

# INSTALLATION AND MAINTENANCE



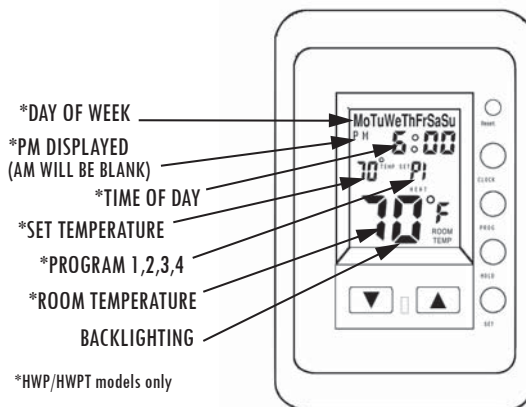
## HW - HWP - HWPT 120 or 230 Series

**⚠ DANGER ⚠**

**ELECTRIC SHOCK OR FIRE HAZARD**

READ ALL WIRE SIZING, VOLTAGE REQUIREMENTS AND SAFETY DATA TO AVOID PROPERTY DAMAGE AND PERSONAL INJURY

### DISPLAY LEGEND



**NOTE:** Temperatures displayed by this thermostat may differ from a thermometer placed next to it by up to 3°. Heat generated by the thermostat and a built-in compensation have an affect on this. Set the thermostat to a number that is comfortable regardless of temperature display setting.

These thermostats are intended to be used as a 2 circuit thermostat controlling a circulation pump and a fan coil on a hydronic heating system, though could have other uses needing 2 circuit control.

## ⚠ WARNING ⚠

**READ CAREFULLY** - These instructions were written to help prevent difficulties that might arise during thermostat installation. Studying the instructions first may save considerable time and money later. Observing the following procedures will keep installation time to a minimum. Save these instructions for future use.

Thank you for buying this King thermostat. It should provide years of service and comfort to your home. Inspect the package. Enclosed should be the thermostat with its cover and two screws.

1. Check the total load of the heaters being connecting to the thermostat. The maximum wattage at 240 Volt is 2880 Watts and for 120 Volt is 1500 Watts per switch. It is important to stay below this total wattage when connecting the thermostat. Lower wattage prolongs the the life of the contacts in the relay.
2. To wire the thermostat determine which pair of wires are coming from the breaker panel and which pair lead to the heater.
3. With wire nuts attach the blue wire (white wire on all 120V models) into the pair of white wires in the junction box.
4. Take a black lead from the circuit breaker panel and attach it to the black lead on the thermostat. This will provide power to the thermostat LCD display, backlighting and control relays.
5. Take a black lead from the heater and attach it to the yellow lead on the thermostat. This will provide power to the heater when the thermostat calls for heat after a one minute delay.
6. Take the black lead from the pump and attach the red lead from the thermostat.
7. Remove cover of thermostat by placing thumb on LCD display and fingers on top edge of cover. Pull towards you. This will expose the top mounting screw.
8. Push the wires carefully into the junction box making sure no wires are pinched or will obstruct the screws mounting the thermostat. Now attach the thermostat to the wall using the #6-32 Phillips head screws provided. Replace cover. Do not over tighten screws.
9. Turn on power. Test by increasing set point to higher than current room temperature by tapping the up button. There will be up to a 3 minute delay in turning on. You will hear a small click and an indicator light will appear in the LCD; the heater should be on now. Turn the thermostat down by tapping on the down arrow.
10. You have now verified the thermostat is in perfect working order and ready for years of trouble-free operation.
11. **Mounting tips:** Make sure nothing is nearby (plumbing pipes in the wall, a lamp close by, direct sunlight, a T.V. set, and/or cold drafts from a door opening) that could affect the average room temperature sensing of the thermostat. Typically the best, most convenient location is on inside walls above the light switch for that room.
12. **Cleaning:** Canned compressed air works great to clear any dust accumulation, while a damp cloth will additionally clean the plastic case surface of finger prints. Strong spray cleaners may damage the plastic case or remove writing or arrows screen-printed on case. Blow out any dust that may accumulate on top or bottom air vents. Good air circulation is key to long life and accurate operation.
13. **Humid locations:** Mildly humid location like bathrooms may reduce life due to corrosion on the contact and lint from towels getting into thermostat air vents. To extend life blow out vent regularly and mount thermostat away from shower locations.