## **FIRECHIEF®**

making the world a safer place

## Kitchen STOVE GUARD



INSTALLATION & OPERATING INSTRUCTIONS









## THANK YOU FOR CHOOSING THE FIRECHIEF KITCHEN STOVE GUARD

Firechief Stove Guard is a safety product for domestic kitchens. The Stove Guard consists of a state-of-the-art Heat Sensor that monitors the cooker from above, and a Control Unit that cuts the power to the cooker if a dangerous situation occurs. The Control Unit is installed behind the cooker or inside a kitchen cabinet close to the cooker. Be sure to read this manual prior to commencing installation.

#### **PACKAGE CONTENTS:**

- Heat Sensor SGS1010
- Battery (CR2032)
- IR lens extension
- Control Unit SGC510-2
- Junction Box SGI510-2JF
- Main manual
- Cupboard sticker
- Screws





## **SAFETY RULES**

Firechief Stove Guard does not prevent all potentially dangerous situations, but it makes the use of the cooker significantly safer. Never leave the cooker unattended. Always check compliance with local regulations.

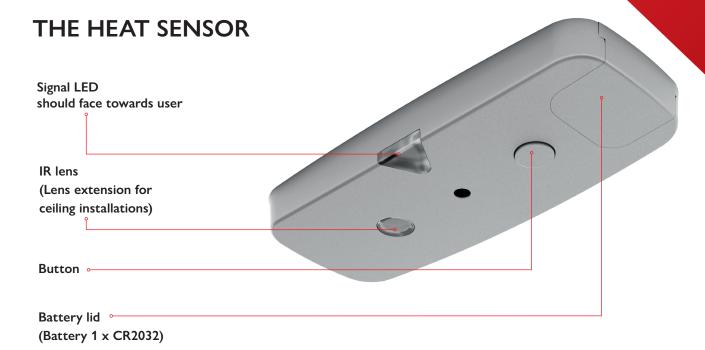
- For indoor use only.
- Do not use in a professional kitchen.
- Do not hold the Heat Sensor close to ears. It will emit a loud sound when the alarm is triggered or in test mode, which can cause hearing damage.
- Do not leave children alone with the product or any of its parts or packaging. There is a risk of choking.
- · Do not disassemble the product.
- Do not immerse the Heat Sensor in water.

- The Stove Guard will not emit an alarm if the temperature of the cooker is too low to identify a dangerous situation, or if the cooker has an automatic limitation of temperature increase.
- The Stove Guard will not completely isolate the cooker. It must never be used to turn off the cooker's power supply for service/repair.
- Do not short-circuit, charge, open or heat the batteries. There is a risk of explosion.

The operating instructions, accessories and stickers must accompany the product. Follow the safety guidance for safe use of Stove Guard. If you have questions about the product, ask a specialist or refer to firechiefglobal.com

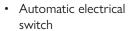
## **TECHNICAL SPECIFICATIONS**

- Alarm signal 80 dB(A) @ 1 m RF 433 MHz Patented technology
- Fulfils BS EN 50615:2015 Standard for stove guards (Eurofins Expert Services Oy)



## THE CONTROL UNIT

- Voltage 230–400 VAC
- Extremely low energy use (approx. 1 W)





## THE JUNCTION BOX

 For safe connections up to 10 mm<sup>2</sup> wires



PLEASE NOTE THE HEAT SENSOR AND CONTROL UNIT ARE FACTORY PAIRED. DO NOT SEPARATE THEM

## **CONTROL UNIT**

It is a statutory requirement that the Junction Box is installed by an authorized electrician. The power to the cooker must be disconnected throughout the entire installation.



## Disconnect the power

Switch off the power at the consumer unit.

**Note!** Do **not** turn on the Consumer unit before the Heat Sensor is set up and ready for a function test.





Watch the film: https://youtu.be/s7ato2xYQUY Test alarm

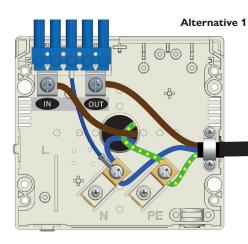
## Connecting the Junction Box

For correct installation of the Junction Box, refer to the wiring diagram on page 5. The Control Unit will then plug & play into the Junction Box.

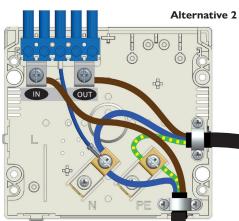
PLEASE NOTE THE HEAT SENSOR AND CONTROL UNIT ARE FACTORY PAIRED. DO NOT SEPARATE THEM

## **FIRE**CHIEF®

## **COOKER CONNECTION**







Stove Guard's maximum supply current allowed is 32 A and the appropriate diversity factor is 100%. The diversity factor applies to Stove Guard installations with parallel connected relays. Type 1, or equivalent circuit breaker (MCB) shall be used for protecting the Stove Guard supply. The circuit breaker shall have capability of interrupting the supply current within 100 ms at 4 x load.







For indoor use only.
Do not use in a professional kitchen.
The Control Unit must be installed
by an authorised electrician.

## **INSTALLATION**

## **INSTALLING THE STOVE GUARD**

Follow these instructions for correct installation.



#### STEP 1:

Installation of the Heat Sensor p. 4–12

#### STEP 2:

Installation of the Control Unit p. 4-12

### STEP 3:

**Function test** 

p. 13

#### INSTALLATION OF THE HEAT SENSOR

The recommended location to install the Heat Sensor is directly above the centre of the cooker, under the cooker hood. The Heat Sensor can also be mounted on a wall with a mounting bracket or on the ceiling. The enclosed fitting instructions should be followed to ensure correct installation.



Installation plate with adhesive tape



## **INSTALLATION LOCATIONS**

#### **RECOMMENDED**

1a Installation under cooker hood



#### **OPTIONAL**

1b Wall mounting



Firechief Kitchen Stove Guard Wall Bracket 140-0003 (FSWB) required for wall installations - available separately.

1c Ceiling mounting

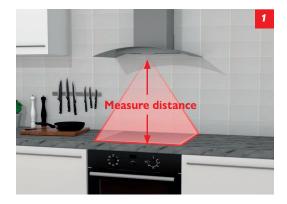


For ceiling installations, the supplied IR lens extension must also be fitted. See page 11-12.

## **COOKER HOOD**

Allow the Heat Sensor to reach room temperature before starting the installation. The power to the cooker must be switched off (at the consumer unit). See table on page 8 for guidance on the appropriate mounting location and follow instructions 1–4.

#### **SELECTING THE MOUNTING LOCATION**



Measure the installation height. The Heat Sensor should be centred above the cooker, preferably within Zone 1 (see diagram at bottom of the page). It can be attached to the grease filter. It is also important to ensure the minimum distance from any lights underneath the hood is 10 cm (5 cm is enough for LED lamp).

Please note: Zone 1 is recommended for best performance.

### MOUNTING THE INSTALLATION PLATE

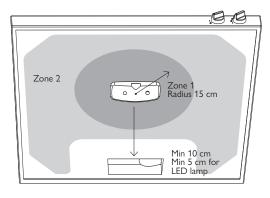


If there is a metal mesh grease filter on the cooker hood, make sure it is free of grease and dry.

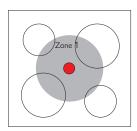
Carefully remove the protective film from the installation plate. Press for at least a minute while attaching installation plate to allow adhesive to work.

For ease of battery fitting and heat sensor adjustment, the heat sensor can be removed from the installation plate and re-attached via it's magnetic fastening.

## COOKER HOOD UNDERSIDE MOUNTING ZONES



## OVERVIEW OF COMPARABLE 'ZONES' ON HOB AREA



Zone 1 is immediately above the middle of the cooker plates. Max 15 cm from the centre.

# INSTALLATION UNDER COOKER HOOD





## STARTING THE HEAT SENSOR

Insert the battery and check step 4 before placing the Heat Sensor on the installation plate.

Briefly press the button. The LED should flash green.



Watch the film: https://youtu.be/SAeFdB3nP3s Installation

### **CHECK INSTALLATION HEIGHT**

If the distance from cooker to Heat Sensor is more than 60 cm, the Heat Sensor's sensitivity level must be adjusted manually.

Please refer to the table below together with the information on page 7 of the User Guide. Also watch the video on sensitivity configuration below.



Watch the film: https://youtu.be/oy-hrT7nTQM Setting the sensitivity level

DISTANCE FROM COOKER TO HEAT SENSOR	COOKER SIZE				SENSITIVITY LEVEL CONFIGURATION	
	0–60 cm wide		61–90 cm wide		Sensitivity	Acknowledgement
	Zone 1	Zone 2	Zone 1	Zone 2	setting	"beep(s)"
81–100 cm	OK	ОК	ОК	OK	3 presses	•••
76–80 cm	ОК	ОК	OK	OK	4 presses	•••
71–75 cm	OK	ОК	OK	OK*	5 presses	••••
65–70 cm	ОК	OK	OK	OK*	6 presses	••••
61–64 cm	OK	ОК	ОК	OK*	7 presses	•••••
60 cm Factory setting	OK	ОК	ОК	OK*	8 presses	•••••
55–59 cm Factory setting	ОК	ОК	OK*	OK*	8 presses	•••••
45–54 cm Factory setting	ОК	OK*	OK*	OK*	8 presses	•••••

OK = The installation complies with BS EN 50615 Cat. B standard test plan. OK\* = The installation may not in all cases meet all BS EN standard requirements.

Please note: The sensitivity level of the Heat Sensor is confirmed by the appropriate sound pattern sequence only and not the LED flashes.

## WALL

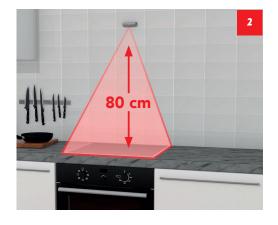
Allow the Heat Sensor to reach room temperature before starting the installation. The power to the cooker must be switched off (at the consumer unit). See table on page 10 for the mounting location and follow instructions 1–5.

### SELECT THE REQUIRED LOCATION AND MOUNT THE BRACKET

Wall mounting requires a bracket 140-0003 (FSWB), sold separately. The bracket can be fastened to the wall using adhesive tape or screws.

See the detailed mounting instructions in the bracket package. Make sure that the bracket is positioned correctly so that the Heat Sensor faces towards the centre of the cooker.







## MOUNTING THE INSTALLATION PLATE

Carefully remove the protective film from the installation plate. Press for at least a minute while attaching installation plate to allow adhesive to work.

For ease of battery fitting and heat sensor adjustment, the heat sensor can be removed from the installation plate and re-attached via it's magnetic fastening.

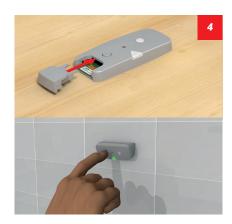
Mounting height on the wall above the cooker Max 90 cm wide cooker.

Recommended: 80 cm Alternatively: 65–79 cm\*

See mounting instructions provided separately with the bracket.

\* For wall mounting with a distance less than 80 cm between the Heat Sensor and the cooker, the installation will not in all cases meet all BS EN standard requirements.

# WALL MOUNTING WITH BRACKET



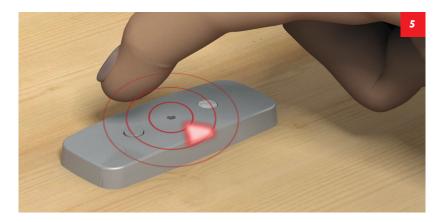
## STARTING THE HEAT SENSOR

Insert the battery and check step 5 before placing the Heat Sensor on the installation plate.

Briefly press the button. The LED should flash green.



Watch the film: https://youtu.be/SAeFdB3nP3s Installation



## **SET THE SENSITIVITY LEVEL**

Set the Heat Sensor's sensitivity level according to the mounting height (as described in the table below) by evenly pressing the Sensor's button. The factory setting for the sensitivity level is 45–60 cm above the cooker. Please refer to the table below together with the information on page 7 of the User Guide. Also watch the video on sensitivity configuration below.



Watch the film: https://youtu.be/oy-hrT7nTQM Setting the sensitivity level

DISTANCE FROM COOKER TO HEAT SENSOR	COOKER SIZE		SENSITIVITY LEVEL CONFIGURATION		
	0-60 cm wide	61–90 cm wide	Sensitivity	Acknowledgement "beep(s)"	
80 cm Recommended	OK	ОК	3 presses	•••	
70–79 cm	OK*	OK*	3 presses	•••	
65–69 cm	OK*	OK*	4 presses	••••	

OK = The installation complies with BS EN 50615 Cat. B standard test plan. OK\* = The installation may not in all cases meet all BS EN standard requirements.

Please note: The sensitivity level of the Heat Sensor is confirmed by the appropriate sound pattern sequence only and not the LED flashes.

## **CEILING**

Allow the Heat Sensor to reach room temperature before use.

The power to the cooker must be switched off (at the consumer unit).

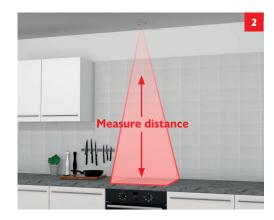
See table on page 12 for the mounting location and follow instructions 1–5.



### **REPLACE LENS**

Carefully lift the lens with a screwdriver. Insert the IR lens extension (included) as shown in the picture. The extension should point directly upwards at an angle of 90°. If the extension moves around, check that it has been inserted the right way round.





#### FINDING THE MOUNTING POSITION

Measure the distance between the cooker and ceiling. Place the Heat Sensor directly above the center point of the cooker. Make sure that the surface is clean and dry.





#### MOUNTING THE INSTALLATION PLATE

Make sure that the ceiling is free of grease and dry.

Carefully remove the protective film from the installation plate. Press for at least a minute while attaching installation plate to allow adhesive to work.

For ease of battery fitting and heat sensor adjustment, the Heat Sensor can be removed from the installation plate and re-attached via its magnetic fastening.

# CEILING MOUNTING WITH IR LENS EXTENSION



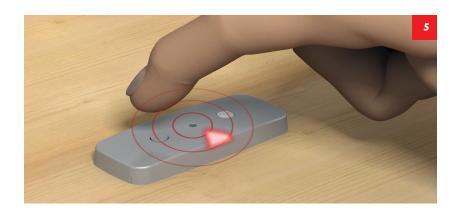
## STARTING THE HEAT SENSOR

Insert the battery and check step 5 before placing the Heat Sensor on the installation plate.

Briefly press the button. The LED should flash green.



Watch the film: https://youtu.be/SAeFdB3nP3s Installation



#### SET SENSITIVITY LEVEL

Set the sensitivity level according to the mounting height (as described in the table below) by evenly pressing the Sensor's button. The Heat Sensor's sensitivity level must always be adjusted when installing it on the ceiling. Please refer to the table below together with the information on page 7 of the User Guide. Also watch the video on sensitivity configuration below.



Watch the film: https://youtu.be/oy-hrT7nTQM Setting the sensitivity level

DISTANCE FROM COOKER TO HEAT SENSOR	COOKER SIZE		SENSITIVITY LEVEL CONFIGURATION		
	0–60 cm wide	61–90 cm wide	Sensitivity	Acknowledgement "beep(s)"	
140–180 cm	ОК	OK	2 presses	••	

Recommended: Immediately above the middle of the cooker.

Alternatively: Farther out into the room with bracket. See the bracket package for mounting instructions.

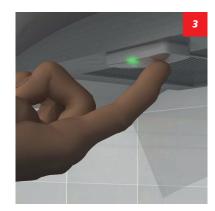
OK = The installation complies with BS EN 50615 Cat. B standard test plan. Please note: The sensitivity level of the Sensor is confirmed by the appropriate sound pattern sequence only and not the LED flashes.

## **FUNCTION TEST**

The installation is completed when the function test has been passed. The Heat Sensor will then give an alarm in a dangerous situation. The user manual, accessories and stickers should be stored close to the Stove Guard for future reference.







### Return the power

Switch on the power at the consumer unit.

### Perform function test

Wait 30 seconds after switching on the power. Press and hold the button until the Heat Sensor emits a "beep" ( • ) and the red LED flashes. Release the button.

The Control Unit will switch off the cooker and give an alarm signal every 5 seconds. The Heat Sensor will also emit a test alarm after a few seconds.

**Note!** Ensure that there is no power going to any of the cooking plates.

#### Reset the alarm

It is important to reset the alarm after a function test to return power to the cooker. Reset the test alarm by pressing the button once.

Check that the cooker can be turned on (or that there is voltage in the Control Unit).

If the Heat Sensor does not respond or if the test alarm cannot be reset, see page 9 of the User Guide, points 5 and 6.

### Installation is now ready.

When connecting the Stove Guard for the first time it is recommended to wait 15 minutes before normal cooker use to allow the Stove Guard to perform final system checks.

## WARRANTY

The warranty applies from the date of purchase. This warranty does not affect your legal rights. The warranty covers the use of the product under normal circumstances in private households and housing associations.

The warranty is limited to replacement of defective components.

The warranty applies only when the product is used according to the instructions. It does not cover damage caused by misuse, improper handling, use of force, batteries, dust, dirt, water or other environmental factors.

If you have a warranty claim, contact your retailer for instructions. We only accept authorized returns with a complete description of the defect. After the warranty period, you will be charged for repairs and it may not always be possible to have the product repaired.

Warranty claims do not extend the original warranty period, and the warranty on spare parts expires at the same time as the product warranty. Unless otherwise provided by law, the manufacturer shall not be liable for additional claims, including for personal or material damage arising from the use of the product or its deficient function or malfunctioning.

#### **DISPOSAL**

Information about disposal of electrical and electronic waste (private households): The Waste Electrical and Electronic Equipment Regulations (2013) (S.I. 2013/3113) / EU Directive 2012/19/EC on recycling of waste electrical and electronic equipment.



This symbol on the Stove Guard and associated documents means that this product should not be disposed of with normal household waste. For proper handling and recycling, this product must be delivered to a separate collection point where it will be accepted free of charge. The product can be returned to your local retailer when purchasing a corresponding new product.

Proper disposal of this product helps to save valuable resources and prevent potentially harmful effects on human health and on the environment, which may otherwise occur in the event of improper handling of waste.

## **UK Declaration of Conformity**



As the product's manufacturer, we declare under our sole responsibility, that this product SGK5010-2JF is in accordance with the following regulations:

- Radio Equipment Regulations 2017 (S.I. 2017/1206)
- Electrical Equipment (Safety) Regulations 2016 (S.I. 2016/1101)
- Electromagnetic Compatibility Regulations 2016 (S.I. 2016/1091)
- Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 (S.I. 2012/3032)
- The Waste Electrical and Electronic Equipment (WEEE) Regulations (2013) (S.I. 2013/3113)

The Model is a combination of the Sensor Unit SGS1010, the Control Unit SGC510-2 and the Installation Set SGI510-2JF.

The Control Unit is certified according to the following standard: BS EN 60730-1:2016+A1:2019 (Automatic Electrical Controls for Household and Similar Use, Part 1: General requirements)

The Installation Set (connectors, socket-outlets, plugs, sockets) is certified according to the following standards and technical specifications: BS EN 60670-1:2005+A1:2013, BS EN 60670-22:2006 + BS EN 60998-1:2004

The other designated standards and the technical specifications are the following:

- Devices for Fire Prevention for Hobs (Cooktops): BS EN 50615:2015 (the Stove Guard standard, tested as a Category B device)\*
- Household and Similar Electrical Appliances: BS EN 60335-2-31:2014 (Part 2-31: Particular requirements for range hoods and other cooking fume extractors): Clause 30: Resistance to heat and fire (the Sensor Unit)
- Automatic electrical controls Part 1: General requirements: BS EN 60730-1:2016+A1:2019 Clause H.27: Abnormal operation, fault conditions for low-power circuits (the Sensor Unit)
- Restriction of Hazardous Substances (RoHS): BS EN 50581:2012

## **FIRE**CHIEF

- Electromagnetic Compatibility (EMC) Standard for Radio Equipment and Services: ETSI EN 301 489-1 V2.1.1 (Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements) and ETSI EN 301 489-3 V2.1.1 (Part 3: Specific conditions for Short-Range Devices (SRD) operating on frequencies between 9 kHz and 246 GHz) (the Sensor Unit)
- Electromagnetic Compatibility and Radio Spectrum Matters (ERM) – Short Range Devices (SRD) Operating in the Frequency Range 25 MHz to 1 000 MHz: ETSI EN 300 220-1 V3.1.1 (Part 1: Technical characteristics and methods of measurement) and ETSI EN 300 220-2 V3.1.1 (Part 2: Harmonised Standard for access to radio spectrum for non specific radio equipment) (the Sensor Unit)

## **EU** Declaration of Conformity

As the product's manufacturer, we declare under our sole responsibility, that this product SGK5010-2JF corresponds to:

- Radio Equipment Directive (RED) 2014/53/EU
- The Low Voltage Directive 2014/35/EU
- The RoHS Directive on the Use of Hazardous Substances 2015/863/EU

....and the following harmonized standards and technical data are used:

- Fire prevention devices for hobs EN 50615:2015 (Cat. B)\*
- EN 60730-1:2016+A1:2019 (Control Unit); Clause H.27 (Sensor)
- Device Requirements EN 60335-2-31:2014, Clause 30
- EN 60670-1:2005+A1:2013, EN 60670-22:2006 + EN 60998-1:2004
- Electromagnetic Compatibility and Radio Spectrum Matters (ERM) EN 300 220-1 V3.1.1, EN 300 220-2 V3.1.1
- Electromagnetic Compatibility (EMC) EN 301 489-1 V2.1.1 and EN 301 489-3 V2.1.1
- RoHS EN 50581:2012
- \* BS EN 50615: 2015 British/European standard for stove guards, approved 05.01.2015, available 06.03.2015. The full title of the standard: Household and similar electrical appliances. Safety. Particular requirements for devices for fire prevention and suppression for electric hobs (cooktops). Tested by an independent, accredited testing laboratory (Eurofins Expert Services Finland).

# REPLACING SENSOR AND CONTROL UNIT

### **PAIRING DEVICES**

The units are already paired at the factory. When replacing the Heat Sensor or the Control Unit, the devices must be paired again.

**Note!** The Heat Sensor must be placed on the installation plate during pairing.

- Check that the cooker is connected to the power supply.
- 2. Press and hold the reset button firmly for 20 seconds. The Control Unit will emit two sets of clicks and buzzes (approximately after 5 and 20
- seconds). Release the reset button after the second set of clicks and buzzes. The Control Unit is now ready to be paired.
- 3. Press and hold the NEW Heat Sensor button until it emits a "beep" ( ) and a red LED flashes. The Control Unit makes a buzzing sound and the Heat Sensor emits a "beep" ( ).
- 4. After 5 seconds, the Heat Sensor gives an alarm (first



- one "beep" and after a while continuous beeping). The Control Unit and the Heat Sensor are now successfully paired.
- 5. Reset the test alarm by pressing shortly the Heat Sensor button. Check that the cooker can be turned on. If the Heat Sensor does not respond or if the test alarm cannot be reset, see FAQ, page 9 of the User Guide, points 5 and 6.



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