TH113 & TH116 A/F/AF

Owner's Guide

Thank you for choosing Aube's non-programmable thermostat. Your new electronic thermostat is equipped with a microprocessor and proportional integral adaptive (PIA) temperature control technology for total comfort. Depending on the selected model, this thermostat has been designed to control:

A: The **A**mbient temperature (using an electric heating system)

AF: The **A**mbient temperature with **F**loor temperature limit (using a floor heating system to heat the room)
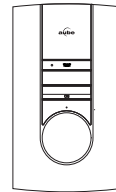
F: The **F**loor temperature (floor heating)

NOTE: This control module must be mounted on a PB112 Series power base.

The thermostat has an On/Standby switch making it possible to put the thermostat in sleep mode when its use is no longer required (e.g. summer).
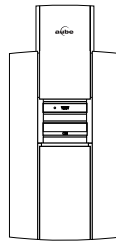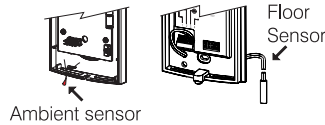
TH116
Public Area

TH113

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❶ Model Selection (switch)

FOR A AND AF MODELS ONLY

At the rear of the control module is a switch that has been factory-set to the applicable temperature control.

NOTE: The AF model can be used for all temperature control types (A, F and AF).

Floor Sensor

**Note**: The ambient sensor is not operational when the switch is set to I (up).

Ambient sensor

Model	Floor sensor	Switch S3	Ambient sensor
F	🗲	I / 0	⊘
AF	🗲	I / 0	⋎
A	⊘	I / 0	⋎

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❷ Temperature Lock (TH113 only)

At the rear of the control module are two potentiometers. These potentiometers act like a temperature lock. Even when occupants adjust the temperature using the dial on the front/rear of the control module, the potentiometers override the dial and maintain the temperature within the locked-in minimum and maximum range.

▸ **A** - ambient temperature

▸ **F & AF** - floor temperature limit

Use a flat tip screwdriver to rotate the potentiometers until the notch points to the desired temperature.

Potentiometers

Notch

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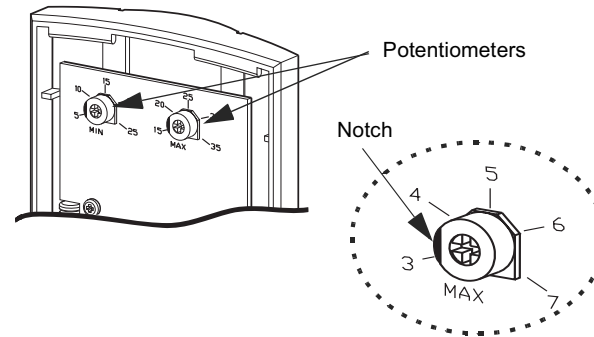
❸ Setpoint Definition

Turn the dial to the desired temperature.

TH113: The dial is located on the front of the control module.

TH116: The dial is located on the rear of the control module.

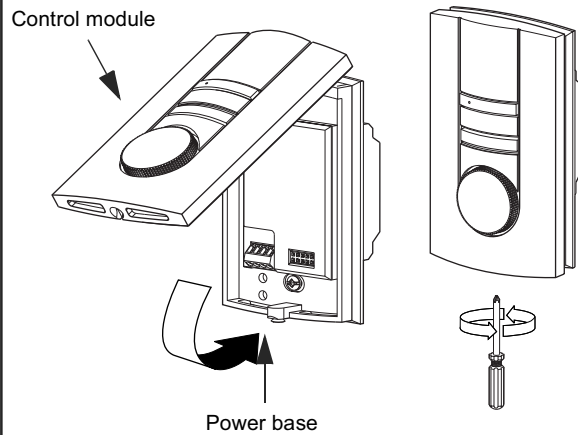The min. position indicates the minimum temperature setpoint: 45°F (7°C).

Temperature dial

TH113   TH116

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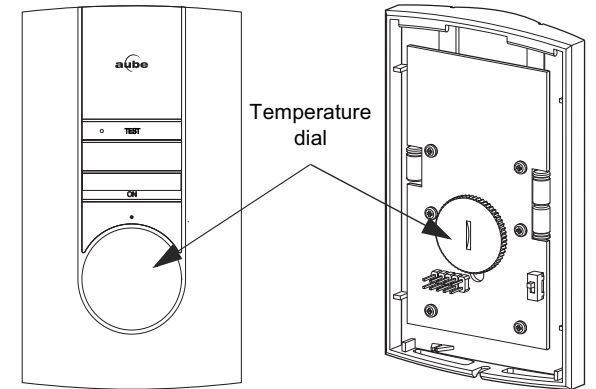
❹ Control Module Installation

Align the bracket tabs on the control module with the holes located on the power base.

Follow the same procedure for the TH116.

Control module

Power base

NOTE: Keep the thermostat's air vents clean and free from obstructions.

NOTE: The screw cannot be removed completely.

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❺ GFCI Test GA & GB power base only

The GFCI monitors the electrical flow for any loss of current; if there is any loss, the thermostat will cut off power to the heating system. We recommend you test the GFCI immediately after installing the control module, and once a month thereafter to ensure it is operating properly. To test:

❶ Press the TEST button:

👍 • **Successful**: TEST warning light is ON and power to heating system is cut off.

👎 • **Unsuccessful**: The TEST warning light is OFF. Cut power to heating system from the main power panel and call customer service.

❷ When successful, reset thermostat (STANDBY/ON) to power heating system.

NOTE: If the test warning light comes ON during normal operation, cut power to heating system from the main power panel and have an electrician verify the installation.

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❻ Remote Input

The TH113 and TH116 are equipped with a remote input which allows connection of an optional telephone controller (CT240) or any other remote control system. When a command signal is received through this input, the thermostat automatically lowers its setpoint by 3.5°C. The LED lights up to indicate the signal's presence (except for GA and GB models).

Bypass (not available for GA and GB power base):
The TEST button can be used to bypass the signal for a 2-hour period. The LED goes off to indicate the bypass.

NOTE: When combined with a GA/GB power base, the TEST button is used only for GFCI testing. The bypass function is not available with these power base models.

Technical Specifications

Models: TH113 and TH116 A / AF / F

Setting range: 45°F, 59°F to 95°F (7°C, 15°C to 35°C)

Potentiometers: minimum: 41°F to 77°F (5°C to 25°C)
maximum: 59°F to 95°F (15°C to 35°C)

Accuracy: ± 0.9°F (0.5°C)

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

If you have any questions concerning the TH113 or the TH116 thermostat, call our technical support team at:

Phone: Montreal area: (450) 358-4600
Canada / U.S.: 1-800-831-AUBE (2823)
Fax: y(450) 358-4650
Email: service@aubetech.com

Monday to Friday from 8:30 AM to 5:00 PM EST.
For more information on our products, visit us at:
www.aubetech.com

❶ Parts

❶ One (1) power base

❷ Two (2) screws

❸ Four (4) solderless connectors for copper wires

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

❹ One (1) floor sensor and one (1) flat tip screwdriver (F and AF floor heating models only).

❷ 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 electrician.

▸ High voltage thermostats must be installed onto an electrical box.

▸ For a new installation, choose a location about 5 ft. above the floor and on an inside wall.

▸ The thermostat must be installed on an inside wall facing the heating system (except for floor heating systems).

▸ Avoid locations where there are air drafts (top of staircase, air outlet), dead air spots (behind a door), direct sunlight or concealed chimneys or stove pipes (except for floor heating systems).

❸ Procedure

❶ Connect the power base wires to the power supply and load using solderless connectors for copper wires (figure 1).

❷ If your thermostat is type F or AF (not A), 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).

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.

❸ 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).

❹ Push the excess length of the high-voltage wires back into the electrical box.

❺ Secure the power base to the electrical box using the provided screws.

❻ If necessary, set the configuration switches on the control module (refer to the control module user guide).

❼ Install the control module onto the base.
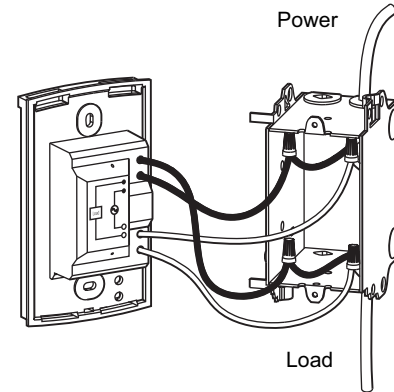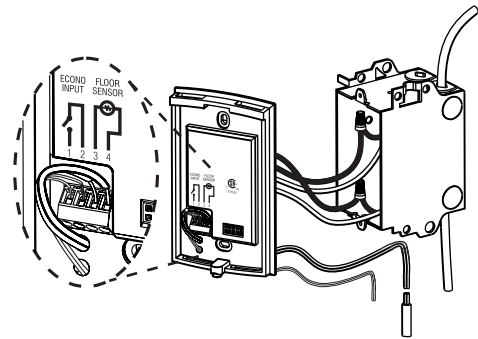
❽ Apply power to heating system.

Figure 1

Power

Load

Figure 2

❹ Technical Specifications

Model	Supply	Max. Load	Power	Wiring	GFCI
120GA	120 VAC, 50/60Hz	15 A	1800 W	4w/DP	5 mA
120GB	120 VAC, 50/60Hz	15 A	1800 W	4w/DP	30 mA
120S	120 VAC, 50/60Hz	16.7 A	2000 W	4w/SP	
240GA	240 VAC, 50/60Hz 208 VAC, 50/60Hz	15 A	3600 W 3120 W	4w/DP	5 mA
240GB	240 VAC, 50/60Hz 208 VAC, 50/60Hz	15 A	3600 W 3120 W	4w/DP	30 mA
240S	240 VAC, 50/60Hz 208 VAC, 50/60Hz	16.7 A	4000 W 3475 W	4w/SP	
240D	240 VAC, 50/60Hz 208 VAC, 50/60Hz	15 A	3600 W 3120 W	4w/DP	

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:

 Models: 120 GA / GB 240 GA / GB

 Models: 120S / 240S 240D