



Signature, Sovereign, Sentry, Sentinel, Staccato Fan-Assisted Radiator

Installation & User Guide

Dear Installer,

The following items should be included in the carton;

- Product complete with pre-wired mains cable
- Mounting Bracket

In the event of items missing or visible damage please contact our After Sales Service on 01245 324560.

We would be most grateful if you would leave this Installation & User Guide and the Guarantee Registration Card with the owner.

Thank you for your co-operation

Steve Russell
Customer Service Manager

Introduction

These heaters are primarily intended for installation directly onto a wall at low level. They must **not** be installed in bathrooms or other high humidity areas. Please contact us on 01245 324900 for details of products suitable for these applications.

The minimum recommended installation height from the floor to the underside of the heater is 100mm. The maximum recommended installation height from the floor to the underside of the heater is 500mm.

A minimum clearance of 75mm is required either side of the heater (except Staccato models) to allow for the insertion or removal of the outer case fixing screws. No side clearance is required for Staccato models.

These heaters are designed for use on standard two-pipe pumped central heating systems with a maximum water temperature of 86°C and a maximum pressure of 6 bar (88lbs/in²). Pipes are 15mm or 22mm depending on model and either pipe may be used as flow or return.

These heaters are classified as a fixed appliance and electrical connection should be via a 3A-fused spur. The fused spur must **not** be directly above the heater but should be accessible after completion of the installation. All heaters must be earthed.

We recommend the use of full-flow isolating valves. The valves should be accessible after completion of the installation.

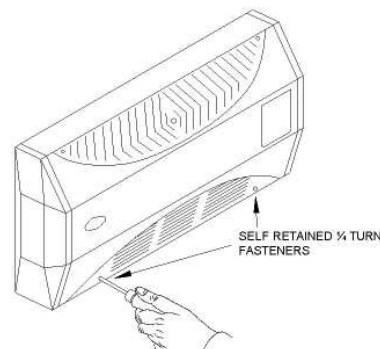
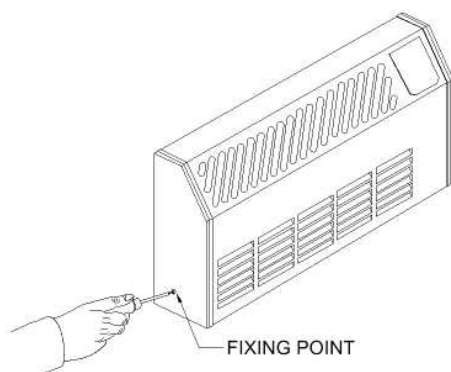
To avoid the possibility of vibration these units must be fitted on a flat even surface.

These heaters are fitted with and controlled by an integral room thermostat. This conforms to Building Regulations Part L (Part J in Scotland). For further details please contact our Technical Support on 01245 324560.

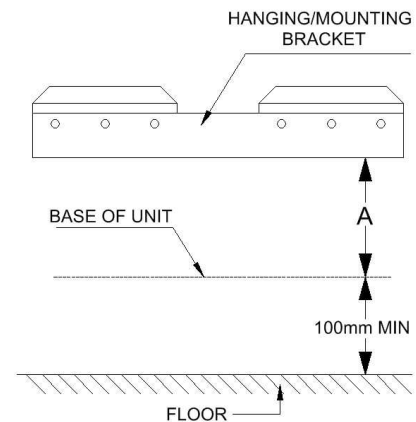
Please note the guarantee may be invalidated if this product is not installed and used in accordance with these instructions.

Installation Guide

1. Release the outer casing by removing the screws on either side of the casing. For Staccato models the screws are accessed through the front of the chassis.



- Secure the mounting bracket to the wall using fixings suitable for the wall type. Ensure the bracket is level and flat to the wall. If necessary use packing to compensate for an uneven wall surface. Minimum recommended installation height is 100mm to the underside of the heater. Maximum recommended installation height is 500mm to the underside of the heater. Hang the heater on the mounting bracket. Locate all four fixing holes; two top and two bottom on either side of unit. Mark the wall through the holes and remove unit from bracket. Drill a suitable sized hole through each mark. Hang the heater onto the bracket and secure with fixings suitable for the wall.



Signature & Sovereign Models

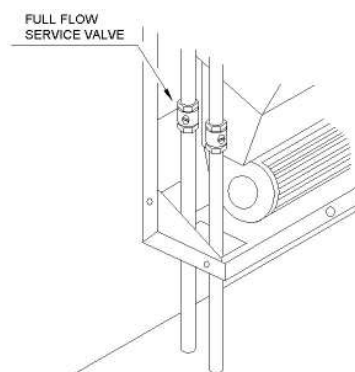
It will be necessary to remove the bleed screw cover-plate situated at the top left hand side of the unit above the supply pipe work. This will enable you to access the top left fixing hole and at a later stage vent the air from the unit.

UNIT TYPE	DIM A
SIG SOV 7,14,21	180mm
SIG SOV 30	365mm
SENTRY SENTINEL	275mm
STACCATO	185mm

Sentry & Sentinel Models

The mounting bracket does not fit central to the unit. The mounting bracket should be fixed 20mm to the right of the centre of the unit.

- Connect the heating system flow and return pipes to the heater pipe work. Do not use soldered fittings to the heater pipe work as the heat generated could damage internal wiring and components. We recommend the use of full flow service valves.

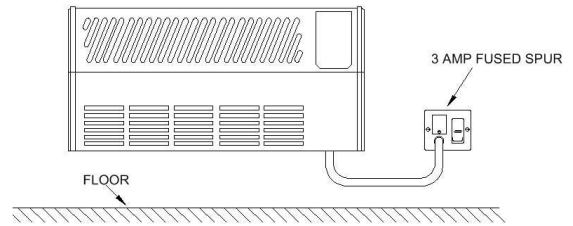


The valves should be accessible after completion of the installation. Check for water leaks. Remove any trapped air from the unit via the built in bleed screw located on the top of the internal supply pipe work.

Signature & Sovereign Models

Refit the cover plate above the bleed screw

4. Isolate the electrical supply and connect the heater electric cable to the fused spur (3 amp). The fused spur must not be directly above the heater and must be accessible after the installation is complete.

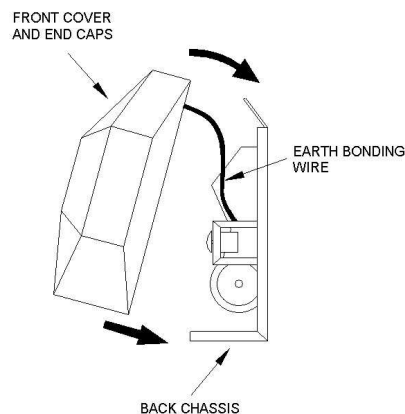


Commissioning

1. Turn on the electrical supply at the fused spur
2. Turn the thermostat control to maximum. For Signature & Sovereign models the heater controls are behind the access panel on the right hand side of the heater.
3. Set the controls to Air Circulation setting - see User Guide.
4. Turn on the central heating system
5. Set the controls to Heating - see User Guide.
6. Balance the central heating system if these heaters are installed on the same circuit as panel radiators
7. If the installation is working correctly remember to reset the thermostat to its normal setting

Installation Continued

5. Attach the earth bonding connector to the outer casing and refit the outer casing to the chassis.



6. Please leave this Installation & User Guide with the user for future reference

Heat Output Performance

Model	Heat Output Δt 60°C		Heat Output Δt 50°C	
	Normal	Boost	Normal	Boost
	kW (Btu/h)	kW (Btu/h)	kW (Btu/h)	kW (Btu/h)
Signature/Sovereign 7	1.3 (4400)	1.8 (6100)	1.1 (3800)	1.4 (4700)
Signature/Sovereign 14	2.7 (9200)	3.6 (12300)	2.1 (7200)	2.9 (9900)
Signature/Sovereign 21	4.1 (14000)	5.4 (18400)	3.2 (10900)	4.3 (14700)
Signature/Sovereign 30	6.0 (20500)	7.9 (27000)	4.8 (16400)	6.3 (21500)
Sentry/Sentinel	2.5 (8500)	3.4 (11600)	2.0 (6800)	2.7 (9200)
Staccato	2.1 (7200)	3.2 (10900)	1.7 (5800)	2.6 (8900)

Δt 60°C assumes a mean water temperature of 80°C and a room temperature of 20°C
 Δt 50°C assumes a mean water temperature of 70°C and a room temperature of 20°C

It is recommended that these models are capable of maintaining the calculated heat loss at **normal** heat output enabling the boost setting to be used for faster heat up.

Fault Finding

1. Fan does not run on any switch setting.
 - a. Check the power supply is switched ON.
 - b. Check fuse in the fused spur.
 - c. Check the wiring connections at the fused spur.

2. No heat output.
 - a. Vent any trapped air from the system (with the system turned OFF).
 - b. Check the central heating is switched ON.
 - c. Ensure the thermostat is calling for heat.
 - d. Balance the central heating system if installed on the same circuit as panel radiators and increase the circulating pump speed if required.
 - e. Increase the boiler water temperature.

In the event of difficulty please contact our technical help-line on 01245 324560. It will be helpful if you do not disconnect the heater from the central heating system.

Smith's Environmental Products Ltd.,
 Blackall Industrial Estate, South Woodham Ferrers, Chelmsford, Essex CM3 5UW
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 E-mail: info@smiths-env.com Web: www.smiths-env.com

In light of our policy of continuous development Smith's Environmental Products Ltd reserve the right to alter specifications without prior notice.



Signature, Sovereign, Sentry, Sentinel, Staccato Fan-Assisted Radiator

User Guide

Dear Customer

We are delighted you have chosen our products and trust you are satisfied with the installation. We would ask you to take a few minutes to read through this User Guide. This will help you gain maximum benefit from your fan-assisted radiator.

As with all our products your heater is covered by a free five-year parts & labour guarantee and we would be grateful if you complete and return the Guarantee Registration Card to us as soon as possible. This will ensure that should you require assistance we can help you quickly and efficiently.

Thank you for your co-operation.

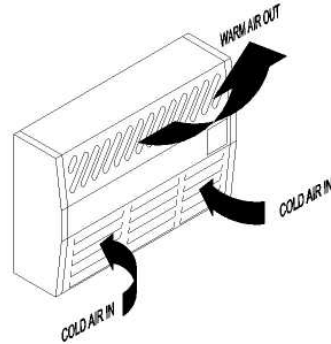
Steve Russell
Customer Service Manager
01245 324900

Your fan-assisted radiator is designed to operate as part of your central heating system in the same way as a panel radiator. Providing you leave the heat output switch in either the normal or boost position it will switch on and off automatically with your central heating system.

How a fan-assisted radiator works

Hot water from your central heating system passes through the heat exchanger transferring its heat to the aluminium fins. Cooler air is drawn in by the fan and heated as it passes over the heat exchanger before being expelled gently back into the room. This not only gives a

more even temperature spread but will heat a room up in less than half the time of a traditional steel panel radiator.

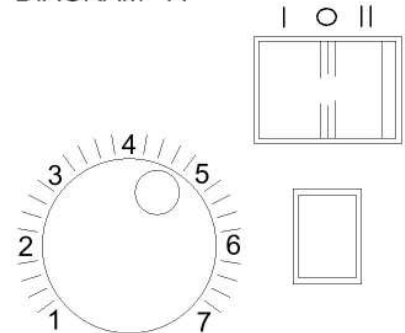


Fan-assisted radiators include an internal thermostat that prevents the fan from operating until the central heating system water passing through the heat exchanger reaches 42°C. This prevents cooler air being circulated at start up.

Heating - Sentry, Sentinel, Signature/Sovereign 7, 14 & 21 models - see diagram A

Ensure your central heating system is **ON**. Set the thermostat control to the desired temperature. For reference a setting midway between 3 and 4 is approximately 20°C (68°F). Ensure the fan-only switch is **OFF** (out). *The position of the fan-only switch may differ dependant on the model.* Set the upper heat-output switch to I (normal). Providing the water temperature in the central heating system is more than 42°C and the thermostat is calling for heat the product will switch on. If you require a faster warm up move the heat output switch to II (boost). Moving the heat-output switch to **O** will turn off the product.

DIAGRAM A



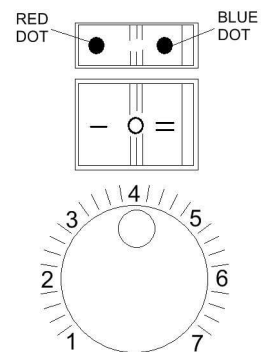
Air Circulation - Sentry, Sentinel, Signature/Sovereign 7, 14 & 21 models - see diagram A

Ensure you central heating is **OFF**. Set the thermostat to maximum (7), the heat-output switch to I or II and push in the fan-only switch. *The position of the fan-only switch may differ dependant on the model.* The product will provide a cooling flow of air.

Heating - Signature 30 & Sovereign 30 - see diagram C

Ensure your central heating system is **ON**. Set the thermostat control to the desired temperature. For reference a setting midway between 3 and 4 is approximately 20°C (68°F). Ensure the upper fan-only switch is set to **RED**. Set the lower heat-output switch to I (normal heat output). Providing the water temperature in the central heating system is more than 42°C and the thermostat is calling for heat the heater will switch on. If you require a faster warm up move the heat output switch to II (boost). Moving the heat output switch to **O** will turn off the heater.

DIAGRAM C

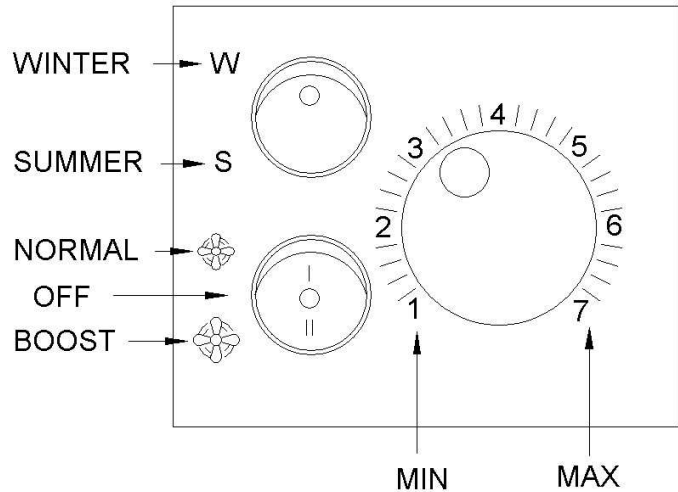


Air Circulation - Signature 30 & Sovereign 30 - see diagram C

Ensure you central heating is **OFF**. Set the thermostat to maximum (7), the heat output switch to I or II and set the fan-only switch to **BLUE**. The product will provide a cooling flow of air.

Heating - Staccato

Ensure your central heating system is **ON**. Set the thermostat control to the desired temperature. For reference a setting midway between 3 and 4 is approximately 20°C (68°F). Set the upper switch to W (winter) and the lower heat output switch to normal. Providing the water temperature in the central heating system is more than 42°C and the thermostat is calling for heat product will switch on. If you require a faster warm up move the heat output switch to boost. Moving the heat output switch to **O** will turn off the product.



Air Circulation

Ensure you central heating is **OFF**. Set the thermostat to maximum (7), the heat output switch to normal or boost and set the Summer / Winter switch to S (Blue) The product will provide a cooling flow of air.

Fault Finding

This heater is covered by a free five-year parts & labour guarantee. In the event of difficulty please contact our After Sales Service on 01245 324560. It will be helpful if you do not disconnect the heater from the central heating system.

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In light of our policy of continuous development Smith's Environmental Products Ltd reserve the right to alter specifications without prior notice.