



# Home Tips®



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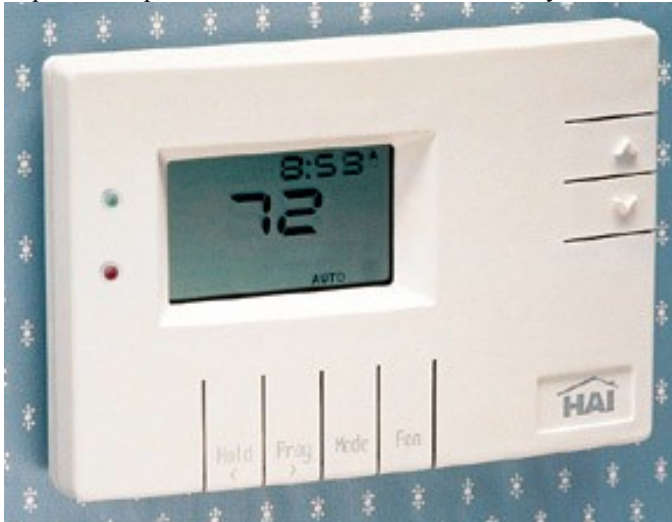
## Q & A

### Programmable Thermostats?

*We are interested in purchasing a programmable thermostat for our home. Will you tell us if they are worth the investment and exactly what do they do?*

In our modern, high-tech society, we do not think much about some of the electronic gadgets in our homes. Take, for example, the ever-present thermostat--a staple of American households for decades. It usually takes the shape of an unassuming box on the wall, but that modest device controls the comfort of your family on the coldest day in January and the hottest day in July.

To maximize your energy savings without sacrificing comfort, you can install an automatic setback or programmable thermostat. They adjust the temperature setting for you. While you might forget to turn down the heat before you leave for work in the morning, a programmable thermostat won't! By maintaining the highest or lowest required temperatures for four or five hours a day instead of



24 hours, a programmable thermostat can pay for itself in energy saved within four years. Programmable thermostats have features with which you may be unfamiliar. The newest generation of residential thermostat technologies is based on microprocessors and thermistor sensors. Most of these programmable thermostats perform one or more of the following energy control functions: They store and repeat multiple daily settings, which you can manually override without affecting the rest of the daily or weekly program.

They store six or more temperature settings a day. They adjust heating or air conditioning turn-on times as the outside temperature changes. Most programmable thermostats have liquid crystal temperature displays. Some have back-up battery packs that eliminate the need to reprogram the time or clock in case of a power failure. New programmable thermostats can be programmed to accommodate life style and control heating and cooling systems as needed.

#### Choosing a Programmable Thermostat

Because programmable thermostats are a relatively new technology, you should learn as much as you can before selecting a unit. When shopping for a thermostat, bring information with you about your current unit, including the brand and model number. Also, ask these questions before buying a thermostat:

1. Does the unit's clock draw its power from the heating system's low-voltage electrical control circuit instead of a battery? If so, is the clock disrupted when the furnace cycles on and off? Battery-operated back-up thermostats are preferred by many homeowners.
  2. Is the thermostat compatible with the electrical wiring found in your current unit?
  3. Are you able to install it yourself, or should you hire an electrician or a heating, ventilation, and air conditioning (HVAC) contractor?
  4. How precise is the thermostat?
  5. Are the programming instructions easy to understand and remember? Some thermostats have the instructions printed on the cover or inside the housing box. Otherwise, will you have to consult the instruction booklet every time you want to change the setback times?
  6. Most automatic and programmable thermostats completely replace existing units. These are preferred by many homeowners. However, some devices can be placed over existing thermostats and are mechanically controlled to permit automatic setbacks. These units are usually powered by batteries, which eliminates the need for electrical wiring. They tend to be easy to program, and because they run on batteries, the clocks do not lose time during power outages.
- Before you buy a programmable thermostat, chart your weekly habits including wake up and departure times, return home times, and bedtimes, and the temperatures that are comfortable during those times. This will help you decide what type of thermostat will best serve your needs.

#### Other Considerations

The location of your thermostat can affect its performance and efficiency. Read the manufacturer's installation instructions to prevent "ghost readings" or unnecessary

