

User Manual  
***FireAngel***<sup>®</sup>

**THERMOPTEK**<sup>™</sup>

**10 YEAR LIFE**  
**SMOKE ALARM**  
**ST-622**  
WITH LOW BATTERY  
WARNING SILENCE



0086  
EN 14604:2005  
Smoke alarm devices  
DOP: SADOPST-622-01



BS EN 14604: 2005  
Licence No: KM557789

GN2173R5

ST-622



A Sprue Brand

**Sprue Safety Products Ltd.**

Vanguard Centre, Coventry CV4 7EZ UK

Technical Support: **0800 141 2561** / EIRE dial **1-800 523171**

Email: **technicalsupport@sprue.com**

Web: **www.sprue.com**



# CONTENTS

---

INTRODUCTION . . . . .	4	ALARM SMART SILENCE™ . . . .	9
AUTOMATIC POWER ENGAGE .	4	LOW BATTERY WARNING	
SENSOR TECHNOLOGY . . . . .	4	SILENCE . . . . .	10
POSITIONING . . . . .	4	MAINTENANCE . . . . .	11
HOW TO INSTALL YOUR		TROUBLESHOOTING . . . . .	12
SMOKE ALARM . . . . .	6	DISPOSAL . . . . .	13
OPERATION . . . . .	8	WARRANTY . . . . .	13
ALARM TEST . . . . .	8		

---

**NOTE:** This user manual is also available in large text and other formats. Please call **0800 141 2561** for further information.

# INTRODUCTION

---

The ST-622 multi-criteria high performance detector is the ultimate alternative to traditional alarms. Groundbreaking Thermoptek technology combines the very latest in optical sensing with thermal enhancement, providing faster response to both fire types eliminating the need for ionisation sources which can be harmful to the environment. In addition, this smoke alarm allows the low battery warning chirp to be silenced until it is convenient to replace the alarm (recommended within no more than 7 days).

**IMPORTANT:** This user manual contains important information regarding the operation of your smoke alarm. Ensure you read this user manual fully before installing and operating the alarm. If you are installing this smoke alarm for use by others, you must leave this manual with the end user.

## AUTOMATIC POWER ENGAGE

---

Your 10 year life smoke alarm is powered by an internal lithium power pack. To avoid unnecessary use of the power pack prior to installation, and to ease disposal when the alarm reaches the end of its life, the alarm is supplied with the power pack in a deactivated state. The power pack on this alarm is automatically enabled when the alarm is fully locked on to the base plate.

**IMPORTANT:** Your alarm will not work until it is correctly fitted to the base plate.

## THERMOPTEK TECHNOLOGY

---

Thermoptek alarms are “toast-proof” meaning they can be positioned in area close to kitchens that may be affected by cooking fumes. Heat alarms should be used in kitchens where required.

This combines an optical sensing chamber with thermal enhancement. The alarm is effective at detecting slow burning fires, and constant monitoring of temperature changes enables the sensitivity of the alarm to be instantly increased thereby quickening the typical response time to fast flaming fires significantly.

## POSITIONING

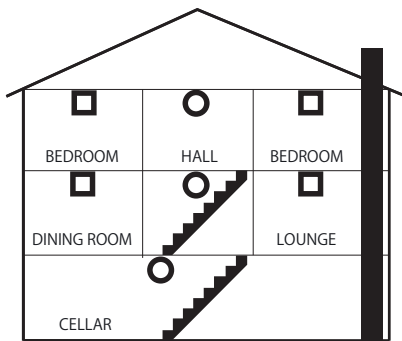
---

**WARNING:** Your smoke alarm can be installed into a new build property as additional protection to an existing smoke detection system only. It cannot be used as a substitute for a hard wired system as required in new build properties. In this type of property the building regulations require alarms to be interlinked. You can obtain further information from your local fire service or building control department at your local council offices. These sources generally provide advice on new builds or projects that require planning permission.



Your smoke alarm typically meets the minimum requirements for family living units in existing buildings, as long as at least one unit is installed on each floor/level of your property.

In order to achieve the earliest fire warning, we recommend that a smoke alarm is fitted in all rooms where the temperature is normally between 4°C (40°F) and 38°C (100°F). Check the section on 'Positioning' to ensure that the smoke alarm is to be correctly positioned for the particular dwelling into which it is intended to be installed.

**WARNING:** The alarm positions shown are based on typical homes. Construction and layout of individual dwellings will vary, so this should be regarded only as a guide. Check with your local fire station for further guidance.



## EXISTING HOMES

-  MINIMUM RECOMMENDATIONS
-  RECOMMENDED FOR ADDITIONAL PROTECTION

**NOTE:** Kitchens should be covered by a self contained heat detector.

### **Multi-family or mixed occupant residence (Tenancy building, student accommodation)**

Your smoke alarm can also be used in individual flats and bedsits, providing the same conditions are met as for a single-family residence. However, there must already be a primary fire detection system that meets regulatory requirements for common areas such as lobbies and hallways.

## **Institutions and Hotels**

This includes motels, hospitals, day care facilities, long-term health care facilities, boarding houses and dormitories. Your smoke alarm can be used in individual sleeping/resident rooms, providing the same conditions are met as for a single-family residence. However, there must already be a primary fire detection system that meets regulatory requirements for common areas such as lobbies and hallways. Use of this smoke alarm in common areas may not provide sufficient fire warning to residents or meet regulatory requirements. This smoke alarm is designed to operate as a standalone smoke alarm.

**WARNING:** This smoke alarm will not communicate with other smoke alarms or fire alarm systems. It is not intended as a substitute for a complete alarm system.

## **Mobile Homes and Caravans**

This smoke alarm is suitable for use in mobile homes and caravans.

## **Commercial and Industrial Premises**

This smoke alarm is not intended for any non-residential, commercial or industrial application, nor for any other purpose than described above.

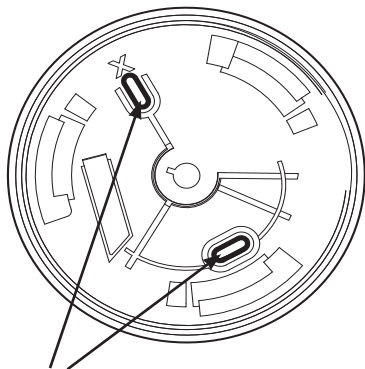
# **HOW TO INSTALL YOUR SMOKE ALARM**

**IMPORTANT:** Make sure you have read and understood this manual before installing your smoke alarm.

## **1 Preparation**

The base plate should be attached to the ceiling or wall.

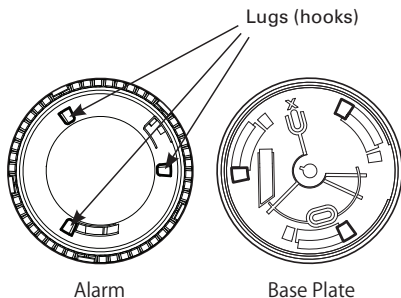
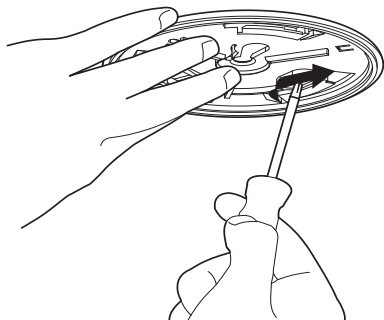
Break out the tabs from the base plate. Use the fixing slots on the base plate as a guide when marking the position of the drill holes. With an appropriately sized drill, drill the holes and insert the plastic fixing anchors supplied (if needed).



Base plate tabs

## 2 Install Base Plate

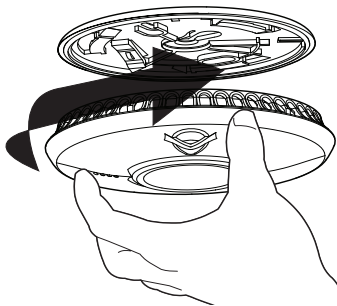
Fit the base plate to the ceiling or wall using the screws provided.



When used with the base plate, the alarm can be attached in any orientation, simply line up the lugs (hooks) with the holes at the end of the slots then twist the alarm clockwise until the alarm stops, make sure the alarm is twisted on fully.

## 3 Fit Your FireAngel Smoke Alarm

The alarm has a mechanism on the back that activates the alarm when it is correctly connected to the base plate. There are three lugs (hooks) on the back of the alarm that slide in to three slots on the base plate.



Once the smoke alarm has been fitted onto the base plate correctly, the internal power pack will activate. The red LED on the front of the alarm should now flash once every 40 seconds to show that it is active.

#### 4 Test Your Smoke Alarm

After fitting the alarm to the base plate, wait for 5 seconds for the alarm to settle then test the alarm. See 'Alarm Test'.

## OPERATION

#### Normal Condition

The red LED on the front should flash every 40 seconds to show that the alarm is active.

#### Low Power Pack Condition

**IMPORTANT:** Your smoke alarm requires the power pack to have sufficient capacity of power to operate correctly.

Should your smoke alarm enter a low power pack condition, the unit will emit an audible 'chirp' once every 40 seconds. When this occurs, we recommend you replace the alarm immediately. Your smoke alarm will continue to warn of this low power pack condition for at least 7 days, however, failure to change the alarm after this time would mean your smoke alarm may have insufficient power to alert you in a real fire situation. When the alarm is removed from the base plate the power pack will automatically deactivate and the

low power warning chirp should stop, allowing you to dispose of the alarm.

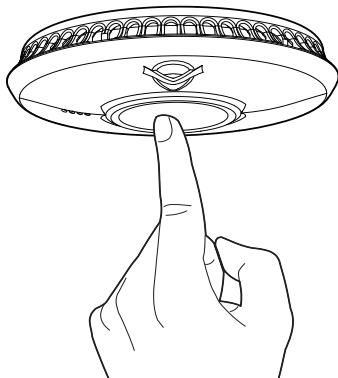
#### Low Battery Warning Silence

This feature can temporarily silence the low battery chirp for 8 hours which is particularly useful if the warning begins during the night. This feature may be repeated up to 10 times, but is not a substitute for replacing the smoke alarm.

## ALARM TEST

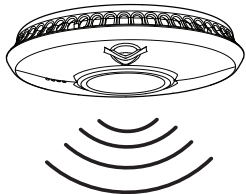
The alarm must be properly attached to the base plate before it can be tested.

- a Press the test button in the centre and release.

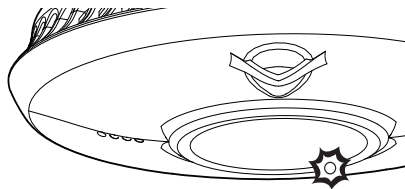




- b** The unit will give an audible alarm consisting of 2 cycles of 3 loud beeps, then stop automatically.



- c** The red LED on your alarm will flash rapidly during the audible signal.



**NOTE:** The test button accurately tests the alarm's smoke sensing circuit, there is no need to test your alarm with smoke. If your smoke alarm fails to give an audible test signal, please refer immediately to the trouble shooting guide at the end of this manual.

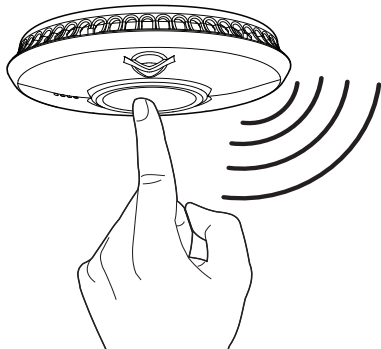
**WARNING:** You should test your smoke alarm every week.

## ALARM SMART SILENCE™

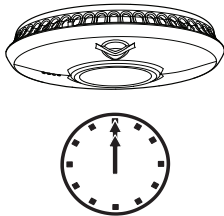
**DANGER:** If your smoke alarm emits the full alarm signal and you are not testing the unit, the smoke alarm is warning you of a potentially dangerous situation that requires your immediate attention. Only use the alarm silence function after making sure that there is no ongoing fire emergency situation. Do not block the vents on the alarm or disable the smoke alarm in any way, as this will remove your protection. Smoke alarms can sometimes react to cooking fumes or other non emergency situations. Your smoke alarm features "Smart Silence" technology. In the event of a known false alarm your smoke alarm can be temporarily silenced by pressing the central test button. Your alarm will automatically return to full sensitivity within 10 minutes.

**NOTE:** If the level of smoke reaching the alarm is very high the alarm silence will be overridden and the alarm will continue to sound.

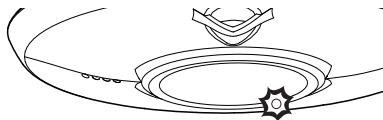
**a** Press and release the silence button, the alarm sound will shortly stop.



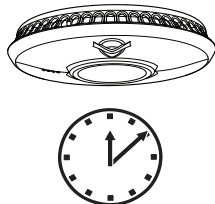
- b** Your alarm will silence and enter into a reduced sensitivity reset cycle for approximately 10 minutes.



- c** During the reduced sensitivity reset cycle, the red LED on your alarm will continue to flash more rapidly than normal, approximately once every second.



- d** Your alarm will automatically return to full sensitivity on completion of the reset cycle and the red LED will revert to flashing once every 40 seconds.



**DANGER:** Never ignore any alarm. Ignoring the alarm may result in injury or death. If your smoke alarm activates and alarms and you are not absolutely certain of the source of the smoke, get everyone out of the house immediately.

## LOW BATTERY WARNING SILENCE

Low battery warnings often start at night or when it may be inconvenient to replace your alarm. You can silence the audible chirp for a period of 8 hours by pressing the test button. Your smoke alarm will

still detect smoke during this time of low battery warning silence. However it is recommended that you replace your alarm immediately, and certainly within 7 days, as your alarm may then have insufficient power to warn you of a real fire situation after this time.

**WARNING:** Your smoke alarm cannot be silenced if the chirp is indicating a fault. In this instance, the unit should be replaced immediately to ensure protection in the event of a fire.

## MAINTENANCE

---

Your smoke alarm has been designed to be as maintenance-free as possible, however there are several things you must do to keep it working properly.

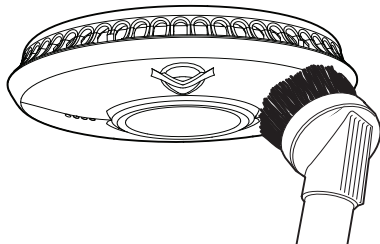
**CAUTION:** Your smoke alarm is a sealed electrical device and no attempt should be made to open the case. Attempting to open the case will invalidate your Warranty.

### Testing

Test your smoke alarm once every week see 'Alarm Test'. Any test failures should be reported to the Technical Support Team.

### Cleaning

As a minimum your smoke alarm should be cleaned once every 3 months using your vacuum cleaner fitted with the soft brush attachment.



**WARNING:** Your smoke alarm may false alarm when it is being cleaned using a vacuum cleaner.

**IMPORTANT:** Do not use solvents or cleaners on your smoke alarm, as they may cause damage to the sensor or circuitry. The unit can be wiped with a slightly damp cloth.

**CAUTION:** Do not paint the smoke alarm as this may block the openings and prevent smoke from entering the sensor.

# TROUBLESHOOTING

Problem	Solution
Your smoke alarm does not sound during testing	<ul style="list-style-type: none"> <li>• Make sure alarm has been rotated clockwise as far as it can go and is securely located on base plate (this means the power pack has been activated). If testing immediately after first activating the alarm you should allow a few seconds for the alarm to settle before testing.</li> <li>• Make sure you push the centre of the test button firmly.</li> <li>• If the unit has been silenced and is in low sensitivity mode it may not test. Wait 15 minutes then try again.</li> <li>• If the alarm has been recently fitted and it still fails to self test then contact technical support.</li> </ul>
Your smoke alarm chirps intermittently	<ul style="list-style-type: none"> <li>• Check the location of your smoke alarm.</li> <li>• Check that your smoke alarm is definitely the source of chirping; make sure the noise isn't coming from another alarm (smoke/carbon monoxide/burglar/gas alarm) by process of elimination.</li> </ul>
Your smoke alarm activates when no smoke is visible	<ul style="list-style-type: none"> <li>• Check the location of your smoke alarm (see 'Positioning').</li> <li>• Clean the smoke alarm (see 'Maintenance').</li> </ul>
The low battery warning silence chirp does not silence when the test button is pressed	<ul style="list-style-type: none"> <li>• You can only silence the low battery warning chirp for a maximum of 10 times. Replace your smoke alarm immediately to ensure protection in case of fire.</li> <li>• If the red LED flashes at a separate time from the chirp, a fault is indicated.</li> <li>• If within warranty contact Technical Support. Otherwise replace immediately.</li> </ul>
You experience frequent unwanted alarms	<ul style="list-style-type: none"> <li>• Check the location of your smoke alarm (see 'Positioning').</li> <li>• Clean the smoke alarm (see 'Maintenance').</li> <li>• If the frequent unwanted alarms continue contact technical support for advice.</li> </ul>
<p>If you have any questions, please contact the Technical Support Team between 9am - 5pm Monday – Friday. Telephone: <b>0800 141 2561</b> or e-mail: <b>technicalsupport@fireangel.co.uk</b> You can also visit the support section of our website <b>www.fireangel.co.uk</b></p>	

## DISPOSAL

---

Waste electrical products should not be disposed of with your other household waste. The alarm is ideally suited for disposal within the waste electronic and electrical equipment (WEEE) recycling scheme.

Please recycle where facilities exist. Check with your local authority, retailer or contact our technical support team for recycling/disposal advice as regional variations apply.

Once the alarm is removed from the base plate the internal power pack (battery) will be deactivated and the alarm will stop emitting the low power warning chirp. The unit is now ready for disposal.

**WARNING:** Do not attempt to open.

**WARNING:** Do not burn.

## WARRANTY

---

Sprue Safety Products Ltd warrants to the original purchaser that its enclosed smoke alarm be free from defects in materials and workmanship under normal residential use and service for a period of 10 (ten) years from the date of purchase. Provided product is sent back to Sprue Safety products with proof and date of purchase, Sprue Safety Products Ltd hereby warrants that during the 10 (ten) 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 ST-622 alarm, will last for the remainder of the period of the original warranty in respect of the alarm 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 manual. 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 10 (ten) 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.



