



# Getting The Most Out of Your Heat Pump

Your cold-climate heat pump can save a lot on heating and cooling costs. Whether your heat pump is ductless or centrally ducted, this new technology is different than the conventional heating and air conditioning systems that you're probably used to. These tips will help you get the best comfort and the most savings for years to come.

## Ductless Users! Maximize the use of your heat pump

If you have ductless indoor units, use them to heat as much of your house as possible in order to increase your savings!



### Set the ductless heat pump thermostat for comfort

- Don't worry too much about the specific numbers.
- You may find it comfortable to set it higher in colder weather; that's OK!
- It's also OK to overheat one room a bit, to help heat more of the house.

### If you are keeping your existing heating system as a backup, use it only when needed:

- Turn the thermostat for your existing heating system down 5-10 degrees lower than the usual setting to make the ductless heat pump your primary heating source.
- When the weather is very cold, you may need to turn up your backup slightly.
- Try to keep the doors open to rooms without the ductless unit, allowing the heat pump's heat to circulate as much as possible.

## Settings are the Key to Great Heat Pump Performance

Use these settings, whether your heat pump is ducted or ductless, to maximize savings and improve your comfort:

### Set it and Forget it

- Avoid frequently adjusting the thermostat; try to keep indoor settings steady.
- It's fine to adjust temperatures up and down as needed for comfort (e.g. turn it down at night if you like it a bit cooler).
- However, *unlike conventional heating systems, deep setbacks of cold-climate heat pumps may cost you energy and money!*
- Avoid turning heat pump unit(s) "on" and "off" to control the temperature.
- "Set it and forget it" is effective when air conditioning, too.

**Pro Tip!** *if your central heat is oil or propane, you can expect your electric bill to increase significantly in cold weather. But you will save more in the long run with reduced fuel costs: keep running the heat pump as much as possible to minimize your backup system operation.*

**Pro tip!** *In humid summer climates, the "dry" setting (when available), may provide better comfort at less cost than "cool". You may need to set the temperature higher to avoid over-cooling.*

### Use the "heat" or "cool" setting on the thermostat or control, rather than "auto"

- Set the unit to "off" when outside temperature is mild and no heat or air conditioning is needed

Set the indoor fan speed to "auto" or automatic most often, so the fan runs as much as needed.

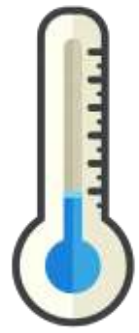
For ductless heat pumps, keep the air vanes open to allow air to flow freely through the unit.



Don't shut your heat pump off in very cold weather!

*If anything, turn it up a bit.*

- Cold-climate heat pumps continue to work fine to well below zero. (Also see *special considerations* below.)



**Pro tip!** Turn the fan up to a higher speed in cold weather to deliver more heat and improve efficiency.



## Taking care of your heat pump

### Indoor and outdoor units need free air flow

- Clean or replace indoor air filters every 2-6 weeks (depending on need).
- Be sure to keep debris and snow away from the outdoor unit(s), and don't try to hide or cover the outdoor unit(s).

### Check on your system at least once every season

- Make sure there's no obvious damage to the outdoor pipe covering, dirt clogging the outdoor coil, or oil drips at or below the piping connections at the unit.
- There may be indicator lights or display icons, on the controller or on the indoor unit itself, that can indicate fault conditions - look at the owner's manual to interpret any displays.

Modern heat pumps should have very little need for service, unless something stops working properly.

- Schedule professional service at the manufacturer's recommended interval; or, of course, if you see any problems.

**Pro tip!** It's normal to hear occasional gurgling or swishing sounds, when a ductless indoor unit is defrosting or as the indoor fan ramps up and down.

## Other considerations

**With ductless heat pumps**, if a central heating system is the only heat source in your basement, make sure it runs enough in very cold weather to keep pipes from freezing. This may mean turning the central heating thermostat higher than you would otherwise when outside temperatures are below the 20s.

**Pro tip!** Consider installing an extra thermostat in the basement to ensure it does not get cold enough to let pipes freeze; air sealing and insulation for the basement can also help.

**If you have an integrated thermostat** that controls both your ductless heat pump and your existing central heating system, be sure to understand how it is set up to accomplish your goal which is generally to minimize central heating use as much as possible while maintaining reasonable comfort.

**Pro tip!** Cold climate heat pumps are designed to run almost continuously, at a very low level. The lower the speed, the more efficient they are. Don't assume that they cost you more just because they run a lot—it's actually the opposite!

With proper installation and operation, your air-source heat pump should bring you efficient heating and cooling, helping you save energy and money while also keeping your home comfortable.

For more information, visit [www.neep.org/ASHPIInstallerResources](http://www.neep.org/ASHPIInstallerResources)