

TOP 10 TIPS

FOR GETTING THE MOST
OUT OF YOUR HEAT PUMP



01 SETTING THE MODE OF OPERATION

Most modern heat pumps have several modes of operation. In addition to the primary modes heat and cool, there is a dry mode which is perfect for dehumidifying indoor air on days when outdoor temperatures are not quite hot enough to use the cooling mode.

Another new mode of operation is called auto which automatically switches between heating and cooling. Auto mode may not work well in your area. It works best when there is a big difference between day and night temperatures.

However, auto mode doesn't work well in some mild climates and may cause your heat pump to switch back and forth between the heating and cooling modes all day long. This can cause big energy bills and make rooms uncomfortable. Instead, try setting the mode of operation to heat (some manufacturers use a "sun" symbol) during the heating season. Switch to the cool mode (some manufacturers use a "snowflake" symbol) when you want air conditioning.

TIP
When you first start the unit, or change the mode of operation, be patient. Give the unit 5-10 minutes to switch modes.

02 UNDERSTANDING THE DEFROST FUNCTION

Depending on which type of modern heat pump you have, you may not even notice the defrost function.

However, for some, the defrost function can be confusing. This is because when outdoor temperatures are below 40 F, the outdoor unit will accumulate frost, but no need to worry because your heat pump is designed to defrost itself automatically. It will occasionally stop producing heat to melt ice from its outdoor surfaces. After a few minutes it will automatically begin making heat again.

What to expect during this defrost mode:

- Indoor fan stops
- Light on the unit may turn on or start blinking
- Water or steam may be seen at the outdoor
- Sounds coming from both indoor and outdoor units, such as "whirring", "clicking", "rushing fluid", etc.
- You may also hear outdoor unit's compressor make more noise than normal (without the fan running)
- Defrost cycle lasts 5-15 minutes, then the unit returns to normal heating operations

Do not be alarmed. Do not interfere with your heat pump's defrost function as that can delay its return to normal heating operations.



HEATING & COOLING MODES:

We recommend that you manually set the mode to either heating or cooling rather than using auto mode.



AUTO MODE:

Works great when there are big differences between day and night temperatures.



DRY MODE:

Perfect for those few times when you want a small amount of cooling on days when it is not very hot outside.

03 CHOOSING THE INDOOR FAN SPEED
USE THE AUTO FAN SETTING

Fan speed can affect comfort and energy savings, so it's recommended to start with the auto fan speed. Most modern heat pumps are controlled by a computer which will pick the best fan speed for overall energy savings.

However, there are times when you may want to manually set the fan speed.

- Setting the fan speed on medium or high may:
 - Increase the ability to heat a room quickly, or
 - Push heat into a wider area
- You may also want to set the fan speed on quiet if noise is ever an issue, i.e. naptime, movie night, etc.



04 SELECTING THE TEMPERATURE SETTING

The controls on most modern heat pumps differ from older wall thermostats, so your new "comfort number" may be higher or lower than what you previously set for your home.

The modern heat pump's computer uses the comfort number to gauge your relative comfort, but it doesn't necessarily represent the actual temperature of the room. All you need to do is find your comfort number, then enjoy the cozy heat or cool air.



TIP
The setting on the controller is not as important as your comfort. Don't worry about the number.

05 AVOID FREQUENT TEMPERTURE ADJUSTMENTS SET IT AND FORGET IT

Modern heat pumps are designed to automatically adjust to changing conditions, so they work best when the temperature settings are left alone. Once you’ve found your comfort number, leave it be. Modern heat pumps use less energy when they maintain the temperature.

If you do want to make adjustments, be patient; the heat pump takes a little time to adjust to new settings. If you prefer to lower the temperature at night or when you leave home, a change of no more than 3 F is recommended.

TIP

If you want your heat pump to heat/cool quickly, we suggest temporarily increasing/ decreasing the temperature setting by 4 F to 6 F and manually increasing the fan speed. Some units have a “powerful” or “turbo” button that does the same thing for a 5-15 minute period.

06 GET TO KNOW YOUR BACKUP HEATING SOURCES

Sometimes, heat pump systems are designed to use secondary heat sources on extremely cold days. Ask your contractor if your system relies solely on the heat pump for heat or if there is a backup heat source. To avoid confusion or misuse, learn what role you have, if any, in operating the secondary heating source.



Backup Heat Source:

☐ Natural Gas Furnace

☐ Natural Gas Boiler

☐ Electric Resistance Heat Strip

☐ Electric Resistance Baseboard Heater

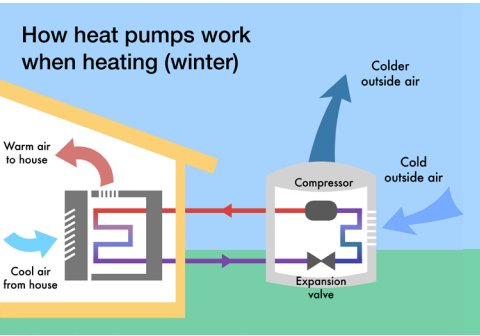
☐ Other _____

07 USING YOUR HEAT PUMP DURING SEVERE WEATHER

In sub-zero temperatures, freezing rain or deep snowfall, you may need to take steps to keep your heat pump running at peak performance. To be prepared for extreme weather, ask your heating and cooling contractor what steps, if any, you need to take. For example, you may need to clear snow away from the outdoor unit.

To maintain comfort during severe weather, try these tips:

- A Temporarily increase the temperature setting of your heat pump.
- B For ductless systems, try reducing the size of the heating area by closing doors to adjacent, unused rooms.
- C Increase use of backup heating sources (if available).

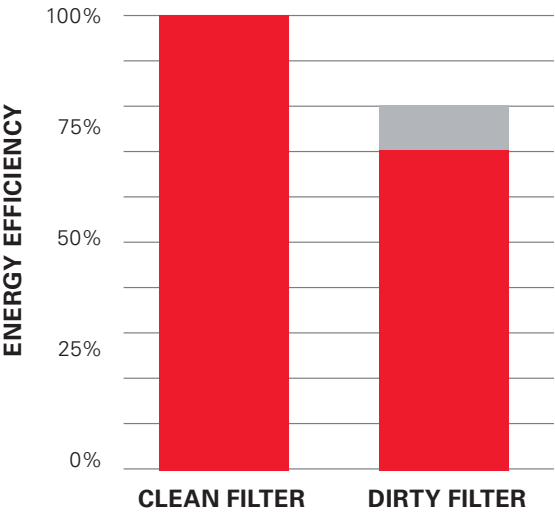


08 CLEAN AND REPLACE INDOOR FILTER REGULARLY

Clean filters allow your heat pump to operate at its full potential. Clogged and dirty filters reduce airflow and limits heating & cooling performance.

Ask your contractor how frequently to clean or replace your filter. Depending on your home and lifestyle, you can expect to clean them anywhere from monthly to twice a year.

Dirty filters can reduce energy efficiency and overall effectiveness of your heat pump 20% to 30%.



09 BE PREPARED FOR NEW SOUNDS ASSOCIATED WITH YOUR HEAT PUMP

Modern heat pumps work differently than furnaces and other heating and cooling technology, so don't be surprised by the new sounds. In addition to the low-level fan sound (both indoor and outdoor units), you may notice changing compressor "frequency" sounds, "clicks" from electronic switches, and fluid noises. **All of these are normal.**

When to be concerned? Contact your contractor if...

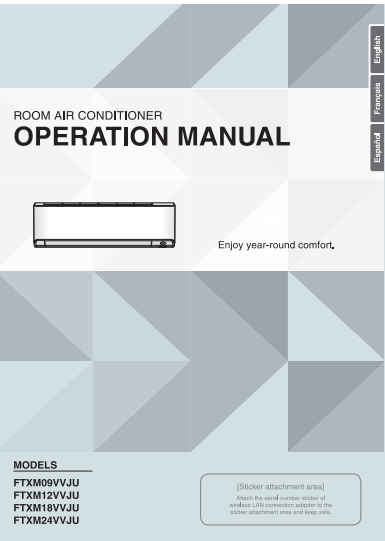
- The indicator lights flash an "error code" for abnormal operation, or
- if a sound is steadily increasing in volume.

After periods of non-use, upon resmuing operation your indoor unit may emit a temporary smell. However, if it persists, contact your contractor as the system may need a deep cleaning.



10 READ YOUR OWNER'S MANUAL

You should familiarize yourself with the owner's manual. It contains complete information about the features, benefits and operation of your heat pump. Every heat pump has specific maintenance and service requirements. This information is important to keep your system running efficiently and reliably for years.



FREQUENTLY ASKED QUESTIONS

My heat pump seems to run all the time. Is that inefficient or bad for it?

No, in fact, inverter-driven heat pumps are built for consistent variable-speed operation to produce both amazing efficiency and improved comfort. When it is running at part-speed, it is more efficient and continues to provide air circulation. More consistent air circulation leads to better filtration (and indoor air quality) and helps distribute comfort throughout your home.

What maintenance should be done on my heat pump?

Cleaning or replacing indoor filters is a must. Since every home and system are a little different, start by inspecting your filter every month or two and cleaning or replacing as needed. You should also keep debris (leaves, plants, clutter) from building up around the outdoor unit. Lastly, yearly system performance checks and a thorough cleaning of both the indoor and outdoor units are recommended.

I pushed the button(s) on the controller and nothing seems to happen?

If you have a ductless system with a handheld remote, a weak signal from the controller to the indoor unit may be an indication you need to change the remote's batteries.

Also, make sure you're pointing the remote directly at the indoor unit, within the 15-20 ft. max range. You will hear a beep.

Finally, assuming you have sent the signal to the indoor unit, **BE PATIENT!** Upon starting the unit or changing the mode of operation, there is a 3-5 minute delay while the system performs checks and prepares for operation. After the delay, the unit will ramp up slowly to the required levels. Minor temperature setting changes will result in a slow response. Major temperature setting changes will also take time for the unit to ramp up.

Is there anything I should know specific to my multi-zone heat pump?

Yes, all of your indoor units should be set for the same mode/function. Setting one unit in heating and the other unit in cooling or dehumidification will create a standby response from one of the units. The compressor can only do one thing at a time. The indoor units of a multi-zone system are sharing the capacity of the compressor. Operation of the system/zones is controlled by a variety of factors. The system may do all kinds of things that leave you scratching your head, but they are working together to give you optimum efficiency and comfort.



To learn more about the Xcel Energy Heat Pump Program scan the QR Code.

