



Getting the Most Out of Your Ductless Heat Pump *A Homeowner's Guide*

Congratulations on your ductless heat pump purchase! Ductless heat pumps are among the most advanced heating and cooling systems available and will provide you years of trouble free service. These systems operate much differently than other traditional systems. Familiarize yourself with the owner's manual for complete information regarding features, benefits, operation, and maintenance.

This Homeowner's Guide provides additional operating information and suggestions to help you enjoy your ductless heat pump and get the most out of this new energy efficient technology.

General Operation Guidelines

1. Set the system to "HEAT" or "COOL" setting

Your ductless heat pump may have an AUTO mode that allows the system to switch between heating and air conditioning automatically. However, our experience in the Northwest suggests this setting does not provide the most efficient and responsive operation. Instead, try setting the system control to the HEAT mode (or the heating symbol) during the heating season and to the COOL mode (or the cooling symbol) when you want air conditioning.

2. Set the fan speed – use the "AUTO" setting

The AUTO fan speed setting (or auto symbol) is preferred over the other settings (usually quiet, low, medium, and high) because as indoor and outdoor conditions change, the unit automatically uses the optimal fan speed.

3. Set the temperature

Depending on the location of your ductless heat pump, you may need to set the unit's temperature slightly higher or lower than the desired temperature in the room to find a setting that's comfortable. Think of the temperature set on your remote as a comfort setting rather than the exact temperature that you want your room.

4. Avoid adjusting the temperature setting

Ductless heat pumps are designed to adjust to changing conditions automatically and efficiently. Once you find a comfortable temperature setting, avoid changing the setting or turning the unit off. The unit will run most efficiently if it is allowed to ramp-up and down to meet your heating and cooling needs.

Heating Operation Guidelines

1. Determine the "effective zone"

It is very likely that your ductless heat pump can provide efficient heating to more of your house than just the room in which it is located. The total area served by the heat pump is called the "effective zone". Depending on the size of your ductless heat pump, your comfort needs, and the configuration of your home, you may be able to increase the size of the effective zone by opening doors between rooms. In general, a larger effective zone will allow the ductless heat pump to provide more benefit to you by efficiently heating more of your house. If you would prefer that an adjacent room be isolated, you could keep those doors closed.

2. Let the ductless heat pump do the work

To maximize the benefits of your ductless heat pump, it should be used as the primary heating system in the effective zone. Try the following strategies:

- a. Set the existing heating system as “back-up.” The existing resistance heating system in the effective zone may be used primarily as “back-up”. This is best achieved by setting the thermostat(s) of the existing heating system 5°F to 15°F colder than the ductless heat pump thermostat setting. If back-up heating is required, the existing heating system will automatically turn on to keep your house from getting too cold.
- b. In severe weather, make temperature adjustments to provide optimal comfort.

In extremely cold weather, the heat pump may not be able to provide desired comfort levels to all areas of the effective zone. To maintain comfort in these cases, you should temporarily:

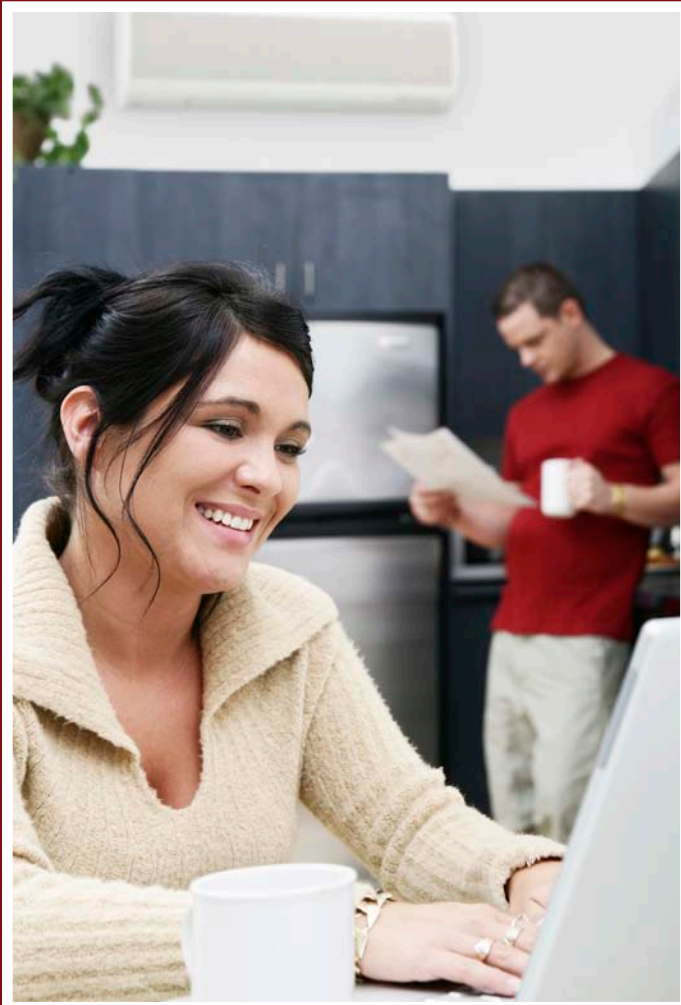
- a. Increase the thermostat setting on your existing electric heating device(s) as needed; and/or
- b. Reduce the size of the effective zone by closing doors to unused portions of the house.

3. Understand the Defrost Function

Heating during periods of cold weather will cause the coil on the outdoor unit to accumulate frost. Don't worry, this is normal. To allow continued, efficient operation, your ductless heat pump is designed to “defrost” itself automatically. During the defrost mode, the indoor unit stops and a light on the unit may come on or start blinking. This is normal and you should not try to interrupt or override this function. As the frost is removed from the coil, you may notice water below or around the outdoor unit. This is normal. At the end of the defrost function (typically 5 to 15 minutes), the unit should return to heating operation.

4. Multi-Zone Systems

Multi-zone systems have 1 outdoor and 2 or more indoor units. These systems allow you to set the indoor units at different temperatures. However, the entire system must operate in the same mode (Heat or Cool).



Maintenance Guidelines

1. Clean the Filters

Ductless heat pumps circulate air and utilize filters to clean that air and protect the equipment. These filters, like the filters of other heating equipment, need to be cleaned regularly. Dirty filters may reduce the performance of the heat pump. The good news is that the ductless heat pump filters are quite simple to clean. The frequency required depends on the conditions of use. Please refer to your owner's manual.

2. Sounds

Although ductless heat pumps are remarkably quiet during operation, they do make noises. In addition to the low-level fan sound (both indoor and outdoor units), you may also hear “whirring”, “clicking”, “rushing fluid”, etc. These sounds can be the result of thermal expansion, refrigerant movement, or mechanical parts. This is normal. As you encounter these sounds, please refer to the owner's manual for indications. If the indications are for abnormal operation or if you become concerned, call your contractor.

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