User Guide

FireAngel®

RF INTERLINK
PUSH-FIT CEILING BASE

RF-BW

CONTENTS

IMPORTANT: Please read this manual before installation. If installing the alarm for others please leave a copy for the end user.

This RF-BW interlink base is designed to be used in conjunction with FireAngel mains operated Smoke, Heat and Carbon Monoxide alarms in the **SW1, HW1 and CW1** series **ONLY**.

Note: This user manual is also available in large text and other formats. Please e-mail **technicalsupport@fireangel.co.uk** for further information.

1. INTRODUCTION

Interlinked Smoke, Heat and Carbon Monoxide alarms which utilise RF interlink technology have the benefit of being able to be used in a Grade D or E alarm system without the need for hardwiring connection between each alarm in the system. This is particularly useful when refurbishing or extending a property and allows the Grade D or E system to be wired by way of the un-switched part of a local lighting circuit or independent circuits at the dwelling's main distribution board (ref BS5839 Part 6).

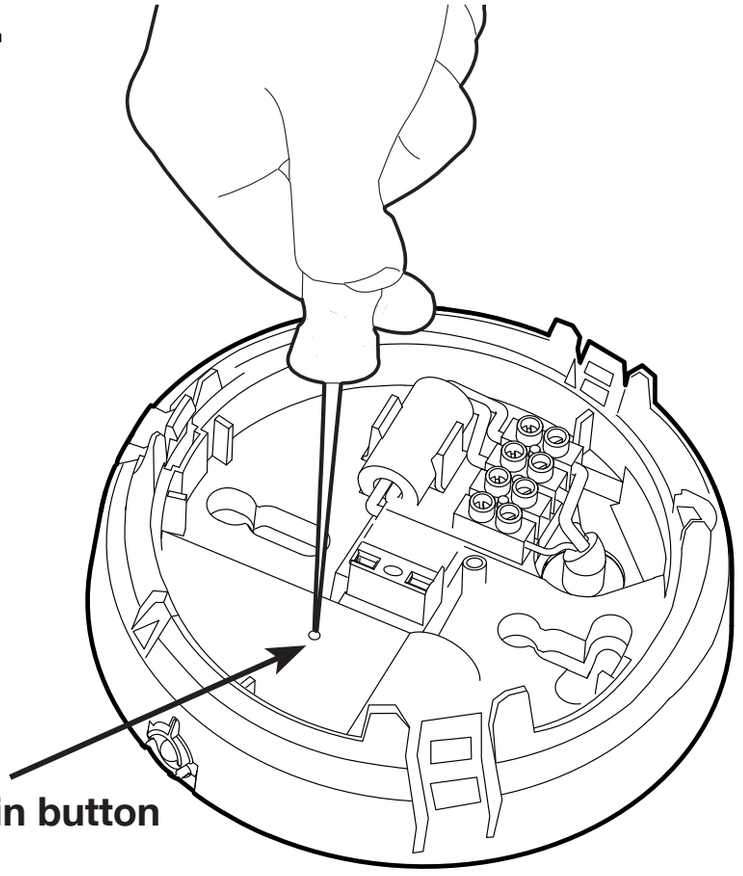
The RF-BW utilises a unique system which provides in excess of 16 million separate ID codes, one of which is automatically selected when the system is learnt in on installation. The high number of alternative codes helps prevent individual systems in separate properties from interfering with one another and resulting in unwanted nuisance alarms. Utilising the RF-BW allows up to 50 alarms to be interlinked in each system. An RF base is required for each SW1, HW1 or CW1 alarm to be networked.

2. QUICK INSTALLATION GUIDE

a) Install each RF-BW base in an appropriate position at least 300mm from the nearest light fitting (ref Smoke/Heat/CO alarm instructions) and connect to the nearest mains circuit. DO NOT SWITCH ON MAINS POWER.

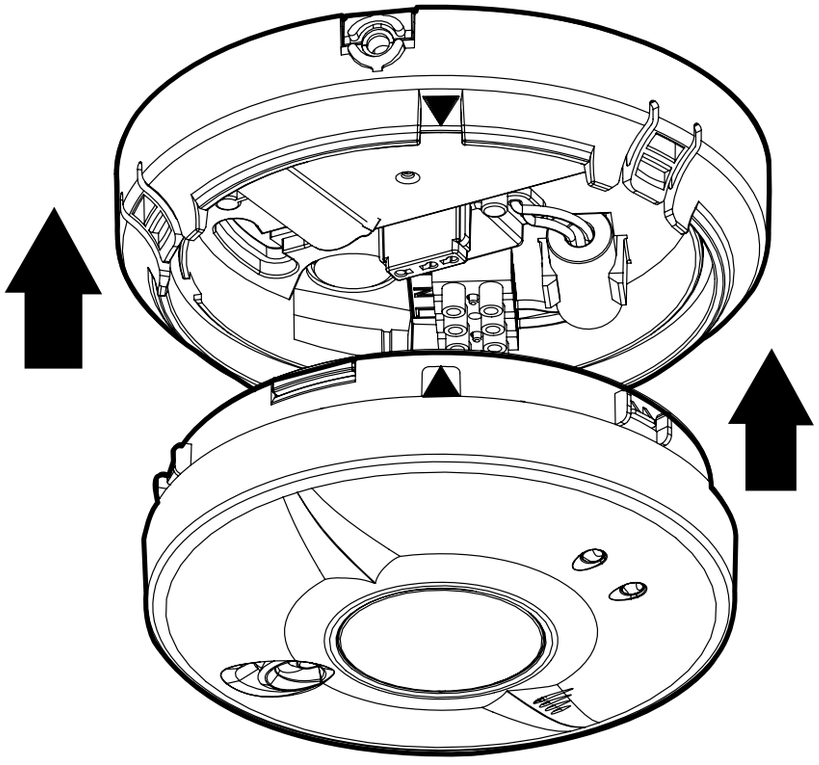
b) Learn in each base by pressing the button (See Fig 1) using a small screwdriver.

Fig 1.



c) Push on the Smoke and Heat or CO alarms as appropriate onto each base (See Fig 2). Switch on mains power.

Fig 2.



d) Ensure that at least 2 minutes has elapsed before pressing the test button on each alarm. When the test button on one of the alarms is pressed all of the other alarms in the system should sound within 10 seconds.

3. INSTALLATION GUIDE

Please consult the Smoke, Heat or CO alarm owner's manual for details of where and where not to site your alarm.

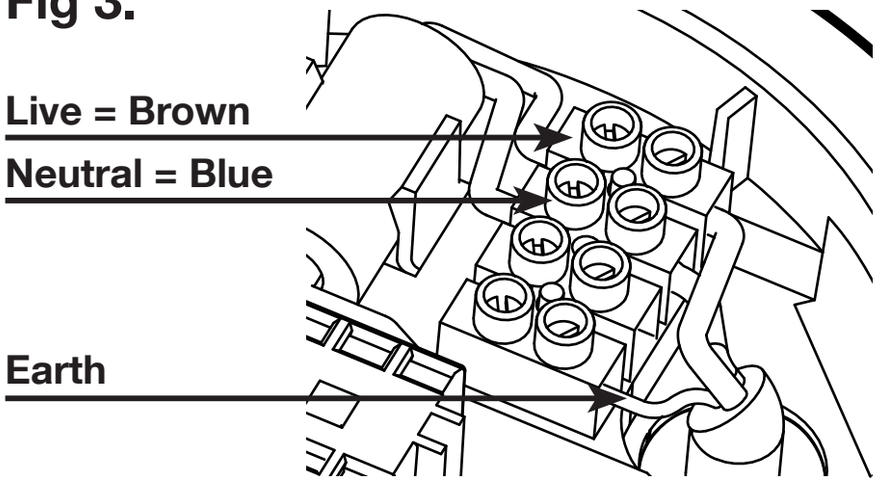
WARNING: Wiring should be installed by a qualified electrician in accordance with BS7671. Permanent connection to the fixed wiring of the building should be made in a suitable junction box. This alarm must not be exposed to dripping or splashing. Connect the alarm as late as possible in an installation and keep the dust cover over the alarm, particularly in new build, to avoid contamination. Remove the dust cover before applying power.

3.1) RF-BW INSTALLATION AND SETUP

a) Install the RF-BW docking base on the ceiling no closer than 300mm from the nearest light fitting. Always refer to your Smoke/Heat/CO alarm manual for positioning and installation guidance.

b) Bring wires through either the YT2 trunking knockout on the side of the base or the knockout in the base itself and install the wires into the connector terminals marked L (live), Neutral (N) and Earth (E). (See Fig 3.)

Fig 3.



c) Install ALL bases that will be required in the system in their appropriate positions.

IMPORTANT: The circuit used to power the alarm must be a constant 230V AC 50Hz voltage circuit that cannot be turned off by a switch. BS5839 Part 6 states that:

For mains powered alarms, each with an integral standby supply (Grade D), the mains electricity supply should take the form of either:

1) An independent circuit at the dwelling's main circuit board, in which case no other electrical equipment should be connected to this circuit (other than a dedicated monitoring device installed to indicate failure of the mains electricity supply to the alarms); or

2) A separately electrically protected, regularly used local lighting circuit. For mains powered alarms with no standby supply (Grade E), the mains electricity supply may only take the form of an independent circuit as per 1) above. If it is necessary to use an RCD for protection, it should operate independently of any RCD protection for circuits supplying sockets or portable equipment. All interconnected alarms should be installed on a single final circuit.

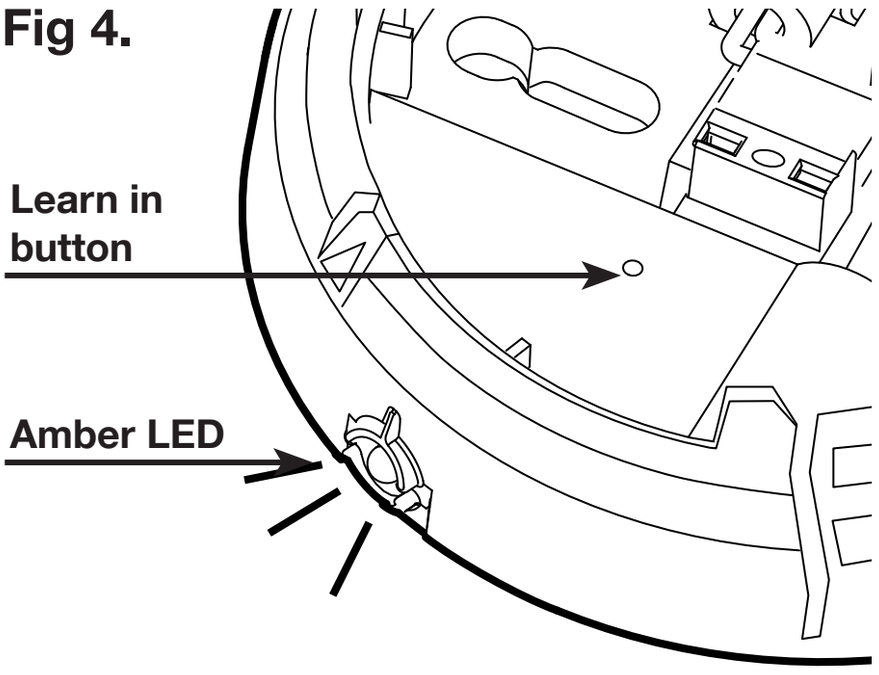
3.2) LEARNING IN A NEW SYSTEM

NOTE: **The system must be learnt in before the alarms are installed on the base.**

a) Locate the push button on an installed RF-BW and press briefly

using a small screwdriver (see Fig 1). The amber LED will illuminate for 3 seconds to indicate that it is activated. (See Fig 4). The buzzer will also give an audible ‘chirp’ to show that it is working.

Fig 4.



b) Repeat this process on every remaining RF-BW required to be in the system. As each alarm is successfully learnt in the amber LED will start to flash once every 3 seconds.

NOTE: The RF-BW allows for a period of 15 minutes during which all bases need to be learnt in.

c) Once all bases are learnt in, install Smoke/Heat/CO alarms onto each RF-BW as outlined in the owner’s manual (See Fig 2).

d) Turn on mains power.

e) Ensure all Smoke/Heat/CO alarms in the system display a green power light and red operating light as per the Smoke/Heat/CO alarm manual.

f) Ensure the amber LED on every RF-BW flashes once every three seconds.

g) Press the test button on each alarm in the system in turn and ensure 1) the alarm sounds and 2) it links with every other alarm in the system.

h) Installation is now complete.

NOTE: If all RF-BW bases have been learnt in before 15 minutes has elapsed, pressing the test button on any installed Smoke/Heat/CO alarm will cause the learn in procedure to finish early. This will also test every alarm in the system. The amber LED on every RF-BW will flash twice

every 3 seconds for a period of 5 minutes after the learn in process has completed. If after a period of 15 minutes a unit has failed to learn in, it will sound a double beep for a period of 5 minutes.

3.3) LEARNING IN AN ADDITIONAL UNIT TO AN EXISTING RF-BW SYSTEM

If you require an additional alarm to be added to an existing RF-BW system:

a) Following section **3.1**, install the new RF-BW in the required location.

b) Restore mains power to all the installed alarms and the new RF-BW.

c) Locate the push button on the new RF-BW and press briefly using a small screwdriver. The amber LED will illuminate for 3 seconds to indicate it has been activated. The buzzer will also give an audible 'chirp' to show that it is working.

NOTE: If the existing Smoke/Heat/CO alarms in the property are mains only powered, it is important that they remain connected with the mains power on during step (d).

d) Press the test button on one of the alarms in the existing system long enough to trigger the other alarm(s) in the system. This should be carried out within 5 minutes.

e) Wait until the amber LED on the new RF-BW flashes twice every 3 seconds. This indicates that the learn in process has completed.

f) Before you install the new Smoke/Heat/CO alarm, isolate the mains power once again.

g) Install the new Smoke/Heat/CO alarm onto the RF-BW as outlined in the alarm owner's manual (See Fig 2).

h) RESTORE MAINS POWER TO ALL ALARMS. Ensure all Smoke/Heat/CO alarms in the system display a green power light and red operating light as per the user's manuals.

i) Press the test button on the new alarm in the system to ensure that 1) the alarm sounds and 2) it links with the existing alarms in the system.

NOTE: The amber LED will stop flashing 5 minutes after the learn in process has completed. Test (i) should be carried out regardless of this.

j) Installation is now complete.

NOTE: If after a period 15 minutes the unit has failed to learn in, it will sound a double beep for a period of 5 minutes.

3.4) UNLEARNING A UNIT FROM AN RF-BW SYSTEM

To remove a unit from a network, turn the mains power off and remove the alarm from the RF-BW base. Press the learn in button rapidly 9 times, during each press the base will beep. After the 9 presses, ensure the base sounds 3 long beeps and a double flash. Once the LED has flashed 5 times you have successfully 'Unlearned' the RF-Base.

4. OPERATING CONDITIONS

Amber operating LED: Located on the side of the RF-BW, this LED will remain off during normal working conditions. Any fault with the RF-BW will be indicated by a flash of the LED and a single chirp.

Low battery warning: When a low battery condition on the RF-BW occurs the internal buzzer will chirp along with a single flash of the amber LED once every minute, for a period of at least 30 days.

IMPORTANT: The RF-BW has a sealed in battery and circuitry, therefore should you encounter a fault warning all networked RF-BW bases will need to unlearnt and the base with the fault warning will need to be replaced. The new network will have to be learnt in following section 3.2.

As with all work involving electrical wiring always consult a qualified electrician.

5. TROUBLE SHOOTING

For queries on Smoke/Heat/CO alarm related issues refer to the specific owner's manual.

Fault	Action
When I press the learn in button the amber LED on the base does not flash.	Wait for at least 2 minutes to allow the system to respond. If there is no response within 5 minutes, ensure unit is correctly positioned. Attempt to learn in again by pressing the button.
When I press the test button on the Smoke/Heat/CO alarm no other alarms sound.	Ensure all alarms are powered up (green and red LEDS indicating as per Smoke/ Heat/CO alarm owners manual. Repeat learn in process in section 3.2 or 3.3 as appropriate.
When I press the test button on the Smoke/Heat/CO alarm some alarms sound and others do not.	Remove the alarms and repeat learn in process in the section 3.2 or 3.3 as appropriate.
The unit gives an occasional single chirp but there is no amber flash.	This indicates a problem with the Smoke/ Heat/CO alarm. Refer to the Smoke/Heat/ CO alarm owner's manual.
The amber LED flashes and base chirps.	Low battery. Replace the base with the fault warning. All networked RF-BW bases will need to be learned in to the new system.
Base emits a double beep.	Base is not learnt in correctly. Repeat the learn in process in section 3.2 & 3.3.

If you have any questions about the operation of your Smoke, Heat or Carbon Monoxide alarms or RF-BW interlink base please contact the Technical Support line on **0800 141 2561** or email us via the link on our website **www.fireangel.co.uk**

6. DISPOSAL

In accordance with the WEEE Directive 2012/19/EU, waste electrical products should not be disposed of with regular household waste. The unit should be disposed of in line with local regulations.

WARNING: Do not open the alarm. Do not burn.

7. LIMITED GUARANTEE

Sprue Safety Products Ltd warrants to the original purchaser that the enclosed RF-BW unit be free from defects in materials and workmanship under normal residential use and service for a period of 5 years from the date of purchase (not including batteries). Provided it is returned with postage prepaid and proof of purchase date, Sprue Safety Products Ltd hereby warrants that during the 5 year period commencing from the date of purchase Sprue Safety Products Ltd, at its discretion, agrees to replace the unit free of charge.

The warranty on any replacement RF-BW, will last for the remainder of the period of the original warranty in respect of the unit originally purchased – that is from the date of original purchase and not from the date of receipt of the replacement product. Sprue Safety Products Ltd reserves the right to offer an alternative product similar to that being replaced if the original model is no longer available or in stock. This warranty applies to the original retail purchaser from the date of original retail purchase and is not transferable. Proof of purchase is required. This warranty does not cover damage resulting from accident, misuse, disassembly, abuse or lack of reasonable care of the product, or applications not in accordance with the user guide. It does not cover events and conditions outside of Sprue Safety Products Ltd's control, such as Acts of God (fire, severe weather etc.). It

does not apply to retail stores, service centres or any distributors or agents.

Sprue Safety Products Ltd will not recognise any changes to this warranty by third parties. Sprue Safety Products Ltd shall not be liable for any incidental or consequential damages caused by the breach of any expressed or implied warranty. Except to the extent prohibited by applicable law, any implied warranty of merchantability or fitness for a particular purpose is limited in duration for 5 years. This warranty does not affect your statutory rights. Except for death or personal injury, Sprue Safety Products Ltd shall not be liable for any loss of use, damage, cost or expense relating to this product or for any indirect or consequential loss, damages or costs incurred by you or any other user of this product.

8. TECHNICAL SPECIFICATION

Power: Independent 10 year (battery for life) lithium cell.

Temperature: (operating):- 0°C - 40°C

Humidity: 0-95% (non condensing)

Warning: Visual and audible low battery warning

Radio Frequency: 868MHz

Wireless Range: Minimum 150m open air

Dimensions: 140mm (D) x 30mm (H)

Approvals: Independently tested to RF standard:

EN 300 220-2 V3.1.1
EN 301 489-3 V1.6.1
EN 301 489-1 V1.9.2

Hereby, Sprue Safety Products Ltd, declares that this RF-BW-T is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. The declaration of conformity may be consulted at: http://spru.es/EC-RF-BW-T

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