



AIR SOURCE HEATING SYSTEM OVERVIEW



The heart of your new central heating system is a highly efficient Daikin Altherma air source heat pump. The heat pump heats the water which flows around your radiators and separately heats the hot water when required in your hot water cylinder. The central heating is controlled from the room thermostat which switches the heat pump on and off at preset times, sending warm water through the radiators. Most radiators have thermostats (TRV's) fitted to control the individual room temperatures.



OUTDOOR UNIT



Outside is the heat pump. This extracts heat from the air, even below 0°C and uses this heat to heat the water passing through the radiators and hot water cylinder. The outdoor unit pulls in air from the rear, extracts the heating from the air, and blows the cooled air out the front. This is done automatically, and there is no need to set or adjust it. If the rear of the outdoor unit gets clogged up with leaves or debris, the efficiency of your heating system can be reduced, so should be checked regularly and cleaned with a soft brush. Similarly, don't block the front of the unit up by leaning anything against it.

HYDROBOX

The wall mounted Hydrobox, similar to a conventional boiler in appearance, distributes hot water around the radiators and to the cylinder. It has a controller built in, which has been preset for efficient use.





ROOM THERMOSTAT





The Sunvic thermostat is located in the hall or on the landing. It controls when the house is heated, and to what temperature. Don't overheat your home—turning your thermostat down by just 1°C can cut your fuel bill by 10%. The thermostat should be set between 18°C & 21°C.
(source: Energy Saving Trust).

RAISING THE HOT WATER TEMPERATURE

Storing water at higher temperatures is wasteful, because heat loss from the cylinder will be increased and the heat pump running costs will rise. However, should you find the hot water is not hot enough; it can be increased by pressing   on the controller. Note: We recommend your water be kept at 48°C to minimise running cost and keep noise levels low.



MAXIMISING YOUR ENERGY SAVINGS

To increase the efficiency of the system, your heat pump will vary the temperature of the water through your radiators. The colder it gets outside, the warmer the circulating water. Weather compensation or economy mode should be selected on the Hydrobox controller, the automatic symbol will show in the controller display. If this symbol is not shown, press the button.  



RADIATORS AND TRV'S

The various rooms in the house are heated by radiators. Most are fitted with Thermostatic Radiators Valves (TRV's). These ensure that the room will not become too warm. The higher the number, the warmer the room temperature. Each valve should be set to the temperature you wish.





IF THE PRESSURE DROPS BELOW 1

On the boiler, there is a pressure gauge. The pressure should be about 1 bar. Below the boiler is a filling loop which comprises of a silver flexible pipe, with two levers attached. If the pressure is below the 1 bar, slowly open the valve on the filling loop. You should hear the water moving into the boiler. Keep an eye on the pressure dial and when it reaches 1 bar, turn the valve off. This dial will increase in pressure when the system is heating water so ensure that the central heating part is off and that no hot water is being drawn. Putting too much pressure in the boiler will cause the blow off valve to blow, which will be vented outside.












ADDITIONAL HOT WATER (BOOST FUNCTION)

If you run out of hot water press and hold the button at the bottom right of the controller until you see  &  on the display.

Use of the Boost function will cost more to run.

SETTING THE CLOCK

1. Push and hold the button   until the clock flashes.
2. Adjust the time via  TIMER  
3. Adjust the day via  TEMP  
4. Confirm 

If the domestic hot water is not used for 2 weeks or more, a quantity of hydrogen gas which is highly flammable *may* accumulate in the domestic hot water tank. To dissipate this gas safely, it is recommended that you turn on a hot tap for several minutes at a sink, basin, or bath, (not at a dishwasher, washing machine). During this procedure there must be no smoking, open flame or any electrical appliance operating nearby. It may make a sound of air escaping.

During longer periods of standstill, e.g. During summer with a heating only application, it is very important **NOT TO SWITCH OFF THE POWER SUPPLY** to the unit. Switching off the power supply stops the repetitive movement of the pump to prevent it from seizing. If you do not want your heating on at all, if you are away, turn the thermostat down to 0.

DIAGNOSING PROBLEMS

- If the radiator is too cold check that the radiator TRV is set to a high enough level. A room may become warm enough without the radiator being more than lukewarm.
 - Is the programmable thermostat set too low? Check that the temperature on the programmable thermostat is set high enough to start the heat pump.
 - Is the mains power switched off? Check that the heating switches are switched ON, including the switch located next to the outdoor unit
 - If you hear a 'clicking' sound frequently—try turning the water temperature down
- If you have checked the above, and the system still fails to operate normally, you can manually reset the system by turning off the power, waiting 60 seconds then turning it back on. If this does not work, check whether the system has lost pressure. A small pressure gauge is located in the Hydrobox. This should read about 1 bar. Leaks can occur in pipes or if a radiator has been moved for decorating.
- If the system still does not operate check the display on the Hydrobox controller for a fault code (a number and a letter for example 7H) and contact NDH with the code.