NUHEAT FLOOR TEMPERATURE CONTROL WITH GFCI MODEL # FTGF1 120 VAC

INSTALLATION

The **NUHEAT™** Floor Temperature control is designed to control the temperature of the floor and detect ground faults in an electric floor heating installation. The load must not exceed 1920W/120V (16amps).

The thermostat is equipped with a ground fault circuit interrupter (GFCI). The GFCI monitors the line to load circuit and therefore isolation of the line and load is required for operation. Connect the line and load separately. Do not cap all the white wires together. (See diagram #1)

THE SENSOR PROBE

The **NUHEAT™** Floor Temperature Control is supplied with a 15 foot isolated sensor. The sensor wire is designed to enter from the external side of the electrical box but can also enter through the rear of the box. (See diagram #2)

Connect the sensor wires to the two lower screws of the terminal block. There is no polarity for the sensor so it does not matter which wire attaches to which terminal. If the sensor is not properly connected or the sensor circuit is open, the LO message will appear on the screen in place of the temperature. If the sensor is shorted the message E1 will appear.

The sensing probe should be placed in a representative heat area (away from hot or cold drafts) for maximum system performance. The sensing probe should be approximately 3/4" from the edge of the heater wire or centered between the wires in the mat. The probe wire cannot cross any heater wires and the sensing probe must not be directly on or adjacent to a heating wire.

OPERATION

There are 4 buttons under the screen to control the floor temperature. The two lower buttons \blacktriangle , \blacktriangledown are used to change the temperature set point. The upper ones $\cancel{\Leftrightarrow}$, $\textcircled{\ }$ are used to save or recall a preset comfort or economic setting. (See diagram #3)

1. Adjust the temperature.

The first time the \triangle or \blacktriangledown button is pressed, the temperature setting is displayed. For all subsequent times pressed, the temperature setting will change by 1°.

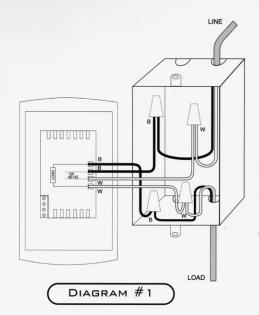
2. Save a Comfort and Economic set point

The **NUHEAT™** Floor Temperature control is equipped with a comfort and economic permanent memory. This feature allows you to switch directly from the comfort set point to the economic setpoint by simply pressing a button.

To save the comfort set point, adjust the temperature to your comfort setting (see paragraph 1), then press on the ☆ button until the ☆ indicator appears on the screen (about 15 seconds).

<u>To save the economic set point</u>. adjust the temperature to your economic setting, then press on the @ button until the @ indicator appears on the screen.

To place the thermostat in comfort or economic mode, simply press on * or % button. In the meantime, you can play with the up and down key to change the set point, without affecting the memory.



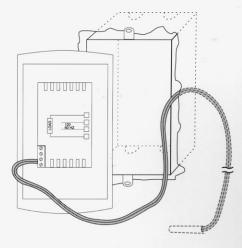




DIAGRAM # 2

DIAGRAM # 3

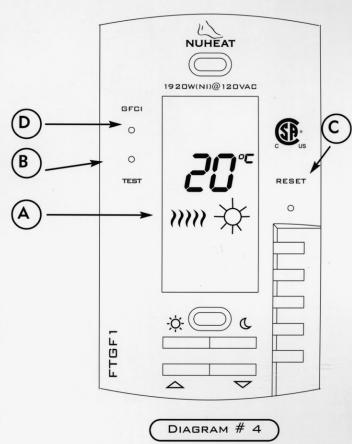
TEST THE GFCI

When the thermostat is installed and powered, increase the set point over the actual floor temperature and wait for the heating (indicator A) on the screen. (See diagram#4). Then, using a paper clip, press on the GFCI test (B) button. The line will open and the light indicator (D) will turn on. To reset the GFCI circuit, press on the RESET button (C) or cut the power to the thermostat.

IF THE GFCI TEST FAILS :

Check the polarity of the connection and make sure that the line is connected to the black wire. The thermostat must be in heating mode (heating indicator is on) when you test the GFCI.

The GFCI test should be done monthly. If the test fails, turn-off the breaker for the heating circuit and call your supplier for instructions. If in normal operation the red light turns on, the installation could be defective and must be turned off until an electrician can verify the circuit.



NUHEAT™ FLOOR TEMPERATURE CONTROL RATING SPECIFICATIONS

Supply/load 120 Vac 50/60 Hz; 16 amps

(resistive load only)

Power 1920 Watts @ 120 Vac GFCI Class A (5 ma trip level)

Approvals CSA C - US

Precision +/ - 0,5 °C @ 1920 Watts

WARRANTY

This product is warranted by the manufacturer against material defects and workmanship in normal use for a period of one year from date of original purchase from authorized dealer. During this period the maufacturer will repair or replace any products proven defective in normal use with a new or equivalent quality without charge.

This warranty does not cover installation, removal or reinstallation of the control. The warranty does not cover investigation, transportation, misuse or accidental damage.

If you have any installation questions please call **NUHEAT**™ before you proceed at 1-800-778-9276.

Thank you for choosing the **NUHEAT™** Floor Temperature Control with GFCI.