

# STOVE GUARD SGEL-SN-1 REFERENCE MANUAL

## For installers and end-users



# Thank you for choosing SONA SGEL-SN-1 Stove Guard.

# Before using this product, please read 'safety instructions' first.

The manual and the user guide are an integral part of the product and contain important information about use and handling. Ensure that the manual is left for the end-user for future reference.

Package contents:

- Intelligent Heat Sensor SGS510
- Control Unit SGC510-2 or SGC500-3
- IR eye (lens extension)
- Control Unit installation set
- Installation instructions
- Guide for User low installations
- Guide for User high installations
- Reference manual
- Connection guide
- Cupboard sticker

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## **1. SAFETY INSTRUCTIONS**



#### Batteries

- Do not short-circuit or charge batteries, due to risk of explosion.
- Do not attempt to open or burn batteries due to risk of explosion.

## 2. CHOOSING OPTIONAL FEATURES

## 2.1. Optional features description

The Stove Guard can be adjusted to suit the needs of different user groups. Additionally, more basic cookers without a thermostat or a timer can be upgraded to correspond to cookers with those features (modes 2, 3A and 3B).

Cooker type	Available features	Activation	
All cookers	Carbon monoxide / smoke alarm detection (requires additional alarm). Alarms detected using sound detection. Compatible with virtually all carbon monoxide / smoke alarms. Silent alarm The Intelligent Heat Sensor does not signal an audible alarm but flashes the red LED upon alarm.	Activate sound detection and test connection, see page 8. See page 22.	
Cookers with mechanical knobs that have a clock - also mechanical cookers that do not have a clock when the user often cooks food by leaving a pot on low heat for long long periods of time.	<ul> <li>Intelligent Timer detects if the cooker has been abandoned, by real-time cooker operation analysis. The cooker is turned off in 1 – 3 hours, depending on the power setting and the type of cooker. The cooker is not turned off when used on a low power setting.</li> <li>Sensor dirt and grease detection Identifies when the Intelligent Heat Sensor's operation is compromised by being covered by dirt or fat.</li> </ul>	Activate <b>mode 2</b> , see page 10.	
Cookers with mechanical knobs that do not have a clock	<ul> <li>Intelligent Timer+, detects if the cooker has been abandoned. Includes low-power setting detection. Works as the Intelligent Timer described in the row above. Also detects hotplates on a low power setting, which can cause burns but are unable to produce a fire.</li> <li>Sensor dirt and grease detection+ increased frequency of diagnostic checks Recommended for high-risk user groups.</li> <li>Safety Lock switches off the power to the cooker when it's not in use.</li> <li>The cooker needs to be manually activated before use (by pressing the Heat Sensor cover once), and is 'locked' approx. 20 minutes after last use.</li> </ul>	No Safety Lock -> activate <b>mode 3A</b> , see page 10. With Safety Lock -> activate <b>mode 3B</b> , see page 11.	

### 2.2. Recommended mode based on user group

Users	Cooker	Touch controls	Mechanical knobs no clock	Mechanical knobs with clock
		1	1 2*	1 2*
		1	3B	1 2*
		1	3B	1 2*
		1	3A	2
Special user group	5	1	1 3A* 3B**	1 2*

\* Recommended for cookers where the heat adjusts in clear steps (ie. no stepless heat adjusting = the cooker has no thermostat); when the cooker has several users; or when cooking frequently involves using a lot of oil/butter.

\*\* When preventing unnecessary cooker use is required (cooker needs to be activated by pressing Heat Sensor cover).

## 2.3. Summary of features, modes and cooker compatibility

Cooker mode	Touch controls or default features for all cooker types	Mechanical knobs with clock/no clock	Mechanical knobs no clock	Mechanical knobs no clock	Activation
Heat hazard detection (EN 50615 cat. B device)	on 15 🗸		-		
Fault diagnosis, EN 50615	$\checkmark$			-	
CO / smoke alarm sound detection	Optional, additional CO / smoke alarm required				See page 8
Silent alarm	larm Optional			See page 22	
Sensor dirt and grease detection		1	Increased	frequency	Set mode, see pages 10-11
Intelligent Timer (> 1kW)		1	1	1	Set mode, see pages 10-11
Intelligent Timer+ (also low power settings)			1	1	Set mode, see pages 10-11
Safety Lock				$\checkmark$	Set mode, see pages 10-11

## **3. ACTIVATING OPTIONAL FEATURES**

### 3.1. Carbon monoxide/smoke alarm detection

Inform the user about an activated feature by ticking the box in the guide for user (low installations: page 3, high installations for cookers with touch controls: page 2).

The carbon monoxide/smoke detector needs to be placed within 5 metres distance of the Control Unit. SONA Stove Guard is compatible with virtually all carbon monoxide alarms, however ensure correct alarm recognition by testing the system first.

If you later wish to deactivate the feature, carry out the same procedure again.

- 1. Detach the Intelligent Heat Sensor. (Wait until the Sensor emits four beeps and the cooker is turned off.)
- 2. Press and release the Heat Sensor cover so that the green LED illuminates.
- **3.** Put the battery disconnection piece into the space on the underside of the Heat Sensor (see image 1 on page 21). Hold the Heat Sensor in your hand and press the disconnection piece and the cover towards each other, hold for about 5 seconds. Release the hold (the Sensor emits a beep). Then again press the disconnection piece and the cover towards each other, hold for about 5 seconds. Release the hold (the Sensor emits a beep) and remove the battery disconnection piece.

If you have lost the disconnection piece, you can alternatively use a screwdriver, see image 2 page 21.

- 4. Press the Heat Sensor cover once. The Sensor will now emit beeps confirming its new setting: one beep signifies that the Audible Alarm Detection is activated, two beeps signifies that the feature is deactivated.
- 5. Return the Heat Sensor on to the mounting plate and press its cover once.

6. Now test the feature:

Turn the smallest hotplate to medium heat.

- Smoke alarm: Do a test alarm with the smoke detector.
- Carbon monoxide alarm: Do a test alarm with the CO detector. If the Stove Guard does not respond, refer to the CO detector's manual as to how to trigger an actual alarm for testing. (Due to varying test alarm signals in CO alarms, the Stove Guard does not always react to the CO test alarm although will identify the actual alarm.)
- 7. Check that the Control Unit receives the signal: the cooker is turned off and the Control Unit starts to emit a buzzing sound every 5 seconds. To reset the alarm, turn the hotplate back to '0' (not required in cookers with touch controls), then press the Heat Sensor cover once.

If the Stove Guard does not react to the external alarm signal, adjust the signal recognition frequency as advised in 'FAQ', question 6.1.

Save the disconnection piece for possible later use.

### 3.2. Activating modes

To switch between the modes 2 / 3A / 3B, carry out the setup procedure for the desired mode. To return back to mode 1, return the Stove Guard to its factory settings. (chapter 5.3).



### Setting mode 2

- 1. Press the Control Unit setup button (1, see image on previous page) and hold it down. After 10 seconds the Control Unit emits a buzzing sound, and after a moment another buzzing sound. Release the setup button.
- 2. Wait for approximately 30 seconds, until you will hear two buzzing sounds.

If the Control Unit emits one or three buzzing sounds, the mode was not set properly, and the procedure should be carried out again, starting from point 1.

# Then go to the end of this chapter, 'Finishing off'. NOTE The 'finishing off' procedure is required for Stove Guard's correct operation.

### Setting mode 3a

- 1. Press the Control Unit setup button (1, see image on previous page) and hold it down. After 10 seconds the Control Unit emits a buzzing sound, and after a moment another buzzing sound. Release the setup button.
- 2. Wait for 10 seconds, turn on the largest hotplate for 5 seconds, then turn it off. The Control Unit will emit **three** buzzing sounds after a short moment.

If the Control Unit emits one or two buzzing sounds, the mode was not set properly, and the procedure should be carried out again, starting from point 1.

3. Then go to the end of this chapter, 'Finishing off'.

NOTE The 'finishing off' procedure is required for Stove Guard's correct operation.

### Setting mode 3b

- 1. Press the Control Unit setup button (1, see image on page 9) and hold it down. After 10 seconds the Control Unit emits a buzzing sound, and after a moment another buzzing sound. Release the setup button.
- 2. Wait for 10 seconds, then turn on the largest hotplate. Wait until you have heard **three** buzzing sounds from the Control Unit, then turn the hotplate off.

*If the Control Unit emits one or two buzzing sounds, the mode was not set properly, and the procedure should be carried out again, starting from point 1.* 

3. Then go to the end of this chapter, 'Finishing off'.

NOTE The 'finishing off' procedure is required for Stove Guard's correct operation.

## Finishing off

- 1. Using the isolator switch, turn the cooker electricity off for approx. 15 seconds. Turn the electricity back on and wait for 20 seconds for the Control Unit to confirm its current setting with two lots of buzzing sounds.
- 2. Straight after the signals do a test alarm: turn a hotplate on, then press the Intelligent Heat Sensor cover until the Sensor emits a beep. The Control Unit turns the cooker off and the Sensor emits a test alarm. Turn the hotplate off and return the cooker power by pressing Sensor cover once.

The test alarm is an essential part of the setup procedure. Not doing a test alarm will affect the functionality of the Stove Guard.

The installation is now complete. For the next 15 minutes, do not turn the cooker on as the Control Unit identifies and adjusts to its installation environment (the Control Unit will emit a buzzing sound as the cooker is ready for use).

Inform the user about an activated feature by ticking the box in the guide for user (low installations: page 3).

# 4. FREQUENTLY ASKED QUESTIONS

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### 1. General questions and at the beginning of use

#### 1.1. Why are there two different guides for the user?

• The Stove Guard operates differently when the Heat Sensor is installed higher than 90 cm (35.5") above the cooker top.

### 1.2. What is a 'low installation' and a 'high installation'?

• In a 'low installation', the Heat Sensor is installed lower than 90 cm (35.5") above the cooker top. In a 'high installation' the Heat Sensor is installed higher than 90 cm above the cooker top.

#### 1.3. What to do when changing the cooker to a new one/moving house?

- Return the Stove Guard to its factory settings (see chapter 5.3). This can be done both when the Control Unit is still attached to the old cooker or after having been connected to the new cooker. When returned to factory settings, install as for first installation. The installation instructions sheet can be found from sonasafety.com.
- 1.4. What to do when replacing the Intelligent Heat Sensor or the Control Unit with a new one?
  - See chapter 5.2 in this manual for device pairing instructions.
- 1.5. I accidentally reset the pre-alarm signal even though the alarm was triggered by a hazardous situation. Has the Intelligent Heat Sensor now become too insensitive? (low installations only)
  - Resetting the pre-alarm signal changes the Intelligent Heat Sensor's sensitivity but only to such a small extent, that resetting it a couple of times does not cause insensitivity.

- 1.6. How to test the Stove Guard function, as recommended for ceiling installations, with induction cookers?
  - An adapter plate that enables the use of all cooking vessels on an induction cooker (available from several retailers) is required. Place the adapter plate on a hotplate and carry out the test as instructed in the installation instructions sheet. However, this test is not absolutely necessary, since any potential problems would eventually be picked up by the automatic fault diagnosis.
- 1.7. What does 'not fulfilling all EN standard requirements' mean? (Certain installation positions only, see \* and \*\* under the tables in the installation instructions sheet)

According to the EN standard, the heat sensor should see to the bottom surface of a pot. In these installation positions, the Intelligent Heat Sensor cannot see the bottom surface of certain pots with higher edges. With these pots, the Stove Guard will identify a risk situation slightly later but is still safe to use.

### 2. Alarm triggers during normal cooking

#### 2.1. The Stove Guard alarm triggers during normal cooking

- For low installations (lower than 35.5" (90 cm) above the cooker top), the alarm sensitivity has a learning component. Pressing the Sensor cover during pre-alarm signal adjusts Sensor sensitivity (see Guide for User, low installations). However, if this has been done a couple of times and the alarm still triggers in a similar cooking situation, see below.
- The Heat Sensor may interpret placing a hot oven tray on the cooker or removing a pot from a hot hotplate as a hazardous situation and signal a short alarm.
- A stove-top coffee maker or a pot that is much smaller than the hotplate can continuously trigger the Stove Guard alarm. The alarm can also trigger more easily if a pot is used without a lid.
- It is recommended to use a pot/pan that fits the hotplate, and to use a lid when possible. To use a stove-top coffee maker, see question 2.2.
- For low installations (learning sensitivity), if the Stove Guard alarm still triggers in situations not mentioned above, adjust the Intelligent Heat Sensor sensitivity manually to be less sensitive, see chapter 5.1 in this manual.

- 2.2. The Stove Guard alarm triggers when I make coffee with a stove-top coffee maker.
  - Stove-top coffee makers are often much smaller than the hotplate, hence the Stove Guard cannot distinguish it from a risk situation. This is usually a problem with the smaller coffee makers, and with ones that take a longer time to make the coffee.
  - To carry on using a stove-top coffee maker, we recommend using a larger model covering more of the hotplate (perhaps only making a half of the amount each time), and/or getting a different model.
  - If you however wish to use the existing coffee maker, the Stove Guard alarm can be reset when it triggers during making coffee (low installations only). This does not cause changes in the Heat Sensor sensitivity (coffee maker triggers the non-learning maximum temperature alarm).

### 3. Alarm did not trigger in a hazardous situation

#### 3.1. The Stove Guard alarm did not trigger in a hazardous situation

- It is possible that the temperature in the situation was not yet high enough to be identified as a risk situation. The Heat Sensor needs to take different cooking scenarios into account, including frying at high temperatures, and not trigger too easily. Hence, the alarm is triggered only when a certain temperature (or rate of increase) is reached, still long before the ignition of a fire. However, it is important to double check the Stove Guard operation with the following procedures (see the next points).
- Check that the Intelligent Heat Sensor is installed to a correct position by double checking the instructions mentioned in the installation instructions sheet (also available online at sonasafety.com).
- If the Sensor is installed correctly, turn on a hotplate and do a test alarm by pressing the Sensor cover until the Sensor emits a beep. Check that the Control Unit turns the cooker off. If the test alarm does not succeed, contact the product retailer.
- For low installations (lower than 90 cm (35.5") above the cooker top), it is possible to change the Sensor's sensitivity so that it reacts earlier (increase by one or two levels, see chapter 5.1 in this manual).

### 4. The cooker does not turn on

- 4.1. I cannot turn the cooker on and the Control Unit is emitting a buzzing sound every 5 seconds / I cannot reset the Heat Sensor alarm.
  - The cooker has been locked due to a temporary error in the Stove Guard or several concurrent maximum temperature alarms. Unlock the cooker by turning the cooker electricity off for 15 seconds using the isolator switch.
- 4.2. I cannot turn the cooker on, and no signal sounds from the Stove Guard
  - The Sensor has been removed from its mounting plate or it is not placed on it correctly. The LED on the side of the Heat Sensor should face towards the user (see image below). Check that the Sensor fits tightly on the mounting plate with no gaps.
  - If the Sensor is placed on the mounting plate correctly, the Control Unit overheating protection has turned the Control Unit and the cooker off. This has likely happened due to incorrect installation location that becomes apparent when the cooker is used on a high power setting. The cooker can be turned back on by turning the electricity off for a moment using the isolator switch. If the overheating protection turns the cooker off again, change the Control Unit installation location to a cooler one or to one that has better ventilation.



## 5. Control Unit error signals

- 5.1. The fault diagnosis alarm (Control Unit: a short and a long buzzing sound, alternating at 5 second intervals) did not reset by pressing the Heat Sensor cover once.
  - The fault diagnosis alarm can be triggered by the Heat Sensor not being on its mounting plate, or it being placed the wrong way round. In modes 2, 3A and 3B (optional features activated), the fault diagnosis alarm will also trigger if collected dirt or fat on the Heat Sensor covers its sensors. The fault diagnosis alarm can also tell about a problem in the radio connection or in the functioning of some part of the system.
  - Reset the alarm by turning the electricity off for 15 seconds using the isolator switch.
  - Ensure that the Heat Sensor fits tightly on its mounting plate with no gaps, and that it is placed the right way round (see question 4.2, first point). Clean the Heat Sensor by wiping it with a cloth dampened with a mixture of household detergent and water. Only use a cloth that does not leave fibres.
  - If the fault diagnosis turns the cooker off again, contact the product retailer. A cooker that is constantly turned off by the fault diagnosis, can only be used for 5 minutes at a time, by switching the electricity off for 15 seconds in the above mentioned way (EN standard requirement).

#### 5.2. The Control Unit emits a buzzing sound every hour or half hour

- The Stove Guard is detecting an error in cooker identification (modes 2, 3a and 3b). Repeat the setup procedure and check the Control Unit mode in the following manner;
- 1. Turn the electricity off for 15 seconds using the isolator switch.
- **2.** The Control Unit confirms its mode with buzzing sounds as the electricity is reconnected. Compare the signals to the table in chapter 5.6. If the Control Unit's setting was not correct carry out the mode setup again, go to chapter 3.2.
- **3.** Within one minute of the last signal, press the Intelligent Heat Sensor cover until you hear a beep. The Sensor will emit an alarm and the Control Unit turns the cooker off. Reset the alarm by pressing the Sensor cover once.
- **4.** For the next 15 minutes, do not turn the cooker on as the Control Unit identifies and adjusts to its installation environment.

# 6. Optional features operation (Safety Lock, sound detection, Intelligent Timer)

- 6.1. The Control Unit did not identify the alarm signal of the carbon monoxide/ smoke alarm
  - Note that when CO alarms are tested, their sounds are not always the same as their main alarm sound, and thus may not be detected by the Stove Guard. Refer to the manufacturer's manual as to how to trigger an actual alarm for testing.
  - Clean the alarm with the soft brush attachment of a vacuum cleaner.
  - Change the batteries in the alarm if necessary.
  - Check that the alarm is not located too far from the Control Unit. The alarms should be located at a maximum distance of 5 metres.
  - Adjust the signal recognition frequency by turning the trimmer on the Control Unit using a screwdriver (frequency adjustment, see the image below): turn the trimmer first approximately 0.5mm to the right, then do a test alarm with the CO/ smoke alarm. If the Control Unit does not react to the alarm signal, then turn the trimmer 0.5mm to the left counting from the original position and repeat the test alarm. If the Control Unit does not identify the signal, then move the trimmer this time 1 mm to the right. Keep repeating test alarms and moving the trimmer with an ever expanding movement, moving from right to left until the Control Unit identifies the signal.



Frequency adjustment

# 6.2. The Control Unit responds to other sounds e.g. a telephone ringing or noise from a television

- Change the telephone's ring tone or turn down the volume on the television. If the signal that causes the false alarm cannot be disabled, adjust the signal recognition frequency by turning the trimmer on the Control Unit using a screwdriver (frequency adjustment, see image above): turn the trimmer first approximately 0.5mm to the right, then see if the sound still triggers a false alarm. If a false alarm is still triggered, then turn the trimmer 0.5mm to the left counting from the original position and try again. If the false alarm is still triggered, move the trimmer this time 1 mm to the right. Keep repeating and moving the trimmer with an ever expanding movement, moving from right to left until no false alarms are triggered. When the correct position is found, then make sure that the Stove Guard still responds to the carbon monoxide/smoke detector alarm signal by re-testing sound detection as advised in chapter 3.1 (point 6).
- Alternatively, sound detection can be disabled, see chapter 3.1.

#### 6.3. The Safety Lock did not activate within 20 minutes

- Check the Control Unit mode as advised in chapter 5.6. If the Safety Lock was not activated, set the Control Unit mode again, go to chapter 3.2.
- 6.4. The Intelligent Timer did not cut off the electricity supply in 3 hours
  - Check that the Intelligent Timer is activated (mode 2, 3a or 3b) by checking the Control Unit mode (see chapter 5.5)
  - The standard Intelligent Timer, activated in mode 2, does not cut the electricity off if the hotplate is on a low power setting. The Intelligent Timer+, available for cookers with mechanical knobs only (modes 3a and 3b), also reacts when a hotplate is left on at low power setting.

# 7. Stove Guard turning the cooker off when not necessary / odd operation of the Stove Guard

- 7.1. The cooker lights shut down for a couple of seconds / the Control Unit makes noises when I am using the cooker
  - When the Control Unit is set in mode 3a or 3b, it performs a check every 15 minutes to see if the cooker is still being used. This is a normal function of the Stove Guard.
- 7.2. The Stove Guard turned the cooker off when I was using the oven.
  - On some cases when a convection oven is used on high heat setting (modes 2 or 3a/3b), the Stove Guard fails to identify that the oven is being used, hence turning the cooker off. The cooker shutdown can be prevented by pressing the Intelligent Heat Sensor cover once when starting to use the oven (just before or after), or when the Stove Guard starts signalling (a short and a long buzzing sound, alternating at 5 second intervals) before the cooker shutdown.
  - Alternatively, the Stove Guard can be set to mode 1. To change to mode 1, return the Stove Guard to its factory settings, see chapter 5.3.
- 7.3. The Stove Guard turns the cooker off and the Control Unit starts to signal even though the cooker is not in use / The Stove Guard turns the cooker off every 15 minutes when using the cooker
  - There has been disruption in the process of the Control Unit adjusting to the cooker (only in modes 2, 3a and 3b). Initiate the process again by carrying out the 'finishing off' procedure, described at the end of chapter 3.2.
- 7.4. The Control Unit is not acting as described in the user manual or you are not certain whether its settings are correct
  - Return the Stove Guard to its factory settings, see chapter 5.3.

# 5. SETTINGS

### 5.1. Manual setting of the Heat Sensor sensitivity level

### The sensitivity level can be manually set to levels between 1 and 10. (Afterwards it can automatically adjust the sensitivity and move up to level 16)

Levels 3 – 10 are reserved for low installations (lower than 90 cm above the cooker top)

Levels 1 and 2 are reserved for high installations (higher than 90 cm above the cooker top)

### NOTE The maximum level to manually set the Heat Sensor is 10.

### First check the current sensitivity level as instructed below.

### 1. Check the current sensitivity level

- Press the Intelligent Heat Sensor cover for about five seconds, until you hear a beep. Release and immediately press again, hold until you hear a further beep.
- After a pause, the Intelligent Heat Sensor confirms its sensitivity level with beeps (e.g. 2 beeps = level 2).

## 2. Set the new sensitivity level

#### To **increase** sensitivity, change the level a step **downwards** (eg. from 5 to 4) To **decrease** sensitivity, change the level a step **upwards** (eg. from 5 to 6)

- 1. Detach the Intelligent Heat Sensor. (Wait until the Sensor emits four beeps and the cooker is turned off.)
- 2. Put the battery disconnection piece into the space on the underside of the Heat Sensor (see image 1 on page 21). Hold the Sensor in your hand and press the disconnection piece and the cover towards each other, hold for about 5 seconds. *If you have lost the disconnection piece, you can alternatively use a screwdriver, see image 2 on page 21*.
- **3.** Release the hold (the Sensor emits a beep) and remove the battery disconnection piece. Within 20 seconds, first press the cover once with a short press, then press and hold the cover down for about 5 seconds, until you hear a beep. Release and immediately press and hold again, until you hear a further beep, then release the hold.

- **4.** Within 20 seconds, start pressing the cover as many times as is the sensitivity level you want to adjust the Sensor to, with short presses. Wait for the green LED to go off between the presses.
- **5.** The Intelligent Heat Sensor now confirms its sensitivity level with beeps, given in two lots see table below. (Afterwards the Sensor emits 3 + 7 beeps.) *If the level is not correct carry out the procedure again, starting from point 1.*

6. Return the Heat Sensor to its place and press its cover once

Save the battery disconnection piece for possible later use.

Beeps	Sensitivity level
2 + 2 (+ 3 + 7)	2
3 + 3 (+ 3 + 7)	3
4 + 4 (+ 3 + 7)	4
10 + 10 (+ 3 + 7)	10

### 5.2. Pairing of devices

(The Heat Sensor should be placed on its mounting plate.)

- 1. Turn off cooker electricity for 15 seconds using the isolator switch.
- 2. Turn the electricity on for 5 seconds, then turn off again for 15 seconds.
- **3.** Turn the electricity back on and wait for 20 seconds so that the Control Unit emits a buzzing sound and after a moment another sound/sounds. Then press the Sensor cover until the Sensor emits a beep. The Control Unit turns the cooker off and the Sensor emits a test alarm. Return the power to the cooker by pressing the Sensor cover once.

### 5.3. Return to factory settings

# This procedure returns the Intelligent Heat Sensor to sensitivity level 5, and the Control Unit to mode 1 (default features).

- Detach the Intelligent Heat Sensor. (Wait until the Sensor emits four beeps and the cooker is turned off.)
- 2. Put the battery disconnection piece into the space on the underside of the Sensor (see image 1). Hold the Sensor in your hand and press the disconnection piece and the cover towards each other, hold for about 5 seconds.
- **3.** Release the hold (the Sensor emits a beep). Remove the battery disconnection piece and save it for possible later use. Press the cover once.
- **4.** Press the Sensor cover and hold it down until you have heard three separate beeps. *The Sensor will emit a test alarm to signify that the factory settings have been restored.*
- **5.** Return the Heat Sensor to its place and press its cover once.

If you have lost the battery disconnection piece, you can alternatively use a screwdriver to carefully press the button on the bottom surface of the Sensor (see image 2).



Image 1



Image 2

## 5.4. Silent alarm

The Heat Sensor alarm signal can be turned off for users that find it disturbing.

For low installations (Heat Sensor installed lower than 35.5" (90 cm) above the cooker top): Since the user will not notice the Heat Sensor pre-alarm signal and therefore will not be able to use the learning sensitivity feature, it is recommended to decrease Heat Sensor's sensitivity by one level, see chapter 5.1.

#### Procedure:

Open the cover (see 'Opening and closing the Intelligent Heat Sensor cover', below). Turn the DIP switch 2 to 'off' position (see image 3 – the image shows the switch in 'on' position). Place the cover back according to instructions.



### Opening and closing the Intelligent Heat Sensor cover

• Use the tip of a screwdriver to carefully detach the cover, one end at a time (image 4).



### 5.5. Checking the Control Unit mode

The Control Unit mode can be checked by turning the electricity off for 15 seconds using the isolator switch. The Control Unit will then emit buzzing sounds that let you know about its mode setting.

See mode descriptions from chapter 2.3.

⊙ – 20 seconds break – ⊙	Mode 1
	Mode 2
$\odot$ – 20 seconds break – $\odot$ – $\odot$ – $\odot$	Mode 3a
● - ● - 20 seconds break - ● - ● - ●	Mode 3b

## 6. LOW BATTERY ALARM

The Intelligent Heat Sensor is powered by solar panels and batteries. The working life of the Sensor is on average 10 years, based on the number of alarms. The batteries are fixed and cannot be changed.

The low battery alarm starts for at least 1 – 2 months (depending on the amount of light) before the batteries run out. It is however recommended to immediately change the Intelligent Heat Sensor, since **if the batteries run out, the cooker can only be used for 5 minutes at a time, until a new Heat Sensor is installed (EN standard requirement)**.

The battery alarm can be postponed for 12 hours by pressing the Heat Sensor cover once.

### If the Intelligent Heat Sensor batteries have run out

The cooker is turned off. To activate 5 minute cooking time, and to reset the Control Unit battery signal (a buzzing sound once a minute), turn the electricity off for 15 seconds using the isolator switch.

When the Sensor is at the end of its working life, please take care to recycle the old Sensor appropriately, see the next chapter.

## 7. DISPOSAL

# Information on Disposal for Users of Waste Electrical & Electronic Equipment (private households)

EU Directive 2002/96/EC for Waste Electrical and Electronic Equipment recycling (WEEE)



This symbol on the Stove Guard product and accompanying documents indicates that this product should not be mixed with general household waste. For proper treatment, recovery and recycling, please take this product(s) to designated collection points where it will be accepted free of charge. Alternatively, the product can be returned to your local retailer upon purchase of an equivalent new product. Disposing of this product correctly will help save valuable resources and prevent any potential negative effects on human health and the environment, which could otherwise arise from inappropriate waste handling.

## 8. DECLARATION OF CONFORMITY

# We declare under our sole responsibility that this product is in conformity with the

- Low Voltage Directive 2014/35/EU
- EMC Directive 2004/108/EC
- R&TTE Directive 1999/5/EC
- Restriction of Hazardous Substances (RoHS) Directive 2011/65/EU

# and the following harmonised standards and technical specifications have been applied:

- Devices for fire prevention for hobs (cooktops) EN 50615:2015 (Cat. B)\*
- EN 60730-1:2011
- Appliances requirements EN 60335-2-31:2003 + A1:2006 + A2:2009, Clause 30
- Electromagnetic Compatibility Radio Spectrum Matters (ERM) EN 300 220-1, EN 300 220-2 v2.4.2
- Electromagnetic Compatibility and Radio Spectrum Matters (ERM) EN 301 489-3 V1.6.1 (2013) and EN 301 489-1 V1.9.2 (2011)
- RoHS EN 50581:2012

\*EN 50615:2015 European Standard for Stove Guards, approved on 5 Jan 2015.

Tested by an independent, accredited test laboratory (VTT Expert Services Finland).

Full title of the standard:

Household and similar electrical appliances - Safety - Particular requirements for devices for fire prevention and suppression for electric hobs (cooktops)

Technical Director Matti Myllymäki

## 9. WARRANTY

This product has a 5 year manufacturer's warranty that covers defects in material or workmanship, starting from the date of purchase. This warranty does not affect your legal rights. The warranty covers use of the product in normal conditions in private households and shared housing. The warranty is limited to the replacement or repair of faulty components. The warranty includes batteries in normal private household use.

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

In case of a warranty claim, please contact the vendor for instructions. Only authorised returns with a full description of the fault are accepted. After the warranty period, repairs may be charged and are not always possible.

Warranty claims do not extend the original warranty period and the warranty of the replacement parts expires with the warranty of the product. Unless there is a statutory obligation, the manufacturer is not responsible for further claims, including personal or material damages, arising from the use of the product or from non-functioning or mis-functioning of the product.

## **10. TECHNICAL SPECIFICATIONS**

CE-certified, Casing IP20, indoor use only

Patent FI 117526, FI 117878, FI125053, patent pending

#### Control Unit SGC510-2 or SGC500-3

- 1-3 phase cookers: SGC500-3 230/400VAC 3x16A/3X10A, star or delta connection, with or without N
- 1-2 phase cookers: SGC510-2 230VAC, 1 – 2 -phase cookers, star connection, 1 x 32A or 2 x 16A

(also 3-phase cookers if 3-phase is connected past Control Unit)

- Power consumption < 1W</li>
- Overload protection

### Intelligent Heat Sensor SGS510

- Wireless 433 MHz/10mW RF, X10
- Alarm transfer with FireSafety
- Socket SSC100
- Audible alarm max. 80 dB (1 m)
- Solar powered with a battery back-up. Working life approx. 10 years (a significant number of alarms may reduce battery life).

#### Features

- Cooker electricity supply cut-off in hazardous temperatures (self-learning maximum temperature and rate of temperature increase) (patented)
- Sensor Dislocation Alarm
- · Fault diagnosis (patented)
- · Sensor dirt and grease detection (patented)
- Intelligent Timer (patented)
- Intelligent Timer+ (low-heat detection) (patented)
- Cooker knob Safety Lock
- Cooker 'emergency use' in a fault situation 5 min
- 16 learning sensitivity levels (adjustable) (patented)

- · Pre-alarm signal prior to cutting the power
- Manual alarm reset
- Audible alarm signal min. 65dB(A), max. 80dB(A) (1 m)
- Silent alarm
- Alarm light
- Sensing distance (from the cooker top) 17.5" - 47" (45 - 120 cm) hood installation, 59" - 79" (150 - 200 cm) ceiling installation, 31.5" - 47" (50 - 80 cm) wall installation
- · Alarm transfer to Telecare
- · Extractor fan shutdown in alarm
- System modifications for special user groups

### Alarm output:



The alarm output is a 3.5 mm 4-pin jack found on the Control Unit. The alarm output is potential free and normally open (opto). It closes for one second when the Control Unit cuts the cooker's electricity supply.

If the alarm output does not work properly, change the polarity of the cable connecting to the alarm output.



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SGK510-ReferenceManual-UK-SONA-revE-ver2

