T600HCP-1 Programmable Thermostat

Application
The T600HCP-1 is a single-stage programmable thermostat that provides exceptional accuracy through the use of a unique Proportional-Integral (PI) time proportioning algorithm. The algorithm virtually eliminates temperature offset associated with traditional, differential-based on/off thermostats. The T600HCP-1 also uses an adaptive control logic algorithm to control the space temperature during recovery to minimize overshoot while providing maximum comfort. Additionally, the menu driven backlit display, plain text menus, and five keys on the T600HCP-1 make programming the thermostat easy and intuitive.

Installation
Location Considerations
Locate the T600HCP-1 thermostat:
- on a partitioning interior wall, and approximately 5 ft. (1.5 m) above the floor in a location of average temperature
- away from direct sunlight, radiant heat, outside walls, behind doors, air discharge grills, stairwells, or outside doors
- away from steam or water pipes, warm air stacks, unheated/uncooled areas, or sources of electrical interference

To install the thermostat:
1. Remove the security screw on the bottom of the thermostat cover using a Phillips-head screwdriver. Open the thermostat by pulling on the bottom side of the thermostat cover (Figure 1).
2. Unlock the Printed Circuit Board (PCB) by carefully pressing the locking tab to the right (Figure 2). Open the thermostat’s PCB to the left.
3. Pull out approximately 6 in. (152 mm) of wires from the wall and insert the cable through the hole in the base.
4. Align the base on the wall, and using the base as a template, mark the location of the two mounting holes on the wall. Confirm the thermostat base is installed with the proper side up.
5. Use the supplied anchors and screws for mounting on drywall or plaster. Drill two 3/16 in. (4.7 mm) holes at the marked locations and tap nylon anchors flush to wall surface (Figure 3).
6. Position base on the wall, insert screws through mounting base, and fasten into wall anchors. Do not overtighten screws.
7. Swing the thermostat PCB back to the right to close. Gently press on the PCB to secure each of the locking tabs.
8. Pull out the screw terminal blocks using the pull-tabs on each connector (Figure 4).

Note: The number of terminals on the terminal blocks varies depending on the T600 model.

IMPORTANT: Use this T600HCP-1 programmable thermostat only as an operating control. Where failure or malfunction of the T600HCP-1 could lead to personal injury or property damage to the controlled equipment or other property, additional precautions must be designed into the system. Incorporate and maintain other devices such as supervisory or alarm systems or safety or limit controls intended to warn of, or protect against, failure or malfunction of the T600HCP-1.
To wire the thermostat:

1. Strip each wire 1/4 in. (6.35 mm) and connect to the appropriate terminal according to the wiring diagram (Figure 5).

2. Gently push excess wire back into the wall, plug the wall hole with fireproof material to prevent drafts from affecting ambient temperature readings, and install screw terminal blocks back onto the PCB.

3. Reattach the thermostat cover to the installed base (top side first) and install the security screw on the bottom.

- **CAUTION: Risk of Property Damage.** Do not apply power to the system before checking all wiring connections. Short circuited or improperly connected wires may result in permanent damage to the equipment.
Setup and Adjustments

Thermostat Operation Overview

Figure 5: T600HCP-1 Wiring Schematic

Figure 6: T600HCP-1 Front Cover
**Thermostat Interface Keys**
The T600HCP-1 interface consists of five keys on the front cover and one configuration key (see Figure 7) that is accessed by removing the front cover. Use the:
- YES key to confirm a selection and move onto the next menu item
- NO key when you do not desire a parameter change, and to advance to the next menu item
- MENU key to access the Main User Menu or exit the menu
- down arrow key to scroll through menu selections or adjust values
- up arrow/SCROLL key to:
  - scroll through menu selections or adjust values
  - stop the Status Display Menu from scrolling and to scroll manually to the next parameter on the menu. When left unattended for 45 seconds, the display resumes scrolling.

**Programming Overview**
There are three menus used to view, program, and configure the T600HCP-1 thermostat.

The **Status Display Menu** is displayed during normal thermostat operation. The menu continually scrolls through the following parameters:
- Room Temperature
- Day and Time
- System Mode
- Schedule Status (Occupied/Unoccupied)
- Outdoor Temperature (providing sensor is connected and functional)
- Applicable Alarms (the backlight lights up as an alarm condition is displayed)

To temporarily stop the scrolling, press the up arrow/SCROLL key.

The **Main User Menu** is used to access and change the thermostat’s basic operating parameters. Access the menu by pressing the MENU key during normal thermostat operation.

The **Installer Configuration Menu** is used to set up the thermostat for application specific operation. Access the menu by removing the front cover and pressing the configuration key, labeled CONFIG (Figure 7).

**Configuring the T600HCP-1**
The T600HCP-1 ships from the factory with default settings for all configurable parameters. The default settings are shown in Table 1. To reconfigure the parameters, follow the steps in this section for the corresponding parameters. The parameters must be set up by accessing the Installer Configuration Menu. Access the Installer Configuration Menu by removing the front cover and pressing the configuration key (Figure 7).

Exit the Installer Configuration Menu any time by pressing the MENU key and, at the exit prompt, pressing the YES key. To pass over a parameter without changing it, press the NO key.

When the thermostat is in the Installer Configuration Menu and left unattended for 45 seconds, it reverts to the Status Display Menu.
Table 1: Installer Configuration Menu

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Default Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RoomTemp 75.0°F</td>
<td></td>
<td>Remove the cover and press the CONFIG key from the Status Display Menu to enter the Installer Configuration Menu.</td>
</tr>
<tr>
<td>DI1 set? Y/N</td>
<td></td>
<td>Configures Digital Input 1 Default: No Function (None) See Configuring the Digital Inputs (DI1 and DI2).</td>
</tr>
<tr>
<td>DI2 set? Y/N</td>
<td></td>
<td>Configures Digital Input 2 Default: No Function (None) See Configuring the Digital Inputs (DI1 and DI2).</td>
</tr>
<tr>
<td>Lockout set? Y/N</td>
<td></td>
<td>Sets Keypad Lockout Level Default: No Lockout (0) See Enabling Keypad Lockout (Lockout).</td>
</tr>
<tr>
<td>Pwr del set? Y/N</td>
<td></td>
<td>Sets Power-up Delay Default: Ten Seconds (10.0 sec) See Setting the Power-up Delay (Pwr del).</td>
</tr>
<tr>
<td>Heat max set? Y/N</td>
<td></td>
<td>Sets the Maximum Heating Setpoint Default: 90.0°F (32.0°C) See Setting the Maximum Heating Setpoint (Heat max).</td>
</tr>
<tr>
<td>Cool min set? Y/N</td>
<td></td>
<td>Sets the Minimum Cooling Setpoint Default: 54.0°F (12.0°C) See Setting the Minimum Cooling Setpoint (Cool min).</td>
</tr>
<tr>
<td>Anticycl set? Y/N</td>
<td></td>
<td>Sets the Anti-Short Cycle Timer Default: Two Minutes (2.0 min) See Setting the Anti-Short Cycle Timer (Anticycl).</td>
</tr>
<tr>
<td>Heat cph set? Y/N</td>
<td></td>
<td>Sets the Maximum Heating Cycles per Hour Default: Four (4.0) See Setting the Maximum Heating Cycles per Hour (Heat cph).</td>
</tr>
<tr>
<td>Cool cph set? Y/N</td>
<td></td>
<td>Sets the Maximum Cooling Cycles per Hour Default: Four (4.0) See Setting the Maximum Cooling Cycles per Hour (Cool cph).</td>
</tr>
<tr>
<td>Deadband set? Y/N</td>
<td></td>
<td>Sets the Minimum Heating/Cooling Deadband Default: 2.0°F (1.1°C) See Setting the Heating/Cooling Deadband (Deadband).</td>
</tr>
<tr>
<td>Fan cont set? Y/N</td>
<td></td>
<td>Determines how the Fan Activates in Response to a call for Heat Default: Thermostat Controls Fan (On) See Setting the Fan Control (Fan cont).</td>
</tr>
<tr>
<td>Fan del set? Y/N</td>
<td></td>
<td>Delays Fan Termination at Cycle’s End for 60 Seconds Default: No Delay (Off) See Setting the Fan Delay (Fan del).</td>
</tr>
<tr>
<td>ToccTime set? Y/N</td>
<td></td>
<td>Sets the Duration for Temporary Occupancy Time Default: Three Hours (3.0 hrs) See Establishing the Temporary Occupancy Time (ToccTime).</td>
</tr>
<tr>
<td>Cal RS set? Y/N</td>
<td></td>
<td>Room Air Sensor Calibration (Offset) Default: 0.0°F (0.0°C) See Room Air Sensor Calibration (Cal RS).</td>
</tr>
<tr>
<td>Cal OS set? Y/N</td>
<td></td>
<td>Outdoor air Sensor Calibration (Offset) Default: 0.0°F (0.0°C) See Outdoor Air Sensor Calibration (Cal OS).</td>
</tr>
<tr>
<td>H lock set? Y/N</td>
<td></td>
<td>Disables Heating Operation based on Outdoor Air Temperature Default: 120°F (49°C) See Setting the Heating Lockout (H lock).</td>
</tr>
<tr>
<td>C lock set? Y/N</td>
<td></td>
<td>Disables Cooling Operation based on Outdoor Air Temperature Default: -40°F (-40°C) See Setting the Cooling Lockout (C lock).</td>
</tr>
<tr>
<td>2/4event set? Y/N</td>
<td></td>
<td>Sets the Number of Events in 24-Hour Period Default: Two Events (2.0) See Selecting the Number of Events (2/4event).</td>
</tr>
<tr>
<td>Aux cont set? Y/N</td>
<td></td>
<td>Sets the Auxiliary Contact as Normally Open or Normally Closed Default: Normally Open (N.O.) See Configuring the Auxiliary Contact (Aux cont).</td>
</tr>
</tbody>
</table>
Configuring the Digital Inputs (DI1 and DI2)
Press the configuration menu access key. The first prompt is to program Digital Inputs DI1 and DI2.
The digital inputs display an alarm condition when the input is closed. An alarm message is included on the scrolling Status Display Menu and when the message is displayed, the backlight momentarily lights up.
Each digital input can be programmed in one of five conditions.
- **None** – No function is associated with the input.
- **Service** – A Service alarm is displayed.
- **Filter** – A Filter alarm is displayed.
- **RemNSB** – Remote Night Setback (NSB) timer clock input. The scheduling is set per the digital input when this option is selected. The time continues to be displayed, but the menu related to scheduling is disabled and no longer accessible.
  - Open Contact = Occupied setpoints
  - Closed Contacts = Unoccupied setpoints
- **RemOVR** – Remote Override (OVR) contact. This disables all override menu functions of the thermostat. The override function is now controlled manually by a remote, momentarily closed contact. When configured in this mode, the input operates in a toggle mode. With this function enabled, it is now possible to toggle between unoccupied and occupied setpoints for the amount of time set by the temporary occupancy time parameter.

When override is enabled through the digital inputs, an **Override** message appears in the Status Display Menu.

To configure the digital inputs while in the Installer Configuration Menu:
1. Press YES to configure Digital Input 1 or NO to advance to Digital Input 2.
2. Use the UP/DOWN arrow keys to locate the desired function for the Digital Input 1. Press YES to select the desired function.
3. Press YES to configure Digital Input 2 or NO to advance to the keypad lockout setup prompt.
4. Use the UP/DOWN arrow keys to locate the desired function for the Digital Input 2. Press YES to select the desired function.

The display now shows the keypad lockout setup prompt. See the Enabling Keypad Lockout (Lockout) section for instructions.

Enabling Keypad Lockout (Lockout)
The T600HCP-1 has three levels of keypad lockout. The levels and degree of lockout are shown in Table 2.

To set the keypad lockout level while in the Installer Configuration Menu:
1. Answer NO to all prompts until the keypad lockout setup prompt appears in the display. Press YES to enter the keypad lockout menu.
2. Use the UP/DOWN arrow keys to locate the desired lockout level. Press YES to select the level.

The display now shows the power delay setup prompt. See the Setting the Power-up Delay (Pwr del) section for instructions.

### Table 2: Keypad Lockout Levels

<table>
<thead>
<tr>
<th>Feature</th>
<th>Level 0</th>
<th>Level 1</th>
<th>Level 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resume to Scheduling</td>
<td>Yes access</td>
<td>Yes access</td>
<td>No access</td>
</tr>
<tr>
<td>Temperature Setpoints</td>
<td>Yes access</td>
<td>No access</td>
<td>No access</td>
</tr>
<tr>
<td>System Mode Setting</td>
<td>Yes access</td>
<td>Yes access</td>
<td>No access</td>
</tr>
<tr>
<td>Fan Mode Setting</td>
<td>Yes access</td>
<td>Yes access</td>
<td>No access</td>
</tr>
<tr>
<td>Schedules Setting</td>
<td>Yes access</td>
<td>No access</td>
<td>No access</td>
</tr>
<tr>
<td>Clock Setting</td>
<td>Yes access</td>
<td>Yes access</td>
<td>Yes access</td>
</tr>
<tr>
<td>Permanent Hold</td>
<td>Yes access</td>
<td>Yes access</td>
<td>No access</td>
</tr>
</tbody>
</table>

Setting the Power-up Delay (Pwr del)
On initial power up of the T600HCP-1 (or each time power is removed and reapplied), there is a delay before any operation is authorized (fan, cooling, and heating). The delay time is adjustable between 10 and 120 seconds. This parameter can also be used to sequence the start-up of multiple units in one location.

**Note:** When adjusting the time with the UP/DOWN arrow keys, holding the keys down changes the time by 10-second intervals.

To set the delay time while in the Installer Configuration Menu:
1. Answer NO to all prompts until the power delay setup prompt appears in the display. Press YES to enter the power delay setup menu.
2. Use the UP/DOWN arrow keys to adjust the power-up delay setting. Press YES to store the setting.
The display now shows the frost protection setup prompt. See Enabling Frost Protection (Frost pr) section for setup instructions.

Enabling Frost Protection (Frost pr)
Frost protection establishes a minimum heating setpoint of 42°F (5.5°C) to prevent freezing in the zone controlled by the thermostat. If enabled, frost protection is active even if the thermostat is set to the Off System Mode. If frost protection is active, it is displayed as an alarm (Frost on with the backlight lit) on the Status Display Menu.

To enable frost protection while in the Installer Configuration Menu:
1. Answer NO to all prompts until the frost protection setup prompt appears in the display. Press YES to enter the frost protection menu.
2. Use the UP/DOWN arrow keys to select off or on. Press YES to store the selection.

The display now shows the maximum heating setpoint prompt. See Setting the Maximum Heating Setpoint (Heat max) section for instructions.

Setting the Maximum Heating Setpoint (Heat max)
The maximum heating setpoint establishes the maximum temperature in the heating setpoint range that can be adjusted from the Main User Menu for both occupied and unoccupied periods. The parameter is adjustable from 40 to 90°F (4.5 to 32°C).

Note:  When adjusting the temperature, holding the keys down changes the temperature by 5 F/C° increments.

To set the maximum heating setpoint while in the Installer Configuration Menu:
1. Answer NO to all prompts until the maximum heating setpoint prompt appears in the display. Press YES to enter the maximum heating setpoint menu.
2. Use the UP/DOWN arrow keys to adjust the maximum heating setpoint temperature. Press YES to store the value.

The display now shows the anti-short cycle timer prompt. See the Setting the Anti-Short Cycle Timer (Anticycl) section for instructions.

Setting the Anti-Short Cycle Timer (Anticycl)
The anti-short cycle timer establishes the minimum on/off times for the cooling and heating stages. The timer is adjustable from 0 to 5 minutes in 1-minute increments. Set the anti-short cycle to 0 for equipment that possesses its own anti-short cycle timer.

CAUTION: Risk of Property Damage.
Do not set the T600HCP-1 anti-short cycling timer to 0 minutes if the controlled equipment is not protected by its own internal anti-short cycling timer. Doing so may result in damage to the controlled equipment.

To set the anti-short cycle time while in the Installer Configuration Menu:
1. Answer NO to all prompts until the anti-short cycle timer prompt appears in the display. Press YES to enter the anti-short cycle timer menu.
2. Use the UP/DOWN arrow keys to adjust the minimum on/off times for the heating and cooling stages. Press YES to store the value.

The display now shows the heating cycles per hour setup prompt. See the Setting the Maximum Heating Cycles per Hour (Heat cph) section for instructions.
Setting the Maximum Heating Cycles per Hour (Heat cph)
The heating cycles per hour establishes the maximum number of times the equipment is turned on and off in one hour. The selection ranges from three to eight cycles per hour.

Note: A higher number of heating cycles per hour results in more accurate temperature control, but could accelerate the wear of mechanical components in the equipment.

To set the maximum number of heating cycles per hour while in the Installer Configuration Menu:

1. Answer NO to all prompts until the heating cycles per hour prompt appears in the display. Press YES to enter the heating cycles per hour menu.
2. Use the UP/DOWN arrow keys to adjust the maximum number of heating cycles per hour. Press YES to store the value.

The display now shows the cooling cycles per hour setup prompt. See the Setting the Maximum Cooling Cycles per Hour (Cool cph) section for instructions.

Setting the Maximum Cooling Cycles per Hour (Cool cph)
The cooling cycles per hour establishes the maximum number of times the equipment is turned on and off in one hour. The selection ranges from three to four cycles per hour.

Note: A higher number of cooling cycles per hour results in more accurate temperature control, but could accelerate the wear of mechanical components in the equipment.

To set the maximum number of cooling cycles per hour while in the Installer Configuration Menu:

1. Answer NO to all prompts until the cooling cycles per hour prompt appears in the display. Press YES to enter the cooling cycles per hour menu.
2. Use the UP/DOWN arrow keys to adjust the maximum number of cooling cycles per hour. Press YES to store the value.

The display now shows the minimum heating/cooling deadband prompt. See the Setting the Heating/Cooling Deadband (Deadband) section for instructions.

Setting the Heating/Cooling Deadband (Deadband)
The heating/cooling deadband setting establishes the minimum difference between the heating and cooling setpoints. The range is adjustable from 2 to 4 °F (1 to 2 °C).

To change the minimum deadband between the heating and cooling setpoints while in the Installer Configuration Menu:

1. Answer NO to all prompts until the deadband setpoint prompt appears in the display. Press YES to enter the deadband setpoint menu.
2. Use the UP/DOWN arrow keys to adjust the minimum deadband between the heating and cooling setpoints. Press YES to store the value.

The display now shows the fan control prompt. See the Setting the Fan Control (Fan cont) section for instructions.

Setting the Fan Control (Fan cont)
This parameter controls how the fan activates in response to a call for heating.

When the fan is in Auto Mode (as selected on the Main User Menu):

- Selecting on enables the thermostat to control the fan on a call for heating or cooling.
- When selecting off, the thermostat on a call for cooling only energizes the fan. The fan is controlled by the equipment fan limit control on a call for heating.

To set the fan control while in the Installer Configuration Menu:

1. Answer NO to all prompts until the fan control prompt appears in the display. Press YES to enter the fan control menu.
2. Using the UP/DOWN arrow keys, select on or off. Press YES to store the selection.

The display now shows the fan delay prompt. See the Setting the Fan Delay (Fan del) section for instructions.

Setting the Fan Delay (Fan del)
The fan delay extends the fan operation by 60 seconds after the call for heating or cooling has ended. This feature is only active when the fan is in the Auto mode.

To enable the fan delay while in the Installer Configuration Menu:

1. Answer NO to all prompts until the fan delay prompt appears in the display. Press YES to enter the fan delay menu.
2. Using the UP/DOWN arrow keys, select on or off. Press YES to store the selection.

The display now shows the occupancy override prompt. See the Establishing the Temporary Occupancy Time (ToccTime) section for instructions.
Establishing the Temporary Occupancy Time (ToccTime)
The temporary occupancy time is the length of time the occupied mode setpoints are used when the override function is enabled (the override function can be enabled from the Main User Menu or from one of the digital inputs) or a temporary setpoint is entered. The range is adjustable from 0 to 12 hours.

To change the temporary occupancy time while in the Installer Configuration Menu:

1. Answer NO to all prompts until the temporary occupancy time prompt appears in the display. Press YES to enter the temporary occupancy time menu.

2. Use the UP/DOWN arrow keys to adjust the length of time the temporary occupancy setpoint should be in effect. Press YES to store the time.

The display now shows the heating lockout prompt. See the Setting the Heating Lockout (H lock) section for instructions.

Setting the Heating Lockout (H lock)
This feature disables heating operation based on outdoor air temperature (requires outdoor air temperature sensor to be connected for the function to be enabled). If the outdoor air temperature is above the heating lockout temperature, heating operation is disabled.

The heating lockout temperature parameter is adjustable from -15 to 120°F (-26 to 49°C) in increments of 5 F/C°.

To change the outdoor air temperature heating lockout while in the Installer Configuration Menu:

1. Answer NO to all prompts until the heating lockout prompt appears in the display. Press YES to enter the heating lockout menu.

2. Use the UP/DOWN arrow keys to adjust the lockout temperature. Press YES to store the value.

The display now shows the room sensor calibration prompt. See the Room Air Sensor Calibration (Cal RS) section for instructions.

Room Air Sensor Calibration (Cal RS)
An offset can be added or subtracted to the actual displayed room temperature as needed. The range is ±5.0°F (±2.5°C), adjustable in increments of 1°F (0.5°C).

To change the room sensor calibration/offset while in the Installer Configuration Menu:

1. Answer NO to all prompts until the room sensor calibration prompt appears in the display. Press YES to enter the room sensor calibration menu.

2. Use the UP/DOWN arrow keys to adjust the correction that should be applied to the sensor reading. Press YES to store the offset.

The display now shows the room sensor calibration prompt. See the Setting the Heating Lockout (H lock) section for instructions.

Setting the Cooling Lockout (C lock)
This feature disables cooling operation based on outdoor air temperature (requires outdoor air temperature sensor to be connected for the function to be enabled). If the outdoor air temperature is below the cooling lockout temperature, cooling operation is disabled.

The cooling lockout temperature parameter is adjustable from -40 to 95°F (-40 to 35°C) in increments of 5 F/C°.

To change the outdoor air temperature cooling lockout while in the Installer Configuration Menu:

1. Answer NO to all prompts until the cooling lockout prompt appears in the display. Press YES to enter the cooling lockout menu.

2. Use the UP/DOWN arrow keys to adjust the lockout temperature. Press YES to store the value.

The display now shows the number of events prompt. See the Selecting the Number of Events (2/4event) section for instructions.

Outdoor Air Sensor Calibration (Cal OS)
An offset can be added or subtracted to the actual displayed outdoor air temperature as needed. The range is ±5.0°F (±2.5°C), adjustable in increments of 1°F (0.5°C).

To change the outdoor air sensor calibration/offset while in the Installer Configuration Menu:

1. Answer NO to all prompts until the outside sensor calibration prompt appears in the display. Press YES to enter the outside sensor calibration menu.

2. Use the UP/DOWN arrow keys to adjust the correction that should be applied to the sensor reading. Press YES to store the offset.

The display now shows the number of events prompt. See the Selecting the Number of Events (2/4event) section for instructions.
Selecting the Number of Events (2/4event)
This feature sets the number of events per 24-hour period that can be programmed into the daily schedule.

Two events selects one occupied and one unoccupied period per 24 hours and four events selects two occupied and two unoccupied periods per 24 hours.

To change the number of events in a 24-hour period while in the Installer Configuration Menu:
1. Answer NO to all prompts until the number of events prompt appears in the display. Press YES to enter the number of events menu.
2. Use the UP/DOWN arrow keys to select 2 or 4 events. Press YES to store the value.

The display now shows the auxiliary contact configuration prompt. See the Configuring the Auxiliary Contact (Aux cont) section for instructions.

Configuring the Auxiliary Contact (Aux cont)
The auxiliary contact is an output that can be used to energize peripheral devices (for example, lighting equipment, exhaust fans, and economizers). The contact can be configured as normally open or normally closed and toggles with the internal occupied/unoccupied schedule (or the NSB contact on one of the digital inputs, if used).

Table 3: Operation of Auxiliary Contact

<table>
<thead>
<tr>
<th>Configuration Setup</th>
<th>Contact Occupied Status</th>
<th>Contact Unoccupied Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normally Opened</td>
<td>Closed</td>
<td>Opened</td>
</tr>
<tr>
<td>Normally Closed</td>
<td>Opened</td>
<td>Closed</td>
</tr>
</tbody>
</table>

To configure the auxiliary contact while in the Installer Configuration Menu:
1. Answer NO to all prompts until the auxiliary contact prompt appears in the display. Press YES to enter the auxiliary contact menu.
2. Use the UP/DOWN arrow keys to select Normally Open (N.O.) or Normally Closed (N.C.). Press YES to store the selection.
3. The display now shows the progressive recovery prompt. See the Enable/Disable Progressive Recovery (Prog Rec) section for instructions.

Enable/Disable Progressive Recovery (Prog Rec)
When progressive recovery is enabled, the desired occupied temperature is attained by the time the occupied schedule starts.

When progressive recovery is disabled, the system restarts at the programmed occupied time.

Note: Programming one of the digital inputs to remote NSB disables the progressive recovery function.

To enable/disable the progressive recovery feature while in the Installer Configuration Menu:
1. Answer NO to all prompts until the progressive recovery prompt appears in the display. Press YES to enter the progressive recovery menu.
2. Use the UP/DOWN arrow keys to select on or off. Press YES to store the selection.
3. The exit menu is displayed. Press YES to exit the Installer Configuration Menu or press NO to return to the beginning of the menu (digital input configuration).

Operation
Programming/Operating the T600HCP-1
Once the T600HCP-1 is configured through the Installer Configuration Menu, the thermostat's operating parameters can be programmed through the Main User Menu (access the Main User Menu by pressing the MENU key during normal thermostat operation). The Main User Menu contains the basic operating features of the T600HCP-1.

The Main User Menu uses Auto Help. Auto Help is displayed automatically in the Main User Menu when there is a pause in programming activity. To exit Auto Help, continue with the programming selection.

When the thermostat is in the Main User Menu and is left unattended for 45 seconds, it reverts to the Status Display Menu.

To configure the auxiliary contact while in the Installer Configuration Menu:
Follow the steps in Table 4 to program the T600HCP-1.
Table 4: Programming the T600HCP-1

<table>
<thead>
<tr>
<th>Function</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room Temp 75.0 °F</td>
<td>Press the MENU key while in the Status Display Menu to enter the Main User Menu.</td>
</tr>
<tr>
<td>Override schd Y/N</td>
<td>Overrides Unoccupied Setpoints Only Appears if Thermostat is in Unoccupied State See Enabling Override Schedule.</td>
</tr>
<tr>
<td>Resume schd Y/N</td>
<td>Resumes Regular Programmed Schedule and Setpoints Only Appears if Thermostat is in Override Mode See Resuming the Programmed Schedule.</td>
</tr>
<tr>
<td>Temperat set? Y/N</td>
<td>Sets the Temperature Setpoints See Entering Temperature Setpoints.</td>
</tr>
<tr>
<td>Schedule hold? Y/N</td>
<td>Sets a Permanent Hold on the Schedule or Resumes the Schedule See Setting Permanent Hold.</td>
</tr>
</tbody>
</table>

Enabling Override Schedule

**Note:** Enabling Override Schedule only appears when in Unoccupied Mode.

The override schedule prompt only appears when the thermostat is in the unoccupied state. This menu selection gives the user the option of overriding the unoccupied setpoints with the occupied setpoints for the amount of time specified under the Establishing the Temporary Occupancy Time (ToccTime) parameter (see Configuring the T600HCP-1 section).

If one of the digital inputs is configured to operate as a remote override contact, this menu is disabled.

To override the unoccupied state while in the Main User Menu:

1. Answer NO to all prompts until the Override Schedule prompt appears. If the thermostat is in the unoccupied state, this is the first prompt.
2. Press YES to enable the temporary override. The T600HCP-1 returns to the Status Display Menu.

When scrolling through the Status Display Menu, **Override** now appears for the schedule status parameter.

Resuming the Programmed Schedule

**Note:** Resuming the Programmed Schedule only appears when in the Override Mode.

This menu only appears when the T600HCP-1 is in the:

- unoccupied override mode
- permanent occupied hold mode
- permanent unoccupied hold mode

**Note:** If the T600HCP-1 is not in one of these modes, this prompt does not appear. Answering YES to this prompt enables the T600HCP-1 to resume the regular scheduled program and setpoints.

To resume the schedule while in the Main User Menu:

1. Answer NO to all prompts until the Resume Schedule prompt appears. If the thermostat is in the override state, this is the first prompt.
2. Press YES to resume the programmed schedule. The T600HCP-1 returns to the Status Display Menu.

Entering Temperature Setpoints

When the T600HCP-1 is in the occupied state, the first prompt appearing in the Main User Menu is to set the temperature setpoints. This is where the heating and cooling setpoints for the occupied and unoccupied states are entered. It is also where any temporary setpoints are entered.

To enter the heating and cooling setpoints for the occupied and unoccupied modes (permanent or temporary), follow the steps in Table 5. When changing the temperatures, pressing the keys once changes the temperature 0.5 F/C° and holding down the keys changes the temperature by 5 F/C° increments.
Table 5: Entering Temperature Setpoints

<table>
<thead>
<tr>
<th>Room Temp 75.0°F</th>
<th>Press MENU from the Status Display Menu to enter the Main User Menu.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperat set? Y/N</td>
<td>Answer NO to all prompts until the temperature set prompt appears in the display (it may be the first prompt). Press YES to enter temperature setting menu.</td>
</tr>
<tr>
<td>Cooling set? Y/N</td>
<td>Press YES to change occupied cooling setpoint. Press NO to advance to occupied heating setpoint menu.</td>
</tr>
<tr>
<td>Cooling 75.0°F</td>
<td>Use the UP/DOWN arrow keys to set temperature. Press YES to store value and advance to next menu.</td>
</tr>
<tr>
<td>Heating set? Y/N</td>
<td>Press YES to change the occupied heating setpoint. Press NO to advance to unoccupied cooling setpoint menu.</td>
</tr>
<tr>
<td>Heating 68.0°F</td>
<td>Use the UP/DOWN arrow keys to set temperature. Press YES to store value and advance to next menu.</td>
</tr>
<tr>
<td>Unocc CL set? Y/N</td>
<td>Press YES to change the unoccupied cooling setpoint. Press NO to advance to the unoccupied heating setpoint.</td>
</tr>
<tr>
<td>Unocc HT 80.0°F</td>
<td>Use the UP/DOWN arrow keys to set temperature. Press YES to store value and advance to next menu.</td>
</tr>
<tr>
<td>Unocc HT set? Y/N</td>
<td>Press YES to change the unoccupied heating setpoint. Press NO to advance to temperature display units.</td>
</tr>
<tr>
<td>Unocc HT 62.0°F</td>
<td>Use the UP/DOWN arrow keys to set temperature. Press YES to store value and advance to next menu.</td>
</tr>
<tr>
<td>°F/°C set? Y/N</td>
<td>Press YES to set the display units to °F or °C. Press NO to advance to temperature setpoint type menu.</td>
</tr>
<tr>
<td>Setpoint type Y/N</td>
<td>Press YES to select the setpoint type (permanent or temporary).</td>
</tr>
<tr>
<td>Setpoint permanent</td>
<td>Using the UP/DOWN arrow keys select the setpoint type (see Setpoint Type section for a description of choices). Press YES to enter the choice.</td>
</tr>
<tr>
<td>Exit? Y/N</td>
<td>Press YES to return to the Status Display Menu or NO to re-enter the temperature setting menu.</td>
</tr>
</tbody>
</table>

Setpoint Type

**Permanent Setpoints** are permanently stored in the programmed schedule. This is the default setpoint type.

**Temporary Setpoints** are changed, but are in effect only for the time specified in the *Establishing the Temporary Occupancy Time (ToccTime)* parameter (see Configuring the T600HCP-1 section).

There is no indication that a temporary setpoint is enabled or active.

After the specified time, the temporary setpoint reverts to the permanent setpoint.

The temporary setpoint can be cancelled at any time by using the Permanent Setpoint option in this menu. When permanent modifications of the setpoints are required, this parameter needs to be set to permanent.

Selecting the System Mode

The T600HCP-1 has four system modes.

- **Automatic Mode (auto)**
  Automatic changeover between heating and cooling. This is the default setting.

- **Cooling Mode (cool)**
  Cooling operation only.

- **Heating Mode (heat)**
  Heating operation only.

- **Off Mode (off)**
  The T600HCP-1 is off. However, when frost protection is on (see the *Enabling Frost Protection (Frost pr)* section) the thermostat still calls for heat, if required.
To set the system mode while in the Main User Menu:
1. Answer NO to all prompts until the system mode prompt appears in the display. Press YES to set the system mode.
2. Use the UP/DOWN arrow keys to locate the desired system mode. Press YES to select the desired system mode.
3. Press YES to return to the Status Display Menu or NO to return to the system mode selection menu.

Selecting the Fan Mode
The T600HCP-1 has three fan mode settings.
- **On Fan Mode (on)**
  Energizes the fan all the time for both occupied and unoccupied periods (even if the system mode is set to off).
- **Automatic Fan Mode (auto)**
  Operates the fan only on a call for heating or cooling for both occupied and unoccupied periods. This is the default setting.
- **Smart Fan Mode (smart)**
  Energizes the fan all the time for occupied periods and only on a call for heating and cooling in unoccupied periods.

To select the fan mode while in the Main User Menu:
1. Answer NO to all prompts until the fan mode prompt appears in the display. Press YES to set the fan mode.
2. Use the UP/DOWN arrow keys to locate the desired fan mode. Press YES to select the desired fan mode.
3. Press YES to return to the Status Display Menu or NO to return to the fan mode selection menu.

Programming the Daily Schedule – Two-Event
The schedule setting menu is used to enter the occupied and unoccupied time periods for each day of the week. The schedule-setting menu reflects either a two or four event schedule per day based on what was selected in the Number of Events Menu during the configuring process. If the schedule-setting menu does not reflect a two-event schedule, return to the Selecting the Number of Events (2/4event) menu in the configuration process and select two events.

When changing the time, pressing the UP/DOWN arrow keys changes the time in 1-minute increments. Holding the keys down changes the time in 30-minute increments.

**Note:** Programming one of the digital inputs to remote NSB disables the menu.

Refer to Table 8 events 1 and 2 for an example of a two-event office schedule.

To set the time schedule for a two-event schedule, follow the steps in Table 6.

### Table 6: Programming the Daily Schedule – Two-Event

<table>
<thead>
<tr>
<th>Time</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room Temp</td>
<td>Press MENU from the Status Display Menu to enter the Main User Menu.</td>
</tr>
<tr>
<td>Schedule</td>
<td>Answer NO to all prompts until the schedule set prompt appears in the</td>
</tr>
<tr>
<td>set? Y/N</td>
<td>display. Press YES to enter the scheduling menu.</td>
</tr>
<tr>
<td>Monday set?</td>
<td>Press YES to set the schedule for Monday or NO to advance to Tuesday.</td>
</tr>
<tr>
<td>Occupied</td>
<td>Press YES to set the occupied start time for Monday or NO to advance to</td>
</tr>
<tr>
<td>day? Y/N</td>
<td>Tuesday (selecting NO will leave the thermostat in the unoccupied</td>
</tr>
<tr>
<td>Occupied</td>
<td>Use the UP/DOWN arrow keys to set the occupied start time. Press YES</td>
</tr>
<tr>
<td>12:00 AM</td>
<td>to enter the time.</td>
</tr>
<tr>
<td>Unoccupied</td>
<td>Use the UP/DOWN arrow keys to set the unoccupied start time. Press YES</td>
</tr>
<tr>
<td>12:00 AM</td>
<td>to enter the time.</td>
</tr>
<tr>
<td>Tuesday set?</td>
<td>Press YES to set the schedule for Tuesday or NO to advance to Wednesday.</td>
</tr>
<tr>
<td>Copy Y/N</td>
<td>Press YES to copy the schedule from the previous day. Press NO to set</td>
</tr>
<tr>
<td>previous</td>
<td>a different schedule.</td>
</tr>
<tr>
<td>Wednesday</td>
<td>If YES was pressed, the next prompt is for Wednesday. Repeat procedure</td>
</tr>
<tr>
<td>set? N/A</td>
<td>for all days of the week.</td>
</tr>
<tr>
<td>Exit? Y/N</td>
<td>After setting the schedule for all days of the week, following the last</td>
</tr>
<tr>
<td></td>
<td>entry for Sunday, press YES to return to the Status Display Menu or NO</td>
</tr>
<tr>
<td></td>
<td>to start again at Monday.</td>
</tr>
</tbody>
</table>

---

T600HCP-1 Programmable Thermostat Installation Instructions 13
Programming the Daily Schedule – Four-Event

The schedule setting menu is used to enter the occupied and unoccupied time periods for each day of the week. The schedule-setting menu reflects either a two- or four-event schedule per day based on what was selected in the Selecting the Number of Events (2/4 event) menu during the configuring process. If the schedule-setting menu does not reflect a four-event schedule, return to the Selecting the Number of Events (2/4 event) menu in the configuration process and select four events.

When changing the time, pressing the UP/DOWN arrow keys changes the time in 1-minute increments. Holding the keys down changes the time in 30-minute increments.

Note: Programming one of the digital inputs to remote NSB disables the menu.

Follow the steps in Table 7 to set the time schedule for a four-event schedule. Refer to Table 8 for an example of a four-event office schedule.

Table 7: Programming the Daily Schedule – Four-Event

<table>
<thead>
<tr>
<th>Event</th>
<th>Event #1</th>
<th>Event #2</th>
<th>Event #3</th>
<th>Event #4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Occupied</td>
<td>Unoccupied</td>
<td>Occupied 2</td>
<td>Unoccupied 2</td>
</tr>
<tr>
<td></td>
<td>Cool</td>
<td>Heat</td>
<td>Cool</td>
<td>Heat</td>
</tr>
<tr>
<td>Monday</td>
<td>72°F (22°C)</td>
<td>70°F (21°C)</td>
<td>80°F (27°C)</td>
<td>62°F (17°C)</td>
</tr>
<tr>
<td>Tuesday</td>
<td>7:00 A.M.</td>
<td>5:00 P.M.</td>
<td>12:00 P.M.*</td>
<td>12:00 P.M.*</td>
</tr>
<tr>
<td>Wednesday</td>
<td>7:00 A.M.</td>
<td>5:00 P.M.</td>
<td>12:00 P.M.*</td>
<td>12:00 P.M.*</td>
</tr>
<tr>
<td>Thursday</td>
<td>7:00 A.M.</td>
<td>5:00 P.M.</td>
<td>7:00 P.M.</td>
<td>10:30 P.M.</td>
</tr>
<tr>
<td>Friday</td>
<td>7:00 A.M.</td>
<td>5:00 P.M.</td>
<td>7:00 P.M.</td>
<td>10:30 P.M.</td>
</tr>
<tr>
<td>Saturday</td>
<td>12:00 P.M.*</td>
<td>12:00 P.M.*</td>
<td>12:00 P.M.*</td>
<td>12:00 P.M.*</td>
</tr>
<tr>
<td>Sunday</td>
<td>12:00 P.M.*</td>
<td>12:00 P.M.*</td>
<td>12:00 P.M.*</td>
<td>12:00 P.M.*</td>
</tr>
</tbody>
</table>

* Programming events to the same time cancels the last period and leave the thermostat in unoccupied mode.

Table 8: Four-Event Office Schedule

<table>
<thead>
<tr>
<th>Event</th>
<th>Event #1</th>
<th>Event #2</th>
<th>Event #3</th>
<th>Event #4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Occupied</td>
<td>Unoccupied</td>
<td>Occupied 2</td>
<td>Unoccupied 2</td>
</tr>
<tr>
<td></td>
<td>Cool</td>
<td>Heat</td>
<td>Cool</td>
<td>Heat</td>
</tr>
<tr>
<td>Monday</td>
<td>7:00 A.M.</td>
<td>5:00 P.M.</td>
<td>12:00 P.M.*</td>
<td>12:00 P.M.*</td>
</tr>
<tr>
<td>Tuesday</td>
<td>7:00 A.M.</td>
<td>5:00 P.M.</td>
<td>12:00 P.M.*</td>
<td>12:00 P.M.*</td>
</tr>
<tr>
<td>Wednesday</td>
<td>7:00 A.M.</td>
<td>5:00 P.M.</td>
<td>12:00 P.M.*</td>
<td>12:00 P.M.*</td>
</tr>
<tr>
<td>Thursday</td>
<td>7:00 A.M.</td>
<td>5:00 P.M.</td>
<td>7:00 P.M.</td>
<td>10:30 P.M.</td>
</tr>
<tr>
<td>Friday</td>
<td>7:00 A.M.</td>
<td>5:00 P.M.</td>
<td>7:00 P.M.</td>
<td>10:30 P.M.</td>
</tr>
<tr>
<td>Saturday</td>
<td>12:00 P.M.*</td>
<td>12:00 P.M.*</td>
<td>12:00 P.M.*</td>
<td>12:00 P.M.*</td>
</tr>
<tr>
<td>Sunday</td>
<td>12:00 P.M.*</td>
<td>12:00 P.M.*</td>
<td>12:00 P.M.*</td>
<td>12:00 P.M.*</td>
</tr>
</tbody>
</table>

Answer NO to all prompts until the schedule set prompt appears in the display. Press YES to enter the scheduling menu.

Press YES to set the schedule for Monday or NO to advance to Tuesday.

Press YES to set the occupied start time for Monday or NO to advance to Tuesday (selecting NO will leave the thermostat in the unoccupied mode for the entire day).

Use the UP/DOWN arrow keys to set the first occupied start time. Press YES to enter the time.

Use the UP/DOWN arrow keys to set the first unoccupied start time. Press YES to enter the time.

Press YES to set the schedule for Tuesday or NO to advance to Wednesday.

Press YES to copy the schedule from the previous day. Press NO to set a different schedule.

If YES was pressed, the next prompt is for Wednesday. Repeat procedure for all days of the week.

After setting the schedule for all days of the week, following the last entry for Sunday, press YES to return to the Status Display Menu or NO to start again at Monday.
Setting the Day and Time

Upon initial power-up (or after a power loss of greater than 6 hours), the T600HCP-1 shows a SetClock alarm. As the thermostat scrolls through the Status Display Menu, the SetClock message causes the backlight to light up until the clock is set.

When adjusting the time with the UP/DOWN arrow keys, holding the keys down changes the time in 30-minute increments.

To set the clock while in the Main User Menu:

1. Answer NO to all prompts until the clock set prompt appears in the display. Press YES to enter the clock set menu.
2. Press YES to set the time or NO to advance to the day set menu.
3. Use the UP/DOWN arrow keys to adjust the time. When the correct time is displayed, press YES to store the time.
4. Press YES to enter the day set menu or NO to enter the clock format menu.
5. Use the UP/DOWN arrow keys to adjust the day. When the correct day is displayed, press YES to store the day.
6. Press YES to choose the time format or NO to access the Main User Menu exit prompt.
7. Use the UP/DOWN arrow keys to select the desired time format. Press YES to enter format.
8. Press YES to return to the Status Display Menu or NO to return to the time set menu.

When the thermostat scrolls through the day and time, the new day and time should be displayed (and no alarm/backlight should be present). If the day or time is incorrect, repeat the Setting the Day and Time procedure.

Setting Permanent Hold

This menu is used to set a permanent hold on the internal scheduling or resume the schedule. The permanent hold is typically used for non-scheduled events that extend for long periods of time.

Following are three selections for this menu:

- **Permanent Occupied Hold (occ hold)**
  This selection puts the thermostat into a permanent occupied mode using the occupied setpoints. Occupied hold appears in the Status Display Menu when this selection is active.

- **Permanent Unoccupied Hold**
  This selection puts the T600HCP-1 into a permanent unoccupied mode using the unoccupied setpoints. Unoccup hold appears in the Status Display Menu when this selection is active.

- **Resume**
  This selection cancels the permanent hold and enables the regular program schedule.

To enable the permanent hold feature while in the Main User Menu:

1. Answer NO to all prompts until the schedule hold prompt appears in the display. Press YES to set the schedule hold type.
2. Use the UP/DOWN arrow keys to locate the desired permanent hold type (or resume schedule). Press YES to enter the choice.
3. Press YES to return to the Status Display Menu or NO to change the schedule hold selection again.

Accessories

Using the information in Table 9, contact the nearest Johnson Controls branch office or wholesale distributor to order these accessories.

Table 9: Optional Accessories (Includes Mounting Hardware)

<table>
<thead>
<tr>
<th>Description</th>
<th>Product Code Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remote Indoor Temperature Sensor</td>
<td>SEN-600-1</td>
</tr>
<tr>
<td>Outdoor Air Temperature Sensor</td>
<td>SEN-600-2</td>
</tr>
<tr>
<td>Duct Mount Temperature Sensor</td>
<td>SEN-600-3</td>
</tr>
<tr>
<td>Remote Indoor Temperature Sensor with Occupancy Override and LED</td>
<td>SEN-600-4</td>
</tr>
</tbody>
</table>
Technical Specifications

<table>
<thead>
<tr>
<th>Product</th>
<th>T600HCP-1 Programmable Thermostat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Requirements</td>
<td>20-30 VAC, 50/60 Hz, 24 VAC nominal, Class 2</td>
</tr>
<tr>
<td>Relay Contact Rating</td>
<td>1 amper with in-rush surges up to 3 amperes, 30 VAC maximum, Class 2</td>
</tr>
<tr>
<td>Maximum Inductive</td>
<td></td>
</tr>
<tr>
<td>Digital Inputs</td>
<td>Relay dry contact only across the C terminal to DI1 or DI2</td>
</tr>
<tr>
<td>Recommended Wire Size</td>
<td>18 gauge maximum, 22 gauge recommended</td>
</tr>
<tr>
<td>Thermostat Measurement</td>
<td>-40 to 122°F (-40 to 50°C)</td>
</tr>
<tr>
<td>Range</td>
<td></td>
</tr>
<tr>
<td>Sensor Type:</td>
<td>Local 10 K ohm NTC thermistor</td>
</tr>
<tr>
<td>Resolution</td>
<td>±0.2°F (±0.1°C)</td>
</tr>
<tr>
<td>Control Accuracy</td>
<td>±0.9°F (±0.5°C) @ 70°F (21°C) typical calibrated</td>
</tr>
<tr>
<td>Outdoor Air Temperature</td>
<td>-40 to 50°C (-40 to 122°F)</td>
</tr>
<tr>
<td>Indication Range</td>
<td></td>
</tr>
<tr>
<td>Setpoint Control Range</td>
<td>Cooling: 54 to 100°F (12 to 37.5°C) in 1/2 degree increments</td>
</tr>
<tr>
<td>Heating: 40 to 90°F (4.5 to 32°C) in 1/2 degree increments</td>
<td></td>
</tr>
<tr>
<td>Minimum Deadband</td>
<td>(Between heating and cooling) 2 F° or 1 C°</td>
</tr>
<tr>
<td>Ambient Operating</td>
<td>32 to 122°F (0 to 50°C); 0 to 95% RH noncondensing</td>
</tr>
<tr>
<td>Conditions</td>
<td></td>
</tr>
<tr>
<td>Ambient Storage</td>
<td>-22 to 122°F (-30 to 50°C); 0% to 95% RH noncondensing</td>
</tr>
<tr>
<td>Conditions</td>
<td></td>
</tr>
<tr>
<td>Dimensions (H x W x D)</td>
<td>4.94 x 3.38 x 1.13 in. (125 x 86 x 29 mm)</td>
</tr>
<tr>
<td>Shipping Weight</td>
<td>0.75 lb (0.34 kg)</td>
</tr>
<tr>
<td>UL and cUL Listing</td>
<td>File E27734 with CCN’s XAPX (US, UL 873) and XAPX7 (Canada, CSA C22.2 No. 24)</td>
</tr>
<tr>
<td>CE Compliance</td>
<td>CE Directives EN50081-1: 1992 EMC Emission; EN50082-2 EMC Immunity (Pending)</td>
</tr>
<tr>
<td>FCC Compliance</td>
<td>This equipment has been tested and found to comply with the limits for a Class A digital device and verified to Class B pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when this equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.</td>
</tr>
</tbody>
</table>

The performance specifications are nominal and conform to acceptable industry standards. For application at conditions beyond these specifications, consult the local Johnson Controls office. Johnson Controls, Inc. shall not be liable for damages resulting from misapplication or misuse of its products.

This device complies with Class A Part 15 of the FCC rules. It was also verified to Class B. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference.
(2) This device must accept any interference received, including interference that may cause undesired operation.

This Class A digital apparatus meets all of the requirements of the Canadian Interference-Causing Equipment Regulations. Cet appareil numérique de la Classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.