



To understand how to operate the heat pump's thermostat, we first need to learn how heat pump systems work. In the cooling mode, heat pumps work the same way as central AC systems. In the heating mode, the heat pump works like a reversible air conditioner, removing heat from the outside and bringing it into your home. Even when exterior temperatures are lower than inside temperatures, a heat pump can still remove enough heat from the outside air to heat your home. However, when outdoor temperatures get below freezing, or when the interior temperature drops too low, your heat pump relies on an auxiliary or emergency backup heating element, which consumes much larger amounts of electricity than the heat pump.

Therefore, you should follow a few steps to heat your apartment as efficiently as possible:

- Do not use the system button to select “EMER.” This prevents the heat pump from operating, and relies only on the costly auxiliary heating elements to provide heat.”
- Keep the fan set to “AUTO.” When set to “ON,” the fan will run all the time, wasting energy.
- Set your thermostat to avoid having “AUX” appear in the display. This may be unavoidable if outdoor temperatures get low enough, but the backup heating

elements may also come on if the thermostat is set back and then returned to a normal temperature. The heat pump will then use the backup or AUX heat in order to return your apartment to its normal temperature as quickly as possible. This can consume large amounts of electricity. In general, setting the temperature back by more than a couple of degrees in the heating season isn't recommended, unless you're leaving for an extended period, i.e., more than a day or two. Setting the thermostat at a reasonable setting and leaving it is usually the best way to operate a heat pump. If you do set back your thermostat, try to increase the thermostat setting by only a degree or two at a time, in order to keep the backup heat from coming on.

It should also be noted that heat pumps produce air that is from 90-100 degrees, which is lower than other heating systems. This is normal and doesn't mean that the system is not working efficiently.