# Installation Guide Smart Electronic Programmable Thermostat for Floor Heating System

# OTH3600-GA-ZB



# **TECHNICAL SPECIFICATIONS**

The OTH3600-GA-ZB 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.

#### Increasing or lowering the temperature

To adjust the temperature, press  $\,\Psi\,$  or  $\,\Lambda\,$  . The requested temperature will blink to confirm the new setpoint.

# **USER SETTINGS**

All the parameters of your thermostat can be programmed through the Ouellet application.

However, if your thermostat is not connected to your gateway and you wish to change the temperature format or the control cycle, you need to:

Get the setpoint to its minimum and hold the button for 10 seconds to access the menu.



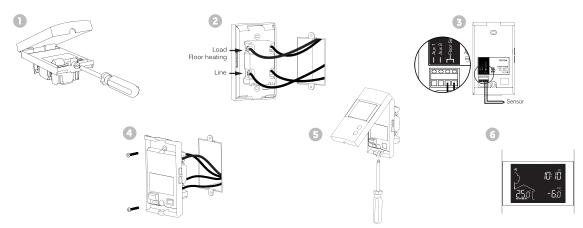
The following table lists the settings that can be changed directly on the thermostat.

# Warnings

The installation of this thermostat should be made by a certified electrician and must be installed in conformity with the national and local Electrical Codes.

Before starting the installation of your new thermostat, please make sure that the breakers for your heating system are off at the main electrical panel!

# **INSTALL YOUR THERMOSTAT**



- 1 Unlock and lift the thermostat cover.
- Connect the heating floor by using the wire connectors load / line located on the back of the thermostat. Connect the ground wire to the screw in the electrical box intended for this purpose.
- Make sure to firmly tighten the wire connectors for a secure connection. A loose connection can be a fire hazard.
- 3 Connect the sensor.
  [Only for control applications in F mode or with floor limit.]
- 4 Use the supplied screws to secure the thermostat base onto the electrical box.
- Replace the cover and lock.
- 6 Power up the thermostat. After performing a test sequence, the thermostat should display the floor temperature. If not, refer to the troubleshooting guide in this manual.

# Settings which can be modified on the device directly:

#	Name	Parameters & settings	Disp <b>l</b> ay
1	Load	<b>Load power</b> 0 watt to 3600 watt	1500
2	Display	Temperature format °C or °F (default: °C)	°C
3	Control	Control mode A (Air), F (Floor) (default: F)	F
4	Limit Floor Max	Maximum floor temperature (Only visible in A mode) 5 °C to 36 °C (default: OFF)	OFF
5	Aux	Assignment of auxiliary output OFF, EXP, 15 sec, 15 min (default: OFF)	OFF
6	Sensor	Floor sensor 10K or 12K (default: 10K)	10

#### #3) The thermostat offers 2 temperature regulation modes:

**F mode (default):** Regulates the floor temperature by means of an external temperature sensor with the possibility to limit ambient temperature.

**A mode:** Regulates ambient temperature with the possibility to limit floor temperature by means of an external temperature sensor.

# #4) Maximum floor temperature limit (A mode)

The thermostat limits floor heating to the set temperature to ensure it does not exceed the selected limit. Ideal for protecting engineered wood floors.

#### #5) Assigning the auxiliary output (A mode):

The thermostat provides an auxiliary output that has three functions which are set from the user settings.

**15 sec function:** Short cycle auxiliary output [15 seconds]. Used for a heater controlled through an electronic relay [SSR].

**15 min function:** Long cycle auxiliary output (15 minutes). Used for a heater controlled through an electromechanical relay or equipped with a fan.

In the 15 sec and 15 min functions, the thermostat controls the ambient temperature with the floor. Once the floor temperature has reached its limit, if the desired ambient temperature is not reached, the auxiliary output activates the heating device to reach the set temperature. [The auxiliary output acts as a second heating stage.]

**EXP function:** Auxiliary output to connect several heating floors (TR1310 sold separately).

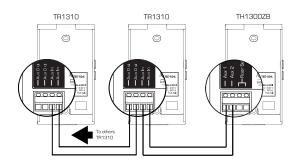
**OFF function (default):** Disables the auxiliary output.

To disconnect a thermostat from a network, refer to the disconnection procedure on the back of this guide.

When installing your floor heating system: add a second sensor in the floor whose tip can be stored in the thermostat housing. This additional sensor can be plugged in and used as a replacement without altering your floor heating system.

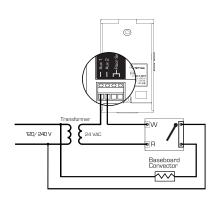
# **CONNECT AN EXPANSION UNIT (TR1310)**

It is possible to connect up to 10 expansion units to the same device. (EXP function)



# **CONNECT THE AUXILIARY OUTPUT**

Second heating stage (15 sec / 15 min functions)



# **GROUND FAULT PROTECTION**

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

# Resetting the ground fault protection

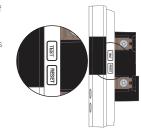
The RESET button warning light turns ON (red) when the ground fault protection is triggered. If the RESET button warning light turns ON during normal operation of the thermostat, simply press the RESET button to reset the ground fault protection. The light will turn OFF. If for any reason this situation occurs again, cut the power to the heating system from the main electrical panel and ask a qualified electrician to verify the installation.

### Testing the ground fault protection

This thermostat has an Auto Test which periodically verifies the correct operation of the protection circuit. You can also do this manually:

1) Press the TEST button. If the RESET button's red warning light does not turn ON the test has failed. Cut the power to the heating system from the main electrical panel and ask a qualified electrician to verify the installation.

2) Press the RESET button to restart the thermostat's base



# TROUBLESHOOTING GUIDE

What should I do if the E1F code appears on my thermostat display?

The E1F code means that the thermostat is in "Floor" mode and there is no connected sensor. If your thermostat is not intended to control an heated floor change the thermostat's control mode for the "A mode"

# LINK YOUR THERMOSTAT TO YOUR GATEWAY



Link your network

to the application

Connect to your network, the wireless thermostat that is closest to the GT130 by pressing simultaneously the  $\uparrow$  and  $\downarrow$  buttons.

On the thermostat display: Flashes= Connecting Remains lit= Connected



If the connectivity fails, an error message will appear on the display.



To link your wireless network to the application, refer to the GT130 installation guide available on our website.

When all the thermostats are connected, press again on the button of the GT130 to close the connectivity session.

Connect all your wireless thermostats the same way. by going to the next closest thermostat.



# DISCONNECT YOUR THERMOSTAT FROM A ZIGBEE COMPATIBLE SYSTEM

To disconnect your thermostat from the Zigbee compatible hub, press the  $\uparrow$  and  $\downarrow$  buttons simultaneously for 10 seconds. The symbol will disappear from the display.

# **TECHNICAL SPECIFICATIONS**

Operating voltage: 120/208/240 Vac, 50/60 Hz

For more information, visit our website at:

# Maximum load:

1800 W @ 120 V / 15 A 3120 W @ 208 V / 15 A 3600 W @ 240 V / 15 A

www.ouellet.com

Setpoint range: 5 °C to 36 °C (41 °F to 96 °F) Display range: 0 °C to 50 °C [32 °F to 99 °F]

**Resolution:**  $\pm$  0.5 °C ( $\pm$  1 °F)

**Storage:** -20 °C to 50 °C [-4 °F to 122 °F] Auxiliary output: 24 Vac / Vdc / 0.1 A GFCI protection: Class A [5mA]

Zigbee profile 3.0 Frequency: 2.4 GHz

Transmission power: +20 dBm Receiver sensitivity: -108 dBm

Trasmitter module IC: 21098-ESPWROOM32 / FCC ID: 2AC7Z-ESPWROOM32

This device complies with Industry Canada license exempt RSS standard(s). Operation is subject to the following two conditions:

(1) this device does not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can against national interference in establishment establishment equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment OFF and ON, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna. Increase the separation between the equipment and receiver

Connect the equipment into an outlet on a circuit

different from that to which the receiver is connected Consult the dealer or an experienced radio/TV technician for help.

#### **WARRANTY**

The manufacturer warrants the components of the OTH3600-GA-ZB against defects in material and workmanship for a five (5) year period from the date of purchase, under normal use and service, when proof of purchase of such is provided to the manufacturer. The obligation of the manufacturer, under the terms of this warranty, will be to supply a new unit and this releases the manufacturer from paying the installation costs or other secondary charges linked to replacing the unit or the components.

# **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.oue**ll**et.com

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

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