

# HEAT PUMPS – HOW TO RUN THEM EFFECTIVELY

ECO-DESIGN ADVISOR FACTSHEET NO.11

Heat pumps are one of the most efficient types of home heating, but some people find them ineffective or may even incur higher power bills because they don't understand how to use them effectively. Understanding the different settings and how to programme them is crucial. This fact sheet explains how.

## Winter Heating



Independent, personalised advice on how to create a sustainable and healthy home

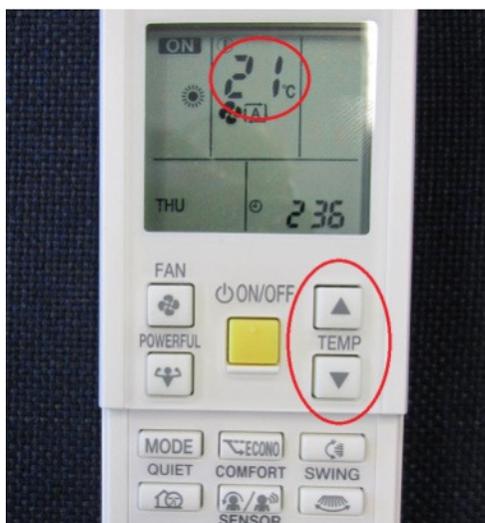
[www.ecodesignadvisor.org.nz](http://www.ecodesignadvisor.org.nz)



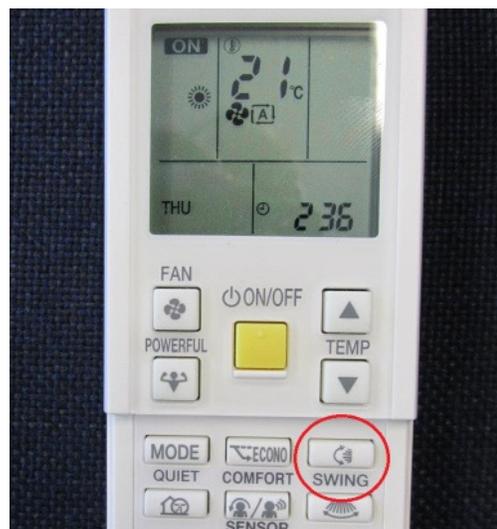
1. Press **MODE** or **MASTER CONTROL** button until you have selected the **Heat (Sun)** setting.



2. Press the **FAN** button until you have selected the **Auto Fan** setting.



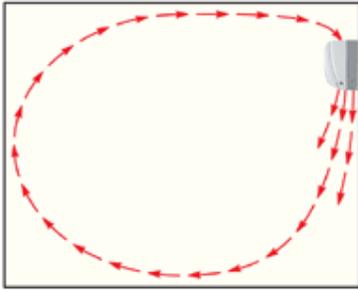
3. Set the temperature between 20°C and 22°C. Setting the temperature higher makes it work harder and it will be less efficient. Running a heat pump at 26°C will use 50% more power than at 21°C. If you are not at home during the day, turn the heat pump off when you go out.



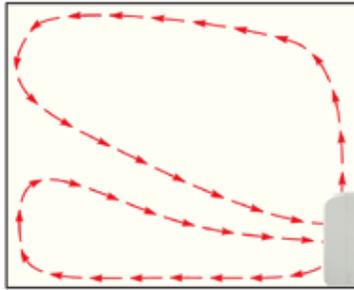
4. Use the **SWING** button to adjust the direction of the air flow down into the room (refer also to next page).

## Heating Cycle

Watch the vertical flap movement; press the **SWING** button to stop the flap at the position of your choice.



High wall mounted heat pump

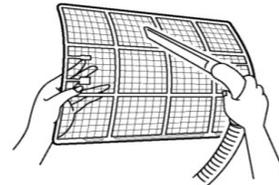
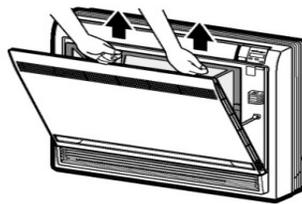
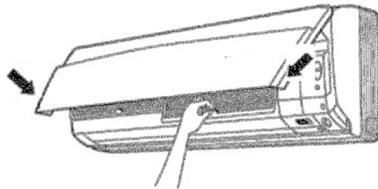


Floor mounted heat pump

For heating, direct the warm air down across the floor where it will rise up, warming the room.  
(If cooling in summer, direct the cold air high across the room, where it will sink down, cooling the room.)

## Maintaining your heat pump

Clean the filters monthly, or every two weeks if using it a lot



## Buying a new Heat Pump

While heat pumps are the most efficient way of using electricity to heat your home, some are much more efficient than others. The most efficient heat pumps produce twice as much heat as the least efficient, using the same amount of electricity. Choosing a highly energy efficient heat pump, instead of a lower efficiency model, can make a big difference to your power bill – the simplest way to do it is look for the ENERGY STAR mark:



An ENERGY STAR qualified heat pump uses up to 30% less energy compared to a non-qualified model. ENERGY STAR heat pumps are tested to perform at the cold winter temperatures we experience in New Zealand. Next time you're shopping for a heat pump choose one with an ENERGY STAR mark for superior energy efficiency. To see a full list of ENERGY STAR qualified heat pumps, visit [www.energywise.govt.nz/heat-pumps](http://www.energywise.govt.nz/heat-pumps)

## Frequently asked questions:

Sometimes cold air comes from the heat pump – what can we do?

- First check the fan setting
- If the fan is on low or quiet setting, you will only get about  $\frac{1}{4}$  of the heat the heat pump is capable of delivering.
- Make sure the **Fan** setting is on "Auto" or "high".
- Check that the **Mode** setting is on the "Heat" setting.
- If the outside temperatures are very low sometimes the heat pump will go into defrost mode.
- Try using the timer to turn on the heat pump in the morning before you get up, or leave the heat pump on 16°C overnight.

How much does it cost to run a heat pump?

- A 6 kW heat pump running for 8 hours a day will add around \$60 to \$70 a month to your power bill.
- That is based on running it in the correct settings.

## More information

For further information, contact your nearest Eco Design Advisor, visit [www.ecodesignadvisor.org.nz](http://www.ecodesignadvisor.org.nz) or view helpful resources at:

- Smarter Homes ([www.smarterhomes.org.nz](http://www.smarterhomes.org.nz))
- BRANZ Level ([www.level.org.nz](http://www.level.org.nz))
- Energy Efficiency and Conservation Authority ([www.eeca.govt.nz](http://www.eeca.govt.nz))