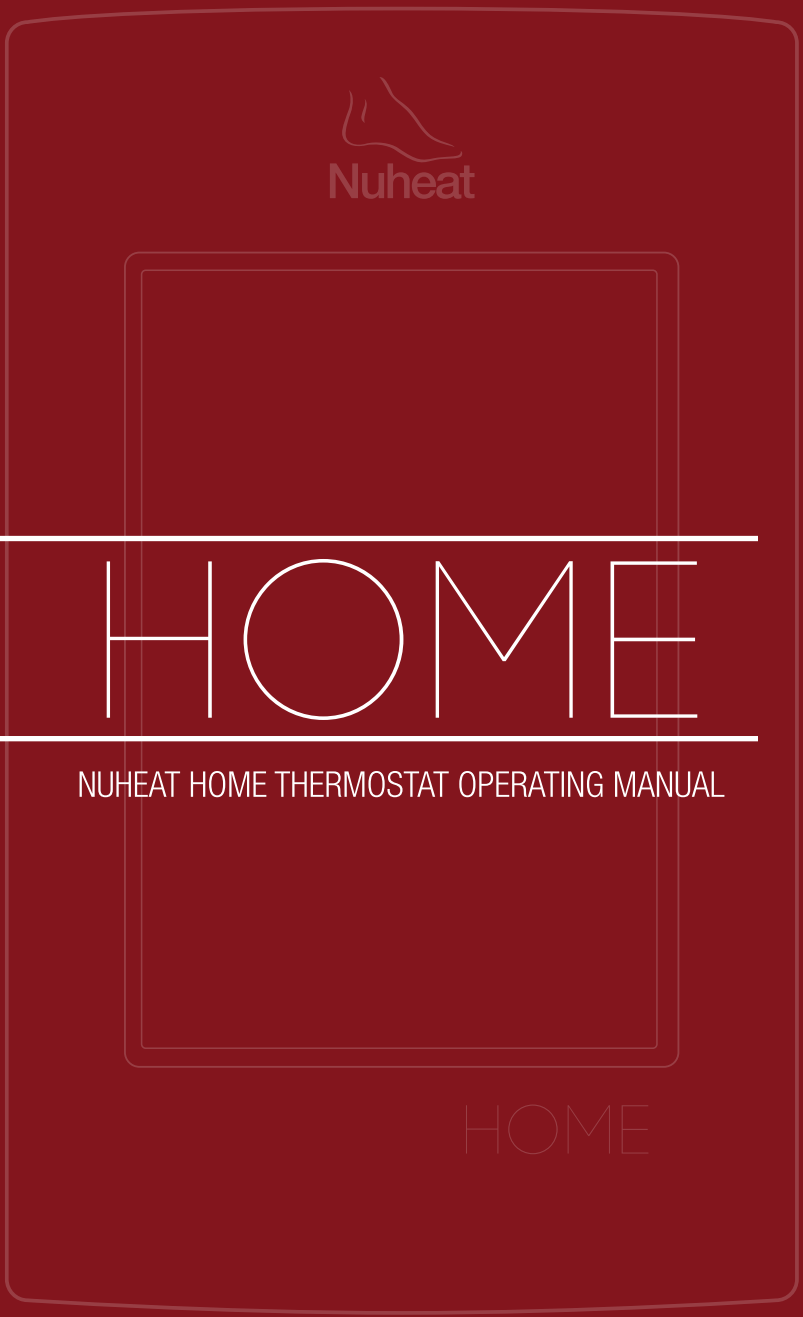



# NUHEAT HOME THERMOSTAT OPERATING MANUAL

Nuheat®

© 2014 Nuheat Industries Limited. All rights reserved.
The entire contents of this manual, including but not limited to text, images, and the selection and arrangement of information (collectively the “Materials”), are protected by copyright and other intellectual property laws under the laws of Canada and other countries.

# TABLE OF CONTENTS


INTRODUCTION ..... 4
SYSTEM TESTS ..... 5
SETUP WIZARD ..... 5
GFCI ..... 5

SECTION 1: HOME SCREEN ..... 6
1.1 Temporary Bypass and Hold Options ..... 7
1.2 Energy Use ..... 8
1.3 Settings ..... 8

SECTION 2: SETUP/PREFERENCES ..... 9
2.1 Language ..... 9
2.2 Date ..... 9
2.3 Time ..... 9
2.4 Unit ..... 10
2.5 Operating Mode ..... 10
2.6 Temperature Control ..... 11
2.7 Temperature Display ..... 12
2.8 Floor Type ..... 12
2.9 Early Start ..... 12
2.10 Floor Limit ..... 13
2.11 Screen Brightness ..... 13
2.12 Screensaver ..... 13

SECTION 3: PROGRAM/SCHEDULE ..... 14

SECTION 4: THERMOSTAT INFORMATION ..... 15

SECTION 5: FACTORY RESET ..... 16

# INTRODUCTION

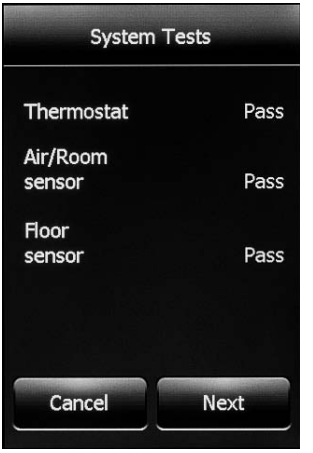
## THANK YOU FOR CHOOSING NUHEAT HOME!

You have chosen the most advanced thermostat to control your Nuheat electric floor heating system. This manual will cover each of the features of the Nuheat HOME thermostat.

# SYSTEM TESTS

The Nuheat HOME thermostat features a series of diagnostic tests to confirm the thermostat is installed and functioning properly.

The *System Tests* option is available the first time the thermostat is connected to power or after a factory reset is initiated.




# SETUP WIZARD

The Nuheat HOME thermostat features a *Setup Wizard* to guide you through the basic setup process.

The *Setup Wizard* is available the first time the thermostat is connected to power or after a factory reset is initiated. Refer to section 4 on page 15.

# GFCI

The Nuheat HOME thermostat has a built-in GFCI (Ground Fault Circuit Interrupter). The GFCI protects against risks of electrocution caused by a current leakage. If the current leakage exceeds 5 mA, the GFCI will automatically be triggered, thus cutting power to the floor heating system. To indicate the fault, a message will appear on the screen informing you of the fault. To reset the GFCI, press the button on the right side of the thermostat. If problem persists, contact Nuheat at 1.800.778.WARM(9276).

# SECTION 1: HOME SCREEN

1. Change date and time
2. Current temperature
3. Target temperature or setpoint
4. Operating mode - *Auto** means the thermostat is following the program/schedule. *Manual* means the thermostat is NOT following the program/schedule and is being controlled manually. Refer to section 2.5 on page 10.
5. Increase the temperature
6. Decrease the temperature
7. Heating indicator - when visible, system is heating
8. Access *Energy Use* data
9. Access *Settings* menu

*When thermostat is in *Auto* mode:

- *Resume Programmed Schedule* - only appears if thermostat is in *Auto* mode and temperature is manually increased/decreased
- *Hold Options* - only appears if thermostat is in *Auto* mode and temperature is manually increased/decreased. Refer to section 1.1 on page 7.

# SECTION 1: HOME SCREEN

## Section 1.1 Temporary Bypass and Hold Options

If the thermostat is following the program/schedule (in *Auto* mode), you can temporarily bypass the programmed temperature by pressing the ▲ or ▼ button until the desired *Set To* temperature is displayed. The thermostat will maintain this temperature until the start of the next period.

Press ***Resume Program*** to cancel the temporary bypass.

Press ***Hold Options*** to access more options.

## Hold Options

The Nuheat HOME thermostat allows you to set the duration you want to hold the temporary bypass temperature. Change the duration of the hold time by pressing the ▲ or ▼ arrows. Alternatively, press ***Permanent Hold*** to hold the temporary bypass temperature indefinitely.

Press ***Cancel*** to ignore the change or press ***Save*** to confirm.

On the home screen, press ***Resume Program*** to cancel the temporary bypass.

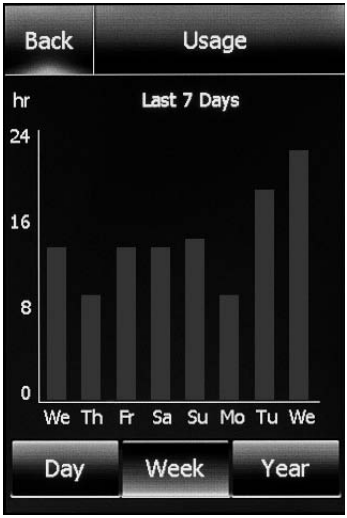
## Section 1.2 Energy Use

The Nuheat HOME thermostat tracks the amount of time your floor heating system has been heating.

Press ***Day/Week/Year*** to view the different time ranges.

Press ***Back*** to return to the home screen.

**NOTE:** The thermostat cycles the heating on and off to maintain the desired setpoint temperature. Actual heating time is normally a percentage of the scheduled ON time.




**Example:** Thermostat is programmed to turn on at 5:00pm and turn off at 8:00pm. The total ON time is 3 hours but the number of hours the system is actually HEATING may be a percentage of the total ON time.

## Section 1.3 Settings

The following options are available under the *Settings* menu:

- Setup/Preferences
- Program/Schedule
- Thermostat Info
- Factory Reset

# SECTION 2: SETUP/PREFERENCES

From the home screen, access the *Setup/Preferences* menu by pressing ***Settings>Setup/Preferences***. Press the ◀ or ▶ arrows at the top to view both pages of *Setup/Preferences*.

## Section 2.1 Language

Choose between ***English/Français/Español.***

Press ***Cancel*** to ignore the change or press ***Save*** to confirm.

## Section 2.2 Date

Set the current month/date/year. Select whether to enable/disable daylight savings time based on your region.

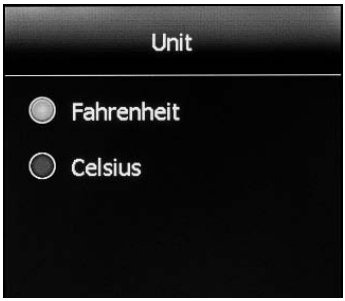
Press ***Cancel*** to ignore the change or press ***Save*** to confirm.

## Section 2.3 Time

Set the current time. Select whether you would like the time to sync with the network time once the thermostat is connected to your WiFi network.

Press ***Cancel*** to ignore the change or press ***Save*** to confirm.

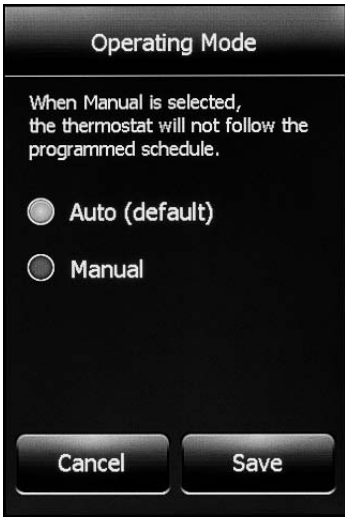
## Section 2.4 Unit




Choose between ***Fahrenheit*** or ***Celsius***.

Press ***Cancel*** to ignore the change or press ***Save*** to confirm.

## Section 2.5 Operating Mode




The thermostat has two operating modes:

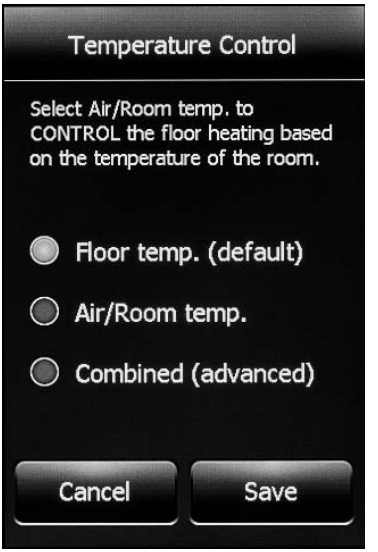
1. Auto - Use *Auto (default)* mode if you want the thermostat to follow a programmed heating schedule. Refer to section 3 on page 14.

2. Manual - In *Manual* mode, the programmed schedule is not followed. Use this mode if you always want to set the temperature manually. The thermostat will maintain the set temperature until it is manually changed or until you switch to another operating mode.

Press ***Cancel*** to ignore the change or press ***Save*** to confirm.

## Section 2.6 Temperature Control

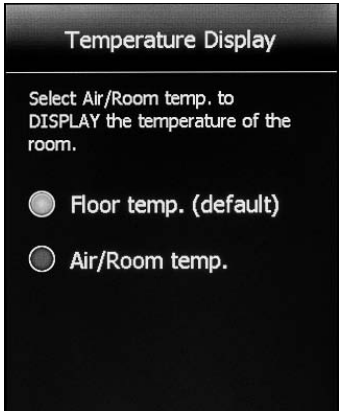
The thermostat can be configured to control the floor temperature, air/room temperature, or a combination of floor and air/room temperature.




| Temperature Control Setting | Description |
|---|---|
| Floor temp. (default) | The thermostat controls the floor temperature. |
| Air/Room temp. | The thermostat controls the air/room temperature. This setting disables the floor sensor and is useful if the floor sensor is damaged or not installed. |
| Combined (advanced) | For advanced users only - This setting allows control of the floor heating system based on air/room temperature but will not turn on the floor heating system if the floor temperature is above the floor limit. |

Press ***Cancel*** to ignore the change or press ***Save*** to confirm.

## Section 2.7 Temperature Display

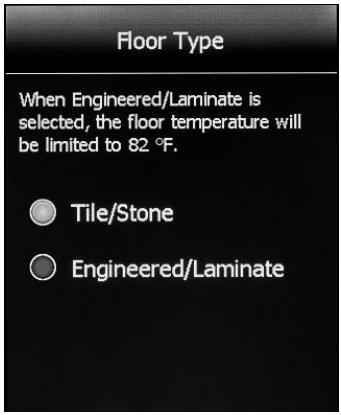



The thermostat can display either of the following temperatures on the home screen and screensaver:

- *Floor temp. (default)*
- *Air/Room temp.*

Press ***Cancel*** to ignore the change or press ***Save*** to confirm.

## Section 2.8 Floor Type




Set according to your flooring type. When *Engineered/Laminate* is selected, the floor temperature will be limited to 82°F / 28°C.

**NOTE:** This setting is not available if *Temperature Control* is set to *Air/Room temp.* Refer to section 2.6 on page 11.

Press ***Cancel*** to ignore the change or press ***Save*** to confirm.

## Section 2.9 Early Start

*Early Start* calculates the optimal time to start heating to ensure your floor reaches the desired temperature at the scheduled time in your program/ schedule. It only applies if your thermostat is following a programmed schedule (ie. thermostat is in *Auto* mode).

Press ***Cancel*** to ignore the change or press ***Save*** to confirm.

## Section 2.10 Floor Limit

Set the maximum temperature you want the floor to reach. The floor heating will not turn on if the floor temperature is above the set floor limit. If the floor limit is set too low, your floor heating system will not turn on. Nuheat suggests leaving the floor limit at the default factory temperature setting.

**NOTE:** This setting is not available if *Temperature Control* is set to *Air/Room temp.* Refer to section 2.6 on page 11.

Press ***Cancel*** to ignore the change or press ***Save*** to confirm.

## Section 2.11 Screen Brightness

Set the desired screen brightness.

Press ***Cancel*** to ignore the change or press ***Save*** to confirm.

## Section 2.12 Screensaver

The thermostat will display the screensaver after two minutes of inactivity. You can choose what information to display on the screensaver.

**NOTE:** Weather information is only available if the thermostat is connected to your WiFi network.

Press ***Cancel*** to ignore the change or press ***Save*** to confirm.

# SECTION 3: PROGRAM/SCHEDULE

## Section 3.1 Program/Schedule

From the home screen, access the *Program/Schedule* menu by pressing ***Settings>Program/Schedule***.

Below is the default schedule of the Nuheat HOME thermostat:

**Weekday**

| Period | Start Time | Floor Temperature | |
|---|---|---|---|
| | | Tile | Wood |
| Wake | 6:00 am | 88°F (31°C) | 82 °F (28°C) |
| Leave | 9:00 am | 74°F (23°C) | 74 °F (23°C) |
| Return | 5:00 pm | 88°F (31°C) | 82 °F (28°C) |
| Sleep | 11:00 pm | 74°F (23°C) | 74 °F (23°C) |

**Weekend**

| Period | Start Time | Floor Temperature | |
|---|---|---|---|
| | | Tile | Wood |
| Wake | 8:00 am | 88 °F (31°C) | 82°F (28°C) |
| Sleep | 11:00 pm | 74 °F (23°C) | 74 °F (23°C) |

To adjust the setpoint(s):

1. Use the ◀ or ▶ arrows to toggle between weekdays and weekend days.
2. Select the period that you want to adjust.
3. Using the ▲ or ▼ arrows, adjust the time and temperature of the setpoint.
4. Press ***Cancel*** to ignore the change or press ***Save*** to confirm.

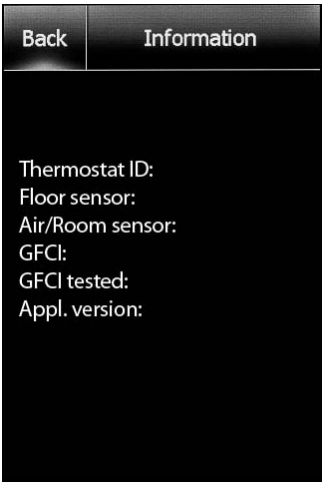
To set a new program/schedule, Press ***New Program*** at the bottom of the screen:

1. Select the days that share the same schedule.
2. Press ***Next***.
3. Select the period that you want to adjust.
4. Using the ▲ or ▼ arrows, adjust the time and temperature of the setpoint.
5. Press ***Cancel*** to ignore the change or press ***Save*** to confirm.
6. Press ***Next***.
7. Repeat steps 1 to 6 until all days have been programmed.
8. Press ***Done*** to save the program/schedule.

# SECTION 4: THERMOSTAT INFORMATION

## Section 4.1 Thermostat Information

From the home screen, access the *Thermostat Info* items by pressing ***Settings>Thermostat Info***.
Press the ◀ or ▶ arrows at the top to view both pages of thermostat information:




- **Thermostat ID** - Unique serial number assigned to the thermostat during manufacturing.
- **Floor sensor** - Status of the floor sensor.
- **Air/Room sensor** - Status of the built-in air/room temperature sensor.
- **GFCI** - Status of the GFCI. If ***?*** appears, it means the GFCI has not been tested. Refer to GFCI Section on page 5.
- **GFCI tested** - Date that the GFCI was last tested.
- **Appl. version** - Firmware version number (for internal use during manufacturing).

# SECTION 5: FACTORY RESET

## Section 5.1 Factory Reset

From the home screen, access the *Factory Reset* by pressing ***Settings>Factory Reset***.

*Factory Reset* allows you to reset the thermostat back to factory default settings. This can be used to reset the thermostat for a new owner or for troubleshooting purposes.

**WARNING -** *Factory Reset* will delete all information stored on the thermostat including energy usage data.

Change the way you heat®

Nuheat Floor Heating Systems
toll free 1.800.778.WARM (9276)
fax 604.529.4404
www.nuheat.com
info@nuheat.com

Nuheat™ is the registered Trademark of Nuheat Industries Ltd.

Printed in Canada
September 2014