the panel.

3.5.5 Common Alarm Outputs

The RFP6 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 can 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.

3.5.6 Alarm Confirmation Period (Selectable)

The RFP common alarm outputs can be delayed to avoid nuisance alarms. Three options are available:

- No delay (standard),
- 30 second delay or
- 60 second delay.



Time delay is selected by a 4-way DIP switch mounted on the back of the main board SUB350, refer to Figure 10 page 33. This provides a means of delay to enable the occupant to remove a known false alarm, i.e. burnt toast, before a remote warning is given.

3.5.7 Defect Mode Output

The Defect (fault) Mode Output responds to a system fault such as loss of power, zone fault (short or open circuit), activation of the ancillary isolate switch or panel switched off. The defect mode provides a set of changeover relay contacts which can be used for either local and / or remote monitoring of a system fault.

3.6 Options

3.6.1 Mimic Panel (Optional)

An Individual Smoke / Heat Alarm indication via Mimic Panel is available for when the exact location of the actuated Smoke / Heat Alarm is required. The mimic panel is available with either 24, 48, or 72 mimic indicators (custom built). The Remote Indication output on each Smoke / Heat Alarm is wired back to the mimic panel using two wires. To minimise field wiring, RIL (0V) only can be wired to the RFP and the +12V can be common in the panel.

3.6.2 Zone Output Facility (Optional)

An optional card which allows for separate zone outputs is available when ancillary devices are required to operate on an activated zones basis only. Two sets of voltage free contacts are supplied for each zone which can be used to control equipment such as bells, sirens, or flashing lights, strobes and door holders etc. The contact rating of the relays is 1A @ 12V.

3.6.3 Remote Zone Relay Board (SUB600)

The board provides a relay output clean contact and 12VDC non-supervised outputs when an alarm is activated in the same zone.

SUB600 is mounted inside a plastic base PM100 with a cover PM110. The assembly can be mounted in any place where an output from specific zone is required. Zone cable (3 wires) is required to connect the remote zone relay board.

3.6.4 Magnetic Door Holder Power Supply

The enclosure of RFP V2 panels has space within the cabinet to mount 24Vdc / 25W switch mode power supply. This can be connected via the common alarm contact on the termination board to supply 24V in normal conditions to maintain power to the door holders.

3.7 Panel Status

The status indications of the RFP will be indicated as shown in Figure 3 page 11 for RFP6V2 and Figure 5 page 12 for RFP12V2/RFP18V2. The mimic display shown in Figure 4 page 11 indicates alarm for individual Smoke/Heat Alarm, wiring from each Alarm to the mimic panel is required.

The status in normal, alarm, fault, etc. are shown in the next sections.

3.7.1 Normal

- All ancillaries 'OFF'
- All sounders 'OFF'
- All yellow indicators 'OFF'
- All red indicators 'OFF'
- Only power on green indicator 'ON'



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

3.7.2 Zone Alarm

- Zone alarm indicator 'ON' (Red LED);
- Panel and Smoke/Heat 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 Troubleshooting in Section 7.

3.7.3 Zone Fault

- Zone fault indicator 'ON' (amber LED);
- Panel Sounder sounds continuously. (Press the Sounder Silence button, sounder will beep once every 20 second (chirp) until fault is cleared);
- Defect Mode output (relay) activated.

3.7.4 Low Battery

With the mains disconnected, the panel operates solely off the battery. When the battery reaches a pre-set low level of approximately12.0 Vdc, the fault sounder will pulse once every 20 seconds to give an audible indication that the system is running low on capacity (all zone fault indicators must remain off). Mains must be restored as a matter of urgency.

3.7.5 Ancillary Isolate Button

Ancillary outputs (alarm) can be isolated via the ancillary isolate switch. When isolated, an amber integrated LED integrated in the switch body will be illuminated, the sounder will sound continuously and the Defect mode will be activated.

3.7.6 Alarm Locate Button

This mode enables the occupant to identify Smoke/Heat Alarm that originated the alarm signal i.e. locate the active Alarm.

- Place the 003 key into the key switch and turn to 'Fire' position.
- Press the "Locate" button (The Locate LED backlight will be lit). Wait for 10 second, all Alarms will be silent except the active Alarm.
- Identify the activated Alarm head. (Clear the smoke from the alarm by fanning it until all the alarms silence on its own).
- Turn the key switch back to ON position.
- Press the "Locate" button to restore the system (the Locate LED backlight will be distinguished)
- System returns to normal.

Note: This panel cannot be fitted with external locators e.g. BAALOC.

3.7.7 Sounder Silence Button

Used only to silence alarm or fault sounder. For a fault condition the sounder changes from continuous tone to chirp once every 20 second. This chirp cannot be silenced and acts as a continuous audible warning to indicate that the sounder is silenced and a fault condition still exist. When the sounder silence switch is pressed, the amber indicator built in the switch body will illuminate.



3.8 RFP V2 System Specifications

No. of zones	6, 12 or 18		
Max. no. of Smoke/Heat Alarms	12 Alarms per zone		
Power Supply	Input: Universal 88 – 264Vac		
	Output: 13.5-16.5 VDC adjustable, 50W (3.4A)		
	Nominal: 14.5VDC, 13.8V on battery terminals		
Standby Supply	12V SLA batteries 7-30 AH ¹ depending on total number of Alarms fitted		
Battery low setting	12.0 VDC		
Key switch Operation	"ON" System ON - Charger ON		
	"OFF" System OFF - Charger ON		
	"FIRE" activates all smoke/heat alarms		
System Monitoring	Separate terminals for zone wiring loop in and out to every Alarm, monitored either by EOL device or DIP switch setting in the last Alarm		
Defect Mode	Initiated by an abnormal system condition:		
	* Total power loss		
	* Ancillary outputs (common alarm) Isolated		
	* Short / Open circuit line fault		
	* System switched off		
Defect Output (Fault)	1 set changeover relay contact		
Alarm Outputs	12VDC / 1 Amp maximum, non-supervised		
	1 set changeover relay contact		
Panic Input	Non-supervised N/O contact - activates all Alarms		
Sounder Silence Switch	Acknowledges panel sounder		
	Alters tone from continuous to chirp (for battery low and zone wiring fault)		
Ancillary Isolate Switch	Isolates common alarm outputs and initiate Defect Mode		
Alarm Locate Switch	Silences all Smoke/Heat Alarms except those initiating the alarm.		
Visual Indications	Individual zone alarm - Red		
	Individual zone fault - Amber		
	Ancillary isolate - Amber		
	Locator activated ² - Amber		
	Sounder silence - Amber		
	Power ON - Green		

¹ When larger battery capacity required, up to 2 x 15AH / 12V batteries can be paralleled to double the battery size. ² Pressing only the locate button will lead to no action unless preceded by fire mode key switch.



Smoke/Heat Alarms options	Remote indication output set to latching or non-latching. Standalone or common alarm operation. Refer to Table 1 page 21		
Panel Features DIP Switch Setting on SUB350	 Common or individual zone operation Latching or non-latching alarm indication Alarm confirmation period: 0 Sec, 30 Sec or 60 Sec Common Alarm Output latching or non-latching 		
OPTIONS			
Zone Output Card SUB365	1 set C/NO/NC changeover relay contact per zone 1 set C/NO relay contact per zone		
Mimic Panel (Custom built)	24 Smoke/Heat Alarm indications or48 Smoke/Heat Alarm indications or72 Smoke/Heat Alarm indications		
Cabling	4 Core 1mm ² , red Brooks BAC4C1/100 or BAC4C1/250		



4 Testing

This section describes the procedures to test your RFP system to ensure that the system is fully functional, see Section 6.2 on page 23.

4.1 Before you Test your RFP System

Before you commence testing your RFP system, it is important to ensure that any ancillary equipment i.e. a security system, fire/smoke doors, A/C shutdown etc, are 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 recommended to notify relevant people e.g. tenants, security/fire monitoring, etc before commencing the test, as this equipment may activate.

4.2 Panel Test

To quickly test the RFP system, the following should be followed:

- 1. Activate fire mode by turning the key switch to the 'Fire' position. All Smoke / Heat Alarms should activate. (If ancillary equipment has not been isolated they will also activate).
- 2. Return the key switch to "ON" position to restore the RFP back to normal.
- 3. Go to the last Alarm in the first zone (this Alarm will contain the End of Line device or DIP switch is set to be last), press the test button. Verify that every Alarm in this zone is sounding and the zone alarm LED in the panel illuminates.
- 4. Repeat for every other zone in the system.

Note: When the test button is pressed, all Alarms will sound but when the button released, it may take 15-30 second to silent every Alarm depending on the number of Alarms in the zone.

5. If the 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.

6. Proceed to the Smoke/Heat Alarm containing the EOL device (last) or to the Alarm that its DIP switch is set to be last Alarm in this zone. Remove the EOL device positive / interconnect wire. The panel should now sound a fault signal (continuous sound), and the fault LED for this zone will illuminate. Return the EOL wiring, fault signal stops. Repeat the same test for each zone.

Note: when the DIP switch is used to set the EOL, power cycle must be carried out by unplug/plug the cable from the Alarm.

- 7. If a device is 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
- 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 "Troubleshooting" in Section 7 on page 26.



5 Installation

The RFP 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 nearest Brooks supplier.

5.1 Surface Mounting Instructions

The RFP is normally surface mounted however, flush surround for different cabinet sizes are available on request. To mount the RFP:

- Locate the position where the panel is to be sited.
- 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.
- Select the appropriate mounting hardware and prepare the two mounting holes.
- Fix the top two points, leaving approximately 6 mm of the protrusion from the wall. Mount the Panel and secure all mounting hardware.

5.2 Cable Terminations

5.2.1 AC Power

The $230V_{AC}$ input is terminated on the mains isolate switch and earth stud provided on the rear inside of the enclosure.

Note: It is recommended to use dedicated 230VAC from separate RC circuit.

5.2.2 Field Wiring

All field cabling is to be terminated on the Terminals provided on the termination board as shown in Figure 7 page 30. The RFP is compatible with either the obsoleted Smoke / Heat Alarms and/or the current EIB650iWX and/or EIB603CX. These Alarms use 4 core cabling for the Smoke or Heat Alarms on each zone. The 4th wire is required if the Fire Mode (FM) is used however, it should be connected to FM.

In order to ensure that voltage drop is kept to a minimum and ensure that Smoke/Heat Alarms operate up to 100m runs, use low resistance cables of \leq 19.5 Ω /km maximum DC resistance at 20°C with each core at 1.0 mm². BROOKS strongly recommend using these cables:

- BAC4C1/100 Metre 4 core 1mm² Red Cable
- BAC4C1/250 250 Metre 4 core 1mm² Red Cable

Cables should be terminated as required. Ensure all cables are neat and secured using approved plastic ties.

5.2.3 Battery

Fit battery (or batteries) into bottom of enclosure.

RED - POSITIVE **BLACK**- NEGATIVE

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

Note: Battery capacity calculation must be carried out based on the battery calculation sheet to determine the batteries required. Failing to use the correct battery capacity will void the compliance to AS3786:2014.



5.2.4 EIB650iWX or EIB603CX Alarms

The new Smoke EIB650iWX and Heat EIB603CX alarms are to be used in conjunction with the SUB1012 interface card which is designed to be compatible with the use of the existing old Smoke / Heat Alarms. The new interface cards are connected to their respective heads via the SUB1005 cable assembly to either EIB650iWX or EIB603CX.

Note: The smoke alarm heads will never show a battery low condition because it draws power from the panel.

The terminal blocks on SUB1012 are uni-directional, meaning that **cables must terminate to the "IN" termination points from the previous smoke alarm or closest to the panel for the first alarm.** The cables are terminated to the "OUT" terminals to the next alarm. This means the field wiring coming from the panel direction must be terminated to the incoming termination point as marked as "IN" in Figure 7 and Figure 8 whereas the field wiring on the end of line direction must be terminated to the outgoing termination point as marked as "OUT". For further details, please refer to chapter 9 of this manual.

Note: Do not interchange the order from IN to OUT.



Figure 6 SUB1012 Terminals - Interface Card

These interface card will automatically detect alarm head types of either EIB603CX or EIB650iWX upon system initialisation. An RIL terminal is also provided.

5.2.4.1 DIP Switch Setting

RFP Main Board DIP switch settings are master settings that take precedence over the interface card SUB1012.

DIP Switch	Description	RFP V2	
(S1)	Description	ON (UP)	OFF (Down)
1	Panel Model Selection (RFP6)	-	\checkmark
2	Device Priority/Common Alarm Operation	Individual	Common
3	Last Alarm in a zone	Last Alarm	Not Last
4	RIL Latch Operation	Latch	Non-Latch

Table 1 DIP Switch Settings for SUB1012

Note: ✓ means that switch must be set to this position.

Take special care to check DIP Switch 3 during installation or expanding the system. There can only be one Smoke/Heat Alarm that is set as the EOL device in each zone and it must



be on the last Alarm for that zone. If this is set incorrectly, the panel will indicate with the fault LED lit on that zone.

Note: It is essential that DIP switch 3 is set to "ON" position if SUB1012 is situated in the last position on the zone. Outgoing termination point is to be left empty.

Note: The end of line device SUB360 must be fitted in the termination board for unused zones.

5.2.4.2 Compliance

Smoke Alarm EIB650iWX compliant with AS3786:2014 Heat Alarm EIB603CX compliant with AS1603.3:1993³

³ At the time of printing this manual, EIB603CX is under compliance testing to AS1603.3:2018.



6 Commissioning of Installation

6.1 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.

6.2 Commissioning Tests

The following tests are to be performed:

6.2.1 System Configuration

- 1. Ensure that the Smoke/Heat Alarm locations and the RFP are appropriate for the type of site and usage.
- 2. Check that all Smoke or Heat Alarms used in the system are:
 - Listed in this manual
 - Compatible with the zone specification
 - Number of Smoke / Heat Alarms for each zone is not exceeded.
 - Installed in an environment for which they are suitable.
- 3. Check that the AC mains power supply for the system has been provided in accordance with AS3000.
- 4. Visually check all field wiring terminations (refer to the panel wiring instructions).
- 5. Ensure that only the last smoke/heat alarm is set as the EOL. Refer to Table 1 page 21 for correct DIP switch setting. If EOL device SUB360 is used for supervision, ensure it is fitted in the last Alarm.
- 6. Check that the battery (or batteries) fitted in accordance of the battery capacity calculation sheet. It should be of a suitable type and capacity
- 7. Check that all zones have been labelled and that the alarm zone is immediately apparent from the labelling.
- 8. Check that as-installed drawing has been correctly marked up and that they are consistent with the installation.
- 9. Record the results of the commissioning test on the commissioning sheet in this Handbook.

6.2.2 Ancillary Functions

'PANIC' – (if used), 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 across 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.



6.3 Panel Testing

6.3.1 General

1) Connect Battery Leads:

Red - Positive

Black - Negative

- 2) Connect Power and Switch ON the Mains. All zone fault LEDs will illuminate for a few seconds and sounder will sound
- 3) Power 'on' LED should light green, no other facility or indicator should function

6.3.2 Fire Mode Test

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

- 1) Turn the key switch to "FIRE" to place the RFP in fire mode
- 2) Check:
 - i. No Alarm LED illuminates
 - ii. All Smoke / Heat Alarms sound
 - iii. Ancillary Outputs activate. Check operation of all ancillary equipment.
- 3) Return Key switch to 'ON'.

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

6.3.3 Fault Test

1. On the termination board disconnect any wire of the three wires (Positive, Negative, Interconnect) to the smoke alarms of zone1.

Ensure:

- Zone1 fault LED illuminates
- The panel buzzer will sound continuously.
- Activate the sounder silence switch. The panel buzzer will chirp once every 20 seconds.
- Defect Mode relay contact will changeover.
- 2. Restore the wire, amber fault LED extinguishes. The Panel buzzer will be silenced and defect mode contacts return to normal.
- 3. Repeat steps 1 and 2 for each zone.

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

6.3.4 Power Supply

Power supply voltage is pre-set at the factory to 14.5VDC (13.8V on battery terminal).

Operate the mains isolate switch off and on, check that the system will not false alarm from AC power interruptions.



6.3.5 Field Testing

With the Control Panel in its NORMAL MODE:

1) Proceed to the last Smoke/Heat Alarm on zone 1.

If EOL device is used in the last Alarm for monitoring, remove + or I wire and ensure zone fault has been registered, reconnect the EOL wires, fault clears.

If the DIP switch is set in the last Alarm in a zone as the "Last Alarm", turn switch 3 off and recycle the power by disconnecting the ribbon cable from the interface card SUB1012 then reconnect again. A zone fault will be indicated in the panel, return switch 3 to its position, unplug cable then plug again, the fault will clear.

- 2) Press and hold the test button for at least 5 seconds, Smoke/Heat Alarm will activate, ensure that an alarm has registered at the panel. All ancillary outputs should activate. When the test button is reset, the Alarms in this zone may take 15-30 second to stop sounding.
- 3) Turn key switch to 'OFF' then back to 'ON'. The alarm LED will extinguish and all ancillary outputs will reset.
- 4) Repeat steps 1 3 for each zone.
- 5) 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.

6.3.6 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/Heat Alarms and zone facilities, should be provided before a final inspection is made.

6.4 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 owner's manual or book shall be provided to record all service/maintenance details.

6.5 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 which will drastically lower the level of protection.

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

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.



7 Troubleshooting

7.1 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'.

7.1.1 Obsoleted Smoke Alarms Only

Refer to the previous version of the RFP manuals.

7.1.2 EIB650iWX and/or EIB603cX

1) In alarm condition, turn key switch to FIRE then press the LOCATE switch so that its amber LED is illuminated. This silences the panel and all the Smoke/Heat Alarms except the one which is actually in alarm. Listen and you will be able to determine where this Alarm is located.

Note: The RFP alarm is set to be non-latching, when the Alarm resets, the panel resets. If the RFP alarm is set to be latching, the alarm LED remains ON until it resets by turning the key switch to the OFF position.

- 2) Try to determine the cause of the alarm. Some possibilities may include: dust, steam, insect spray, cooking fumes, gas heater etc, or it may be a faulty unit. Fan the Smoke Alarm vigorously with a newspaper or cloth to try and clean any contaminants from inside the sensing chamber. If the Smoke Alarm silences, return to panel, turn the key switch "OFF'; wait for approximately 10 seconds, then turn the system back ON.
- 3) Vacuum the Smoke Alarm head thoroughly.
- 4) If it continues to sound, turn the Panel key switch to "OFF" position.
- 5) Remove the Smoke Alarm head from its base. If a replacement cannot be acquired immediately, continue with step 6.
- 6) Turn the Panel key switch to "ON" position, the panel will indicate a fault. This is because a smoke alarm head is missing.
- 7) When a replacement is available, turn the Panel key switch to "OFF" position.
- 8) Fit the new Smoke Alarm head to its base.
- 9) Turn the Panel key switch to "ON" position, the panel should now be without fault and return to normal condition i.e. only the Green LED "ON" should be lit.

Note: EIB650iWX and/or EIB603CX are not serviceable, if suspected to be faulty or contaminated, they have to be replaced.

7.2 Faults

A fault is present when the sounder in the panel pulses at intervals of 20 seconds (chirps) or sounds continuously and zone fault LED is illuminating.

7.2.1 Line Fault

If a zone fault LED is lit and the sounder is sounding continuously, then an Open Circuit or Short Circuit (+Ve to -Ve) has occurred. If a Short Circuit has occurred, then the fuse on the zone would have been blown. If a short occurs between the +Ve and Interconnect, the panel will remain in alarm, this will not be indicated on the panel as a fault. If a short occurs between the -Ve and Interconnect, the panel will remain in locate mode, this also will not be indicated on the panel as a fault.



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.

7.2.2 Incorrectly set EOL on DIP Switch (S1)

There should only be one Smoke/Heat Alarm that is set as the EOL device in each zone and it must be on the last Alarm for that zone. If this is set incorrectly, the panel will indicate with the fault LED lit on that zone and the panel buzzer will sound in short intervals. Refer to Table 1 on page 21 for correct DIP switch setting.

7.2.3 Low Battery

If the 'Power On' LED is unlit, no red or amber LED is lit and the Sounder Silence switch is not activated, a low battery fault indicated by chirps with an interval of about 20 seconds will be heard. This may be caused by the 230Vac Mains being off for at least 72 hours. Mains power should be restored as a matter of urgency.

If the 230Vac Mains has not been off, call the service technician responsible immediately.



7.3 Spare Parts

7.3.1 Main Panel

No.	Description	Stock No.
1.	RFP V2 Main & Display Board	SUB350
2.	RFP V2 Termination Board	SUB357
3.	Zone Output Card	SUB365
4.	Lead Acid Battery	BBAT12V6.5 BBAT12V15 BBAT12V17
5.	003 Key Switch	SK150
6.	Mains Isolate Switch	SW165
7.	Ribbon Cable & Connectors	CA115
8.	Fuse Fast Blow 1.5Amp	FU155
9.	Fuse Fast Blow 1Amp	FU160
10.	Power Supply	BAPS15V50W

7.3.2 Smoke / Heat Alarms

	Description	STOCK No.
1.	Photo Electric Smoke Alarm Head	EIB650iWX
2.	Heat Alarm Head	EIB603CX
3.	Deep Base c/w S/H Alarm Interface Card	BAX16

To obtain any of the spare parts shown above or equipment service, please contact your nearest local distributor or Brooks Office.



8 Battery Capacity Estimation

The required battery capacity can be calculated using the active battery calculation spread sheet. By selecting the RFP model, no. of smoke/heat alarms and adding any ancillaries, the spread sheet will automatically calculate the battery capacity required to maintain the system for 72 hours in standby condition and 4 minutes in alarm as required by AS3786.

RFP V2 Series Battery Calculations				Rev	1	Date	30-Jul-18
Proiect:							
	A	No. of	Quiescent Current		Alarm Current		
System Components	Stock Number	Units	mA	Total mA	mA	Total mA	Comments
6 Zone Residential Fire Panel	RFP6V2	1	17.0	17.0	64.0	64.0	Coloct only One
12 Zone Residential Fire Panel	RFP12V2	0	18.0	0.0	80.0	0.0	Select only one
18 Zone Residential Fire Panel	RFP18V2	0	20.0	0.0	95.0	0.0	paner
Photoelectric Smoke Alarm	EIB650iWX	11	4.5	49.5	30.0	330.0	Max. 12 per zone
Heat Alarm	EIB603CX	1	6.0	6.0	50.0	50.0	Max. 12 per zone
Zone tripping card (6 relays)	SUB365A	0	35.0	0.0	125.0	0.0	Max. one card for each 6 zones
Total no. of Alarms		12					
Ancillary Output				0.0		0.0	
External Strobe Output				0.0		0.0	
VAD				0.0		0.0	
Others				0.0		0.0	J
Total current consumption. (mA)				72.5		444.0	
Standby Time (hours)		72					
Alarm Time (minutes)		4					
Battery Requirement (in AH) Nearest Standard Battery Size (A/h)		6.599 7					Use 7 AH Battery

Manual calculation of battery capacity can also be calculated as follow:

Total Quiescent Current IQ =	mA	Standby time	e T ₁ = 72 Hrs	
Total Alarm Current IQ =	mA	Alarm time	$T_2 = 4$ minutes.	
	$[(I_Q \times T_1$	$)+2(I_A \times$	$(T_2)/60] \times 1.25$	
Battery Capacity (Ah) =	1000			



9 Block Wiring Diagrams







Figure 8 F801 Iss0 - RFP12V2 / RFP18V2



Operation & Installation Manual RFP V2 Series RFP V2 Series Rev 0



Figure 9 F802 - RFP V2 with Options





Figure 10 DIP Switch Settings on Main Board (SUB350)



10 Commissioning Checklists

LOCAL FIRE ALARM SYSTEM

Installer's Statement

		Page 1 of 2
1.	Building Name	
2.	Address	
3.	Is the system monitored? YES/NO I	If YES, by whom:
	_	
4.	Name of nearest Fire Brigade Station	Phone:
5.	Type of Panel: RFP – 6 / 12 / 18	Serial No.:
6.	Number of smoke alarms connected:	
7.	Describe any ancillary equipment installe	ed 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 supplie	ed YES/NO



INSTALLERS STATEMENT

Page 2 of 2

Additional Comments



RESIDENTIAL FIRE PANEL

TEST REPORT

As installed Diagrams		Correct/Incorrect
Log Book Details		Correct/Incorrect
SMOKE ALARMS		
	Layout	Correct/Incorrect
	Number	Correct/Incorrect
	Type Selection	Correct/Incorrect
HEAT ALARMS		
	Layout	Correct/Incorrect
	Number	Correct/Incorrect
	Type Selection	Correct/Incorrect
Ancillary Devices		
	Layout	Correct/Incorrect
	Number	Correct/Incorrect
	Type Selection	Correct/Incorrect

Panel Position

IF INCORRECT, COMMENT:

CONTROL PANE	EL	
	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:

Date:

INSPECTION, TESTING AND MAINTENANCE PROCEDURES

Building Name					
Address					
Note: Give details of commissioning test	of all unsatisfactory items report.	in repo	rt section. Ro	efer to owner's manual fo	or
✓ Place a t satisfactor	ick in box where item is ory	[× P ur	lace a cross in box where	e item is
SIX MONTHLY CH	HECKS		SIX MONTI	HLY CHECKS	
All RFP equipment	t clean and operative		Visual inspe Alarms	ection of all Smoke/Heat	
Battery condition a	and terminals		Correct ope devices	eration of all ancillary con	itrol
Indicator lights cor	rect operation		Operation of	of manual call points	
Correct initiation of Alarm	f each Smoke/Heat		Spare glass	ses for manual call points	s 🗌
Fault annunciation	operative		All controls	returned to normal cond	ition
REPORT:					
SERVICE PERSON:			Witnessed b	y:	
Print Name			Print Name		
Signature			Signature		

Date:



11 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. Onsite 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.



12 Revision History

Issue	Date	Description	Written By	Checked By
1	30/7/2018	Combine RFP 6 & RFP12-18 operation and installation manuals and replace old smoke alarms with EIB603CX and EIB650iWX.	E. Thein / Harry Ng	A. Shenouda





NSW - Head Office P.O. Box 7050 Silverwater NSW 1811 4 Pike Street Rydalmere NSW 2116 Ph: 02 9684 1466 Fax: 02 9684 4146 Website: www.Brooks.com.au

VIC

1/3 Molan Street, Ringwood, VIC 3134 Ph: 03 9879 5294 Fax: 03 9879 5249

SA

P.O. Box 101 Woodville SA 5011729A Port Road, Woodville, SA 5011Ph: 08 8347 0000 Fax: 08 8347 0600

QLD

P.O. Box 511 Archerfield QLD 41082/49 Boyland Ave Coopers Plains, QLD 4108Ph: 07 3373 8222 Fax: 07 3373 8022

WA

P.O. Box 2114, Midland DC W.A. 69366/91 Leah Highway, Kewdale WA 6105Ph: 08 6262 8095 Fax: 02 9684 4146

New Zealand

Unit 106 "The Zone" 23 Edwin St, Mt Eden, Auckland 1024 Ph: +64 9 638 4644 Fax: +64 9 638 4645 Toll Free 0800 220 007 (NZ only)

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