



# User Guide

### Non-programmable Thermostat



## **Description**

Aube's TH114 non-programmable thermostat can be used to control the ambient air temperature or floor temperature. You can select among the following temperature control modes:

A mode:

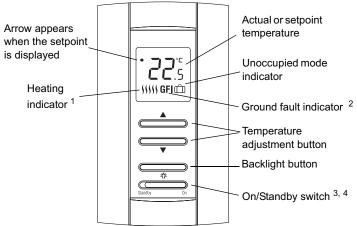
controls and displays the ambient air temperature

F mode:

 controls and displays the floor temperature using an external temperature sensor

AF mode:

- controls and displays the ambient air temperature
- maintains the floor temperature within desired limits using an external temperature sensor



<sup>&</sup>lt;sup>1</sup> The thermostat displays the percentage use of heating required to maintain the desired temperature. For example, **\( \)** is displayed when heating is at 40 percent.

Display	5	<b>\$\$</b>	555	<b>5555</b>	<b>\$\$\$\$\$</b>
% use of heating	1 to 24%	25 to 49%	50 to 74%	75 to 99%	100%

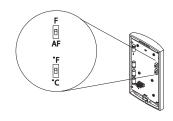
<sup>&</sup>lt;sup>2</sup> **GFI** appears when the ground fault protection has triggered.

<sup>&</sup>lt;sup>4</sup> To reset the ground fault protection, switch the thermostat to Standby and back to On.



## Configuration

The configuration switches are located at the back of the control module (faceplate).



### 2.1 Temperature Display (S1)

The S1 switch is used to select between °C (default) and °F.

### 2.2 Temperature Control Mode (S2)

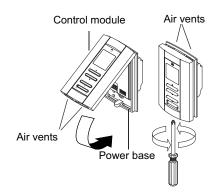
This switch is used to select the temperature control mode.

F: To select the F mode

AF: To select the A or AF mode (default)

# **Installation**

- Refer to the installation instructions of the power base.
- 2 Insert the tabs at the top of the control module in the slots at the top of the power base.
- **3** Secure the control module using the captive screw underneath the base.



**NOTE**: Keep the thermostat's air vents clean and unobstructed at all times.



# Power-up

Upon power-up, the thermostat undergoes a series of tests before displaying the actual (measured) temperature.



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# **Error Messages**



The measured temperature is below the thermostat's display range. Heating is activated.



The measured temperature is above the thermostat's display range. Heating is deactivated.



Verify the thermostat and sensor connections.

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 $<sup>^3</sup>$  Place the thermostat in Standby to cut power to the heater when it is not in use (e.g. in summer).



### **Backlight**

The display illuminates for 5 seconds when the backlight button is pressed.

When either of the ▲▼ buttons is pressed, the display illuminates for 10 seconds. The setpoint temperature appears for 5 seconds, then the actual (measured) temperature is displayed.



## **Temperature Display and Setting**

#### 7.1 Setpoint Temperature

The thermostat normally displays the actual (measured) temperature. To view the setpoint, press once on one of the ▲▼ buttons. The setpoint is displayed for 5 seconds.

To change the setpoint, press one of the  $\blacktriangle \blacktriangledown$  buttons until the desired temperature is displayed. To scroll faster, press and hold the button.

### 7.2 Floor Temperature Limits (AF mode only)

The thermostat generally turns heating On or Off to control the ambient temperature. However, if the floor temperature drops below the set minimum floor temperature limit or rises above the maximum limit, the thermostat will turn heating On or Off respectively, regardless of the ambient temperature, to maintain the floor temperature within the desired limits.





The minimum and maximum floor temperature limits are factory-set at 10 °C (50 °F) and 28 °C (82 °F) respectively. To modify the limits, proceed as follows:

- Switch the thermostat to Standby.
- While pressing any button, switch the thermostat back to On to access the floor temperature limit settings.
- Press the Backlight button briefly to switch between minimum and maximum floor temperature settings.
- Press the ▲▼ buttons to set the desired limit.
- Press the Backlight button for 3 seconds to save your modifications. After the data are saved, the thermostat displays the actual ambient temperature or "- -".

**Note**: Your modifications are also saved if no button is pressed for 60 seconds.

#### 7.3 Unoccupied Mode

**Note**: This feature is available only if the thermostat is mounted on a power base that has the unoccupied mode input (ECONO).

The thermostat can be connected to any other remote control device equipped with a dry contact. When the contact closes, the Unoccupied mode is activated and the Unoccupied mode icon is displayed. In this mode, the thermostat lowers its setpoint by 3.5°C (7°F) and all temperature adjustments are blocked except for temporary bypass.

#### **Temporary Bypass**

To temporarily bypass the Unoccupied mode, press the backlight button. During the bypass, the Unoccupied mode icon flashes. The bypass is automatically cancelled after 2 hours or if the backlight button is pressed again.



# **Technical Specifications**

Power supply: Refer to the power base installation instructions.

Setpoint range - F mode: 5 °C to 40 °C (40 °F to 104 °F)

- A/AF mode: 5 °C to 30 °C (40 °F to 86 °F)

Floor limit range (AF mode): 5 °C to 40 °C (40 °F - 104 °F)

Display range - F mode: 0 °C to 60 °C (32 °F to 140 °F)

- AF mode: 0 °C to 50 °C (32 °F to 122 °F)

Resolution: ± 0.5 °C (1.0 °F)

**Duty cycle**: Refer to the power base installation instructions.

Storage: -20 °C to 50 °C (-4 °F - 120 °F)



### Warranty

Aube warrants this product, excluding battery, to be free from defects in the workmanship or materials, under normal use and service, for a period of three (3) years from the date of purchase by the consumer. If at any time during the warranty period the product is determined to be defective or malfunctions, Aube shall repair or replace it (at Aube's option). If the product is defective.

- return it, with a bill of sale or other dated proof of purchase, to the place from which you purchased it, or
- (ii) contact Aube. Aube will make the determination whether the product should be returned, or whether a replacement product can be sent to you.

This warranty does not cover removal or reinstallation costs. This warranty shall not apply if it is shown by Aube that the defect or malfunction was caused by damage which occurred while the product was in the possession of a consumer.

Aube's sole responsibility shall be to repair or replace the product within the terms stated above. AUBE SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE OF ANY KIND, INCLUDING ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING, DIRECTLY OR INDIRECTLY, FROM ANY BREACH OF ANY WARRANTY, EXPRESS OR IMPLIED, OR ANY OTHER FAILURE OF THIS PRODUCT. Some provinces, states or regions do not allow the exclusion or limitation of incidental or consequential damages, so this limitation may not apply to you.

THIS WARRANTY IS THE ONLY EXPRESS WARRANTY AUBE MAKES ON THIS PRODUCT. THE DURATION OF ANY IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IS HEREBY LIMITED TO THE THREE-YEAR DURATION OF THIS WARRANTY. Some provinces, states or regions do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

This warranty gives you specific legal rights, and you may have other rights which vary from province, state or region to another.



### **Customer Assistance**

For any questions regarding product installation or operation, contact us at:

705, Montrichard Saint-Jean-sur-Richelieu, Quebec J2X 5K8 Canada

Tel.: (450) 358-4600 Toll-free: 1-800-831-AUBE Fax: (450) 358-4650

E-mail: aube.service@honeywell.com

For more information on our products, visit us at: www.aubetech.com

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## Installation Instructions

For models: 120S / 240S / 240D



### **Parts**

- One (1) power base
- Two (2) screws
- Four (4) solderless connectors for copper wires

NOTE: Special CO/ALR solderless connectors must be used for connecting aluminum conductors.

#### Option

One (1) AC112-01 floor sensor (ordered separately; required for floor heating applications only)



### **Guidelines**

Turn off power to the heating system at the main electrical panel to avoid electrical shock. The installation should be carried out by an elec-

NOTE: This power base must be used with thermostat operating on 15-minute cycles.

High voltage thermostats must be installed onto an electrical box.

The following guidelines are not necessary for floor heating applications:

- For a new installation, choose a location about 1.5 m (5 ft) above the floor and on an inside wall.
- The thermostat must be installed on an inside wall facing the heating
- Avoid locations where there are air drafts (top of staircase, air outlet), dead air spots (behind a door), direct sunlight or concealed chimneys or



### **Procedure**

- Connect the power base wires to the power supply and load using solderless connectors for copper wires (figure 1).
- For floor heating applications, insert the floor sensor wires through one of the two holes below the terminals (figure 2) and connect the wires to terminals 3 and 4 (no polarity).

NOTE: The wires must run alongside the terminals and not go over them. The wire must not cross any heating wires nor be placed directly on a heating wire or adjacent to it. For best performance, the sensor probe should be centered between the wires in the mat.

**WARNING**: This power base does not have a built-in ground protection device. Therefore, for floor heating applications, you must install a separate ground protection device at the main electrical panel. Contact your Aube authorized representative if you need a thermostat with built-in ground protection device.

- If you wish to use a remote controller such as the CT240 or CT241, insert the cable (use 18 to 22 gauge flexible wires) into one of the two holes available below the terminal board and connect to terminals 1 and 2 of the base (figure 2).
- Push the excess length of the high-voltage wires back into the electrical
- Secure the power base to the electrical box using the provided screws.

- If necessary, set the configuration switches on the control module (refer to the control module user guide).
- Install the control module onto the base.
- Apply power to heating system.

Figure 1

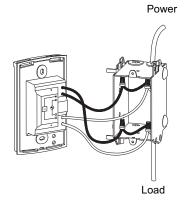
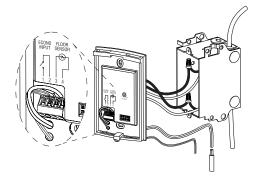


Figure 2





# **Technical Specifications**

Model	Supply	Max. Load	Power	Wiring
120S	120 VAC, 50/60Hz	16.7 A	2000 W	4 wires / single pole
240S	240 VAC, 50/60Hz 208 VAC, 50/60Hz	16.7 A	4000 W 3475 W	4 wires / single pole
240D	240 VAC, 50/60Hz 208 VAC, 50/60Hz	15 A	3600 W 3120 W	4 wires / double pole

Storage: -4°F to 120°F (-20°C to 50°C)

Remote controller input (ECONO): requires a dry contact Size (H • W • D): 4.89 x 2.76 x 0.91 in. (124 x 70 x 23 mm)

Certifications:



