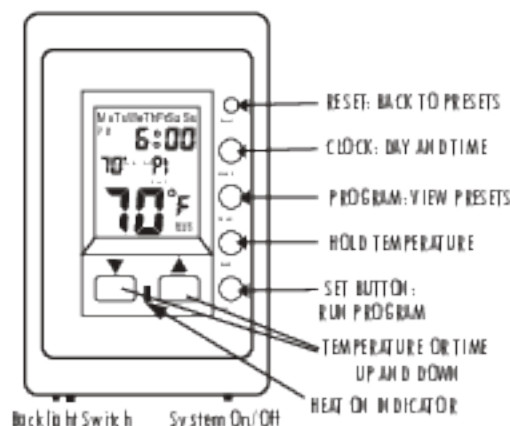


GENERAL INFORMATION



ESP-230 & ESP-120 with battery program back-up



SPECIFICATIONS: ESP 230 & 120

Temperature range: 44° to 95° F
 Temperature Default: Your setting
 Display Format: Liquid Crystal Display (LCD)
 Display size: Large format
 Sample Rate: Every 60 seconds
 Delay on or off: 3 minutes
 Illumination: Green LED
 Heat Indicator: Red LED
 Relay Rating: 30 Amps before de-rating
 Accuracy: $\pm 1.2^\circ$ F
 Maximum Amps: 22 resistive continuous
 Maximum Watts: 5280 (ESP-230)
 2640 (ESP-120)
 Minimum Watts: 0
 Power Supply: 120 Volt (ESP-120)
 208/240 Volt (ESP-230)
 System On/Off Switch
 Battery Backup



LEAVE THESE INSTRUCTIONS WITH HOME OWNER

GENERAL INFORMATION:

This thermostat is designed to provide the highest level of accurate temperature control for residential line voltage electric heating in 120 or 208/240 Volt. Almost all electric heaters installed as original equipment in a residential application will be 208 or 240 Volt. It is very rare that a home, apartment or condominium would be wired with all 120 Volt heaters. Check your voltage to make sure you have the right thermostat for your heater voltage. A 2-pole, or double wide circuit breaker, at the panel would indicate you should use the 240 Volt model. A single pole, or single wide breaker, would indicate a 120 Volt circuit. There are some exceptions to this rule so checking with a voltmeter is the only way to know for sure.

Be safe and smart, electricity can cause severe injury or death. If you are uncomfortable hire an electrician for the project.

The thermostat will provide years of comfort control for your family for small fan driven electric heaters, baseboards, radiant ceiling, wall panel heaters, cove heaters, or any line voltage resistance heating systems that do not have an electric motor over 1/3 hp. The thermostat will be warm to the touch on top. This is normal operation and also provides air currents across the face of the thermostat that better help it sense room temperature.

OPERATION:

This precision electronic thermostat will sense the room air at the bottom of the thermostat by a thermistor. This very sensitive sensor will send information to the microprocessor. As the temperature drops, the information it sends will indicate if heat is needed. To reduce any undesirable fast on/off cycles the processor has a built in 3 minute delay. This will save energy and provide the best control of a space. This thermostat does not require batteries and will have a default setting of 68°F when powered up. Temperature is easily changed by tapping the ARROW keys ▼ or ▲ on the front of the thermostat. Up ▲ arrow increases temperature and ▼ down arrow reduces temperature. Backlighting is provided on some models and can be turned off or on by a small switch under the left corner of the thermostat. This will allow you to see the thermostat in low light or at night. A system On/Off switch is located under the lower right corner to disable the thermostat. This will not disconnect all the power to the heater. To perform maintenance on the heater you need to turn the circuit breaker at the circuit breaker panel off.

INSTALLATION:

This line voltage device should be installed and serviced by a qualified electrician. The thermostat has been designed to mount to a standard 2" x 4" electrical outlet box. Leveling of the thermostat is not required. Mounting screws are provided. Mount the thermostat about five feet above the floor in an open area. A good rule of thumb is to place the thermostat above the light switch for that room. This works well for most bedrooms and makes it very convenient to turn the heat lower when leaving the room. Avoid mounting the thermostat where there may be plumbing pipes in the wall, or placing a lamp or TV too close to the thermostat. The heat from these items affects the thermostat's performance.

Due to internally generated heat and an offset to compensate for this, the display temperature of the thermostat may not match a digital thermometer placed next to it or in the same room. This thermostat will keep very accurate control of room temperature. Set it to what feels comfortable, not the temperature you were used to with your old thermostat.