

# Installation and Programming Guide Programmable Thermostat for Floor Heating System OTH3600P-GA



## TECHNICAL SPECIFICATIONS

The OTH3600P-GA programmable thermostat is designed to control your floor heating system. The thermostat has an integral ground fault protection (Class A – GFCI) that can detect a leakage current of 5 mA and is equipped with an entry for connecting a temperature sensor which is supplied with the thermostat.

For optimum performance, a recommended clearance of 12 in. (305 mm) above and below the thermostat and 3 in. (76 mm) on each side of the thermostat.

## ABOUT YOUR THERMOSTAT

The programmable thermostat has two (2) temperature control modes:

- **A Mode** : Ambient temperature control and possibility of limiting the temperature of the floor using an external temperature sensor.
- **F Mode** : Floor temperature control using an external temperature sensor and possibility of limiting the ambient temperature.

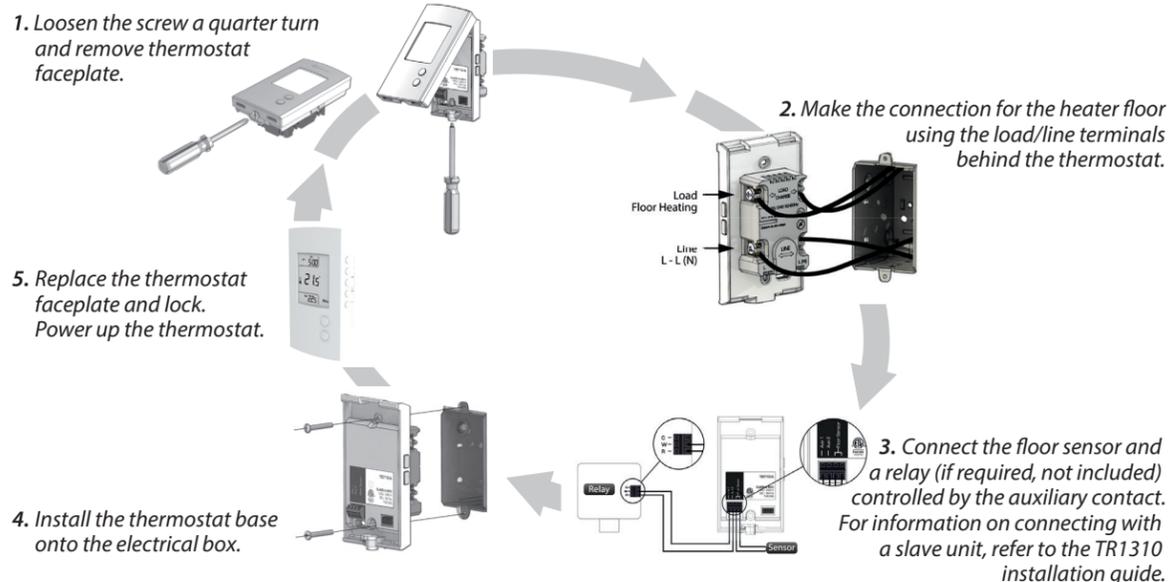
The OTH3600P-GA also as an auxiliary contact that can function in 3 different modes. Possibility of controlling supplemental heat sources to be added by either using a slave module for heated floors or using a relay and a low-voltage transformer for an electric heater. The modes are set-up in the installer mode.

- **SLA Mode** (A and F modes): Auxiliary contact for slave module. (TR1310 sold separately).
- **Shrt Mode**<sup>1</sup> (A mode only): Auxiliary contact on short cycle (15-second).
- **Fan Mode**<sup>1</sup> (A mode only): Auxiliary contact on long cycle (15-minute).

<sup>1</sup> The thermostat controls the ambient temperature using the heated floor. When the floor reach is maximum temperature or the floor is at 100% capacity and the ambient temperature is below the setpoint, the thermostat will close the auxiliary contact.

## INSTALLATION

Installation must be carried out by a certified electrician and must comply with local and national electrical codes in effect. To avoid risk of electric shock, disconnect all power suppliers to the main power panel before working on any circuit.



## GROUND FAULT PROTECTION

The thermostat is equipped with a ground fault protection that can detect a leakage current of 5 mA. When leakage current is detected the ground fault protection is triggered and quickly interrupts the power supply to prevent any serious injuries.



## RESETTING THE GROUND FAULT PROTECTION

The RESET button warning light flashes red when the ground fault protection is triggered. If the RESET button warning light comes on during normal operation of thermostat, simply reset the ground fault protection.

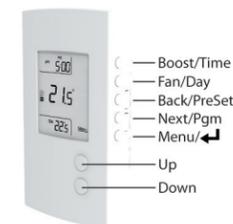
To reset the ground fault protection after the device is triggered, press the RESET button. The RESET warning light goes out. If for any reason this situation recurs, cut the power to the heating system from the main power panel and ask a qualified electrician to verify the installation.

## TESTING THE GROUND FAULT PROTECTION

This test should be performed on a monthly basis to ensure the suitable operation of the ground fault protection.

1. Press the TEST button warning light: If the red RESET button warning light does not light up, the test has failed. Cut the power to the heating system from the main power panel and ask a qualified electrician to verify the installation. If the warning light lights up, proceed to step 2.
2. Press the RESET button to restart the thermostat base.

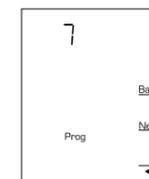
## MAIN CONFIGURATION MENU FOR INSTALLER



1. Press simultaneously the Menu button and second-to-last button (Next) and hold for 5 seconds to access installer settings.
2. Press Up or Down to change the setting displayed.
3. Press Next to go forward or Back to go back.
4. Return ← to exit the configuration menu.

## INSTALLER SETTINGS DISPLAY ORDER

1. User interface selection: Programmable 7 days (7), Programmable 5/2 days (5/2), or Non programmable (NP). (Default: 7 days).



*IMPORTANT: If the "Non programmable" interface is selected in the installer settings, the time and programming schedule menus will no longer be available.*

2. Keypad lock activation (Default: Off). If the keypad is not locked, skip to Step 6.



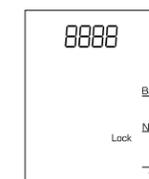
## INSTALLER SETTINGS DISPLAY ORDER (cont.)

Three (3) options possible:

- **OFF**: No lock.
- **INST**: Installer menu locked, but all other functions accessible and setpoint limited by lock min/max.
- **ALL**: Keypad fully locked.

*IMPORTANT: When the lock option is activated, all thermostat functions are deactivated except temperature adjustments within the range allotted in the installer menu. The word "LOCK" appears briefly onscreen when a button is pressed. In lock mode it is impossible to access the installer menu without the 4 digit code.*

3. If lock mode is activated, you will need to enter a 4 digit code.



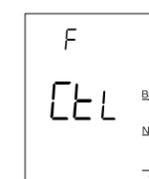
4. In lock mode only: Low temperature limit for heated floor only (Default: 5 °C).



5. In lock mode only: High temperature limit for heated floor only (Default: 36 °C).



6. Thermostat control mode, choose between 2 modes: A (Ambient), F (Floor), (Default: F).



7. Choose auxiliary contact mode: SLA, Fan, Shrt (visible in A mode only).



## MAIN USER CONFIGURATION MENU

### Same programming for all modes

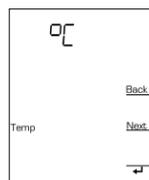
1. Press and hold **Menu** for 5 seconds to access user settings.
2. Press **Up** or **Down** to change displayed setting.
3. Press **Next** to go forward or **Back** to go back.
4. Press **Return**  to exit the configuration menu.

*Note: The thermostat will automatically save all changes and return to the regular display if no button is pressed for 1 minute.*

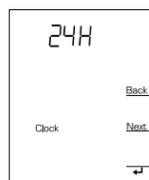
### Settings display order

**A Mode:** 1, 2, 3, 4, 8, 9, 10, 11, 12, 13.  
**F Mode:** 1, 2, 5, 6, 7, 10, 11, 12, 13.

1. Temperature display format: °C or °F (Default: °C).



2. Time display format: 24 hr. or 12 hr. (Default: 24 hr.).



3. Minimum ambient air temperature setpoint (Default: 5 °C).



4. Maximum ambient air temperature setpoint (Default: 36 °C).



5. Minimum floor temperature setpoint (Default: 5 °C).



6. Maximum floor temperature setpoint (Default: 36 °C).



7. Ambient temperature limit maximum (5 °C to 36 °C, Default: OFF).



8. Floor temperature limit minimum (5 °C to 36 °C, Default: OFF).



9. Floor temperature limit maximum (5 °C to 36 °C, Default: OFF).



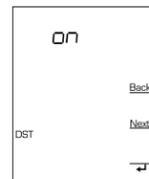
10. Floor sensor: 10k or 12k (Default: 10k)



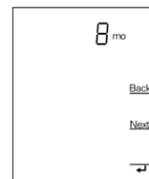
11. Automatic standard/daylight saving time adjustment (Default: Deactivated).

*Note: When the daylight saving time function is activated, the thermostat automatically switches to daylight saving time the second Sunday in March and to standard time the first Sunday in November.*

The correct date must be entered to use this function.



Enter the year, followed by the month and day.



12. Backlighting (Default: AUTO—activates for 12 seconds after a button is pressed).



13. Early Start: OFF / ON (Default: OFF).



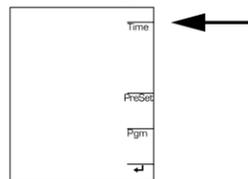
## PROGRAMMING MENU

### Same programming for all modes.

1. Press **Menu** button to access the configuration menu.

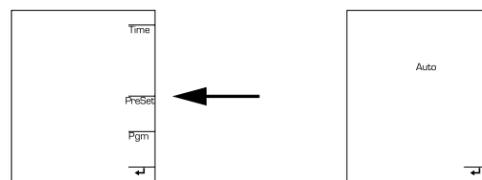


2. Setting time and date.  
 Press **Time** and either press **Time** again to set the time or press **Day** to set the date.  
 Press **Up** or **Down** to change time or date settings.



*If DST (daylight saving time) is activated, you can enter the year, month, and date by pressing **Next** (**Day** button is not activated).*

3. To access operating modes, choose **Preset**.  
 Then select the operating mode by pressing **Up** or **Down**. Once you have selected the mode, you can go back by hitting **Return** .



### The thermostat has 4 operating modes:

- **No freeze:** Sets temperature setpoint at 5 °C (41 °F). Perfect for a second home or cottage during prolonged absences.
- **Manuel:** In this mode, all settings must be adjusted manually.
- **Automatic:** In this mode, the thermostat automatically changes the temperature settings at specific times of day. You can program it to activate up to 4 times a day.

The thermostat features 2 different programming methods (For information on choosing a programming method, see the installer settings):

- 5-2: One program for weekdays (Monday to Friday) and one for the weekend.
- 7: A different program for every day of the week.

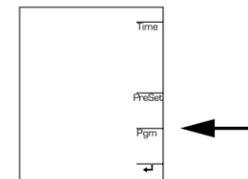
### Default program

|   | Period | Monday to Friday |               | Saturday & Sunday |               |
|---|--------|------------------|---------------|-------------------|---------------|
|   |        | Start            | Temperature   | Start             | Temperature   |
| 1 | Wake   | 6:00             | 21 °C (70 °F) | 6:00              | 21 °C (70 °F) |
| 2 | Leave  | 8:00             | 16 °C (61 °F) | -                 | -             |
| 3 | Return | 18:00            | 21 °C (70 °F) | -                 | -             |
| 4 | Sleep  | 22:00            | 16 °C (61 °F) | 22:00             | 16 °C (61 °F) |

- **Off:** Sleep mode. If no heating is required (e.g., summertime, cottage, etc.), you can put the thermostat in Sleep mode. Please note when this mode is activated the heater will not operate, regardless of the room or setpoint temperature.

4. To change the schedule in automatic mode, follow these steps:

In the main menu, press **Program (Pgm)**.



You are now in the Programming menu.



- Press **Day** to set the day.
- Press **Up** or **Down** to select the day.
- Press **Pgm** to set the period.
- Press **Up** or **Down** to select the period.
- Press **Time** to select the time.
- Press **Up** or **Down** to set the clock.
- Press **Set** to select the setpoint.
- Press **Up** or **Down** to adjust the setpoint.
- Repeat steps 3 to 10 for each period you wish to change.
- Press **Return**  to return to the normal display.

To copy a period and set it for every day, press and hold **Day** for 3 seconds.

To delete a period, set the setpoint below the minimum or set the time between 11:45 p.m. and 00:00.

*Note: The thermostat will automatically save all changes and return to the regular display if no button is pressed for 1 minute.*

### Boost mode functionality

#### Boost mode screen



- The **Boost** mode is only available in Ambient mode with auxiliary contact.
- The **Boost** button allows you to set the heater connected thru auxiliary contact to its maximum for a specific time period.
- **Boost** mode is available only in **A/Shrt** and **A/Fan** modes.
- Every time you press the **Boost** button, the Boost mode duration increases as follows: 10 min., 20 min., 30 min., 1 hr., 2 hr., 3 hr., 4 hr., 5 hr., 6 hr., 7 hr., 8 hr.
- At the end of **Boost** mode, the thermostat returns to the previous temperature control mode. You can cancel **Boost** mode at any time by pressing **Return** (**Back**).

## POWER FAILURE

*Note: The following description applies only if the thermostat was running for at least 2 hours before the power failure.*

In the event of a power failure, the screen will turn off and your settings will be saved. However, if the failure exceeds 8 hours, you will have to reset the time and date. When power is restored, the thermostat will return to the operating mode in effect prior to the failure.

## TROUBLESHOOTING

### Error codes

- E1:** The thermostat temperature sensor is defective (open).
- E2:** The thermostat temperature sensor is defective (short circuit).
- OL:** The thermostat is overheated; make sure the load is less than 15 amperes.
- HH:** The thermostat temperature sensor has detected a temperature above the setpoint range (too hot).
- LL:** The thermostat temperature sensor has detected a temperature below the setpoint range (too cold).
- E1F:** The floor temperature sensor is defective or not connected (open).
- E2F:** The floor temperature sensor is defective (short circuit). Make sure there is no short circuit in the sensor connector.
- HHF:** The floor temperature sensor has detected a temperature above the setpoint range (too hot).
- LLF:** The floor temperature sensor has detected a temperature below the setpoint range (too cold).

## TECHNICAL DATA SHEET

OTH3600P-GA  
 Voltage: 120/208/240VAC, 50/60 Hz  
 Maximum load: 15A/1800W @ 120V,  
 15A/3120W@208V, 15A/3600W @ 240V  
 Temperature control range: 5 °C to 36 °C (41 °F to 97 °F)  
 Temperature display range: 0 °C to 70 °C (32 °F to 158 °F)  
 Resolution: 0.5 °C or 1 °F  
 Storage Temperature: -20 °C to 50 °C (-4 °F to 122 °F)  
 Auxiliary contact: 0.1A @ 24VAC

**This product must be installed with the floor sensor provided by the manufacturer.**

## WARRANTY

### Three (3) year limited warranty

The manufacturer warrants the components of the OTH3600P-GA against defects in material and workmanship for a three (3) year period from the date of purchase, under normal use and service, when proof of purchase of such is provided. The obligation of the manufacturer is limited to replacement of the product (device) only and in no way whatsoever includes the cost of connecting or installing the device or replacement parts.

### CUSTOMER SERVICE

If you have any questions about this product, please contact our technical support team:

**Ouellet Canada Inc.:** 1 800 463-7043 • info@ouellet.com  
 www.ouellet.com

**Momento:** 1 866 930-7878 • www.momentoconfort.com

**Global Commander:** 1 855 247-5596 •  
 www.globalcommander.ca

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