

T4700 Chronotherm® Electronic Programmable Line Voltage Thermostat

INSTALLATION INSTRUCTIONS

APPLICATION

The T4700A,B Chronotherm® Electronic Programmable Line Voltage Thermostat provides exceptional comfort with the flexibility of 7-day programming and resistance-rated heating equipment. The patented CoolSwitch™ design provides a long service life.

Depending on local climate, night and day temperature setback can save up to 28 percent of the energy used to heat a controlled zone. According to the Electric Power Research Institute, precision temperature control also saves up to 12 percent energy during comfort periods compared with conventional I-metal electric heating thermostats.



MERCURY NOTICE

If this control is replacing a control that contains mercury in a sealed tube, do not place your old control in the trash. Dispose of properly.

Contact your local waste management authority for instructions regarding recycling and the proper disposal of an old control. If you have questions, call Honeywell Customer Response Center at 1-800-468-1502.

INSTALLATION

When Installing This Product...

1. Read these instructions carefully. Failure to follow these instructions can damage the product or cause a hazardous condition.
2. Check the ratings given in the instructions and on the product to make sure the product is suitable for your application.
3. Installer must be a trained, experienced service technician.
4. After completing installation, use these instructions to check out the product operation.

WARNING

240 Vac Line Voltage Hazard.

Can cause serious injury or death.

Disconnect power before making wiring connections.

Do not install thermostat unless you are fully competent with house wiring.

Do not connect to voltage different from device rating.

Location

Install the thermostat away from concealed warm or cold water pipes, air ducts, or drafts from hallways, fireplaces or stairways. Do not place the thermostat above a heater.

1. Select a location for mounting the thermostat on an inside wall where the thermostat can be subjected to average room temperature.
2. Install a vertical switch box for mounting the thermostat approximately 1.5m (5 ft) above the floor on the inside wall selected.



Wiring

1. Disconnect power before beginning installation.
2. Double check that thermostat is rated for the voltage and amperage of the load to be controlled.
3. Remove cover by carefully prying at the top or bottom edge with a coin or slotted screwdriver; flip open door cover.
4. When replacing an old line voltage wall thermostat, remove it carefully to avoid damaging wiring insulation. Check the old insulation for cracks, nicks, or fraying and apply certified electrical tape, as needed, to achieve adequate insulation, or replace the wires using standard methods.
5. Attach thermostat wires with solderless wire connectors approved for the size and number of wires to be connected. Be sure that all wire connectors are tight. See Fig. 1.
6. Secure thermostat to the electrical box with captive mounting screws.

— **Installation Hint:** Pre-bend the solid conductors, then push them and the wire connectors into the electrical box before tightening the mounting screws.

7. Snap cover in place; close door cover after setting the thermostat and turn on the power.

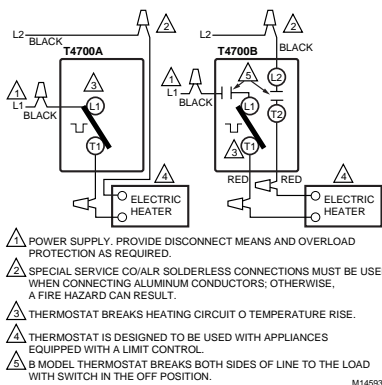


Fig. 1. T4700A,B Thermostat typical hookup.

SETTINGS

Initial Powerup

When the thermostat is first powered up (or after eight hours of continuous power loss), the display blinks for two seconds and then undergoes a self-test — while `00E` displays for about 15 seconds.

This is followed by the display flashing (1:00 PM); the internal checkout is complete and the thermostat is ready to be programmed. `0000`

To verify that the thermostat is turning on the baseboard heater, press the (+) key until the setpoint displayed exceeds the room temperature.

The (°) symbol is flashing. Feel for warmth in the area close to the heating element; the unit should be starting to generate heat.

Press and hold the Prog key; the thermostat will return to the Run mode.

Factory Set Programming

The thermostat defaults to a normal non-programmable thermostat at power-up, indicated with Hold appearing in the display. Pressing the Prog key once enters the programming mode. The thermostat is preset with a factory set schedule for 7 days, see Table 1.

Thermostat Reset

Table 1. Preset Factory Schedule for 7-days.

Event	Time	Temperature
WAKE	6:00 AM	70°F (21°C)
LEAVE	8:00 AM	61°F (16°C)
RETURN	6:00 PM	70°F (21°C)
SLEEP	10:00 PM	61°F (16°C)

The T4700 can be reset to its default settings (Table 1) by inserting a bent paper clip or similar wire into the small hole on the front of the thermostat (next to the (+) key with the cover open). This resets only the clock; the programmed schedule is retained.

Thermostat Programming

See the Owner's Guide for instructions on setting the Current Day and Time, Setting the Daily Program, and Copying Schedules to Another Day.











To change display or function (for example, to °C or °F temperature setting, or to 7-day or 5-1-1 programming), see Additional Functions section.

Additional Functions

To program additional functions, see Table 2.

Also, after programming is complete, the device reverts to normal Run mode within five minutes, if no key was pressed, and any new setting is stored in its memory.

Table 2. Programming Additional Functions.

Function	Key	Display	Description
Begin sequence to convert display or mode.	  	FF FF	Press and hold both the Prog and Func keys. Initially a random four-digit/letter display occurs (for example, FF FF). Continue to press Prog key until temperature symbol appears.
Convert to °C or °F.	  		Press Prog key a second time to display °C. Use (+) key to change to °F if desired (or °F to °C).
Convert 5-1-1 to 7 day .	  	5 1 1 d	Press Prog key a third time to display 511d. Press (+) key to change mode to 7-day programming (or back to 5-1-1 programming). Then adjust using the (+) or (-) keys.

NOTE: To exit the programming mode: 1) press and hold the Prog key for three seconds and the display returns to Run mode, or 2) during the programming session, after five minutes elapsed time with no program change, the display reverts to Run mode. This does not change any of the programmed steps. Simply keep pressing the Prog key until you arrive at the desired mode.

CHECKOUT

After initial thermostat powerup (or after eight hours of continuous power loss), the display blinks for two seconds, then runs a self-test (when 00E displays) for 15 seconds. When the internal self-test checkout is complete, the display flashes (1:00PM) and the thermostat is ready to be programmed.

1. Press the (+) key until the setpoint displayed exceeds the room temperature to verify that the thermostat is turning on the baseboard heater.
2. When the (°) symbol is flashing, feel for warmth near the heating element that indicates that the unit is generating heat.
3. Press and hold the PROG key until the thermostat returns to the RUN mode.

TROUBLESHOOTING

Display Code	Cause	Action
Oload	Connected load exceeds 3800W.	Ensure total baseboard wattage connected does not exceed 3800W. A fire hazard exists if wattage exceeds 3800W. Push Reset key to clear and reset clock.
06E	Power failure detected.	Push Reset key to clear and reset clock.
Missing segment or other abnormal display.	Unknown.	Push Reset key to clear and reset clock. If problem persists, call Honeywell Customer Response Center at 1-800-468-1502.

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