



Save on your heating bills with a new thermostat

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Are you coming home to a house that's as cool as a meat locker because you've turned the heat off to save on energy? You can come home to a warm house *and* cut your energy costs by investing in a programmable thermostat. These handy little devices allow you to heat or cool your home at different temperatures at specific times and they are relatively inexpensive to purchase and install. Installing a programmable thermostat shouldn't set you back more than \$30 to \$100 — and the energy savings can be substantial. According to the U.S. Department of Energy, you could cut your heating and cooling bills by 10% annually just by turning your thermostat back 10% to 15% for 8 hours a day. With Excel's

Thermostats are responsible for controlling the environmental equipment in your home. Traditionally, that meant the heating and air conditioning systems. Today's technology includes furnace humidifiers, zone damper systems, air cleaners, and heat recovery ventilators.

Almost all homes built before 1970 had old round or rectangular thermostat that simply turns your system on and off. It uses a mechanical mercury bulb sensor that tells the furnace or air conditioner when to come on and go off. These were not very accurate and could vary by 6 degrees or more. However, they were reliable and I actually still see them regularly during home inspections. When a builder wants to install an inexpensive thermostat today, they will install a simple digital thermostat. Since they use solid-state technology and are electronic, they will cycle the heating or cooling to within only 1 degree of the set point. If you set your temperature at 70 degrees, the moment the thermostat drops to 69 degrees, it will engage the furnace. However the drawback with the simple digital is that it will not yield any energy savings over the old round thermostat.

Digital setback thermostats are simple computers that allow you to determine when to reduce the temperature and when to raise it during the day. Features will vary from one 24hr. program to a seven-day program. They're extremely effective and will reduce your heating and cooling bill if you stick to a regular schedule (i.e., leave the house the same time every day, get home the same time, etc.) The way the programmable part of the thermostat works is, you have several preset periods throughout the day that are controlled by a computer in the thermostat. For example, in the winter, you can set it to keep your home at 65 degrees overnight, and then have it raise the temperature to 70 degrees by the time you get out of bed. Then it can be set to drop back down to 60 degrees while you're at work, and heat back up by the time you get home. It's a great

energy saver (manufacturers claim savings of 10 - 30% or more) because you don't have to pay the extra energy bills to heat or cool your home while you're away or while you're sleeping. In fact, just setting it to provide a 5 degree or 10 degree difference while you're away or asleep can save you a considerable amount on your gas and electric bills. Keep in mind that when setting up your thermostat bigger temperature reductions are not always better. Not only does your heating system warm you but it also warms the contents of your home. If you were to set your thermostat to 55 degrees during the day and 70 when you get home, not only will the air be at 55 but so will all the furniture, walls, etc. The heating system will then have to reheat the home and warm it 15 degrees which may ultimately take more energy than if the home was kept at 60 degrees and warmed to 70 degrees.

If you decide to upgrade the thermostat yourself - stick to name brands and choose that fits your needs and you can operate. Consumer's Report reviewed programmable thermostats and gave the *LUX TX9000* their Best Buy award. A less sophisticate and easier to operate was the LUX TX500. If you're not comfortable installing the thermostat yourself contact a local heating contractor or a handyman.

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