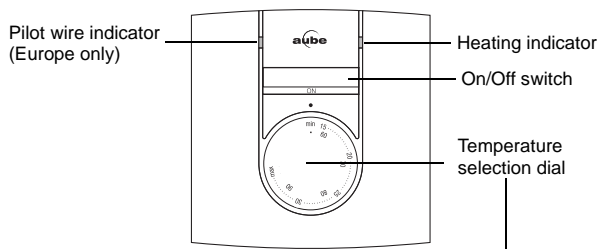
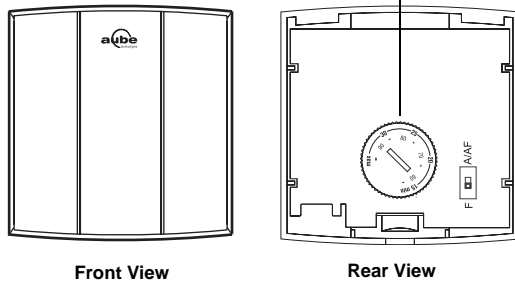


#### TH131



#### TH133



**NOTE:** Even if the following illustrations show the TH131 model only, they can also apply to the TH133 model.

## 1 Description

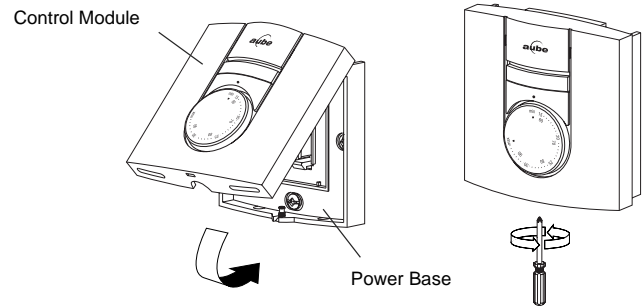
This user guide covers the following thermostat models:

- TH131 A/F/AF
- TH133 A/F/AF

The TH131 model is designed for residential applications, whereas the TH133 model is designed for public areas as its controls are hidden and thus protected against unauthorized access. Both models can be configured for the following applications:

Type	Application
A	Controls the ambient (room) temperature
F	Controls the floor temperature
AF	Controls the ambient temperature and limits the floor temperature

## 2 Installation



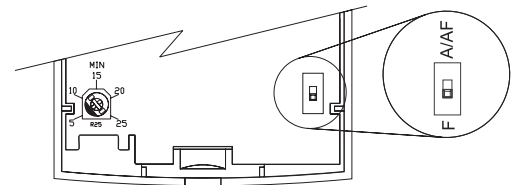
**NOTE:** Keep the thermostat's air vents clean and free from obstructions.

## 3 Configuration

### 3.1 Application Types

Type	Switch Position
A	UP (A/AF)
AF	UP (A/AF)
F	DOWN (F)

Position the switch, on the back of the control module, according to your application.

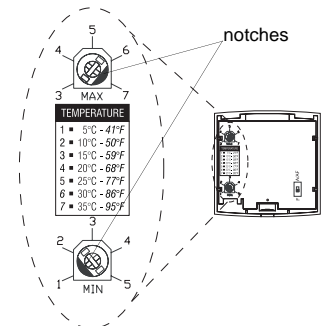


### 3.2 Minimum and Maximum Limits (TH131 only)

Use the two potentiometers on the back of the control module to set the minimum and maximum temperature limits. Depending on your application, the potentiometers limit the following temperature:

- ▶ ambient temperature (A)
- ▶ floor temperature (F or AF)

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



## 4 Operation

### 4.1 Temperature Adjustment

#### TH131

Use the dial on the front of the thermostat to set the desired temperature.

**NOTE:** If the dial is placed at a temperature beyond the high or low temperature limit, the temperature will be maintained at that limit (see section 3.2).

#### TH133






Remove the control module from the base and use the dial on the back of the control module to set the desired temperature.

### 4.2 On/Off Switch (TH131 only)

Use the On/Off switch to turn the thermostat Off when it is not used (e.g., in the summer).

## 5 Pilot Wire Orders (Europe only)

TH131 accepts the six following pilot wire orders when installed on a 230 V power base.

ORDER	SIGNAL	DESCRIPTION
Comfort	No signal	Maintain temperature at setpoint
Reduced setpoint (3.5k setback)		Maintain temperature at 3.5°C below setpoint
frost protection		Maintain temperature at 7°C
Off		Stop heating
1k setback		Maintain temperature at 1°C below setpoint
2k setback		Maintain temperature at 2°C below setpoint

## 6 Specifications

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

**Minimum temperature limit:** 5°C to 25°C (41°F to 77°F)

**Maximum temperature limit:** 15°C to 35°C (59°F to 95°F)

**Accuracy:** ± 0.2°C (0.36°F)

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

**Heating cycle length:** 15 minutes

**Software:** Class A

**Controller:** Electronic

**Size (H/W/D):**

- **TH131:** 78.9 x 78.9 x 16.3 mm (3.1 x 3.1 x 0.64 in.)
- **TH133:** 78.9 x 78.9 x 18 mm (3.1 x 3.1 x 0.71 in.)

## ✓ Warranty

### AUBE TECHNOLOGIES INC. THREE (3) YEAR LIMITED 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
- 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 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 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 region to region.

## Installation Instructions

230 V Line Voltage Power Base

The PB130-230 power base is used to power a TH13x Series control module. The resistive load must not exceed 3450 watts (NI) @ 230 VAC (15 A).

### 1 Parts

- 1 One (1) PB130-230 power base
- 2 One (1) floor sensor (for AF and F control modules only)
- 3 One (1) wall plate (optional, in certain countries)

### 2 Guidelines

Turn off power to the heating system at the main power panel to avoid electrical shock. Installation should be carried out by an electrician.

- ▶ All work must conform to the applicable country standards for electrical installations and wiring.
- ▶ This thermostat should be connected on a circuit equipped with a fuse or a circuit breaker. It must be installed on a certified electrical box.
- ▶ For a new installation, choose a location about 1.5 m above the floor.
- ▶ For electric baseboards, convectors and fan-forced heaters, the thermostat must be installed facing the heating system.
- ▶ The thermostat must be installed on an inside wall.
- ▶ 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.

### 3 Technical Specifications

**Model:** PB130A-230

**Supply:** 230 VAC, 50 Hz

**Load:** 15 A maximum (resistive only)

**Power:** 3450 Watts (NI) @ 230 VAC

**Conformity:** EN60730-2-9 / EN50081-1 / EN50082-2

**Storage:** -20°C to 50°C

**Protection:** Class 2

**Protection degree:** IP21

**Automatic action:** Type 1.B

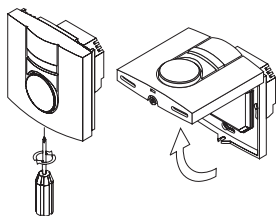
**Environment:** Normally polluted

**Size (H • W • D) :** 2.95 x 2.95 x 0.55 in. (75 x 75 x 14 mm)

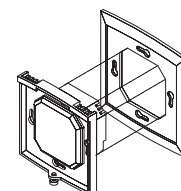
**NOTE:** The terminals are designed to handle a cross-section of wire measuring 0.33 to 3.1 mm<sup>2</sup>.

### 4 Procedure

- 1 Remove the screw holding the control module to the power base and lift the lower part upwards. The screw cannot be completely removed.

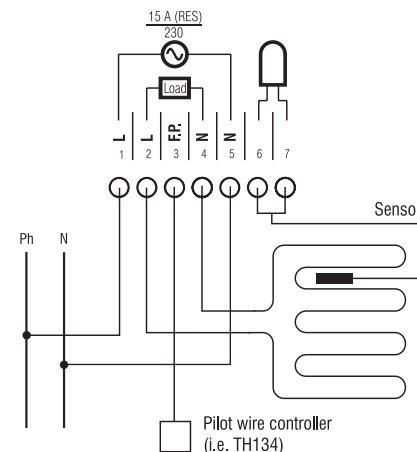


- 2 Before making the connections, make sure that the base covers the electrical box entirely. If not, install a wall plate at the back of the base as shown.



- 3 Connect the wires:

- **Power:**  
Terminals 1 & 5
- **Load:**  
Terminals 2 & 4  
see note 1
- **Pilot Wire:**  
Terminal 3  
see note 2
- **Floor sensor:**  
Terminals 6 & 7  
(no polarity)  
see note 3

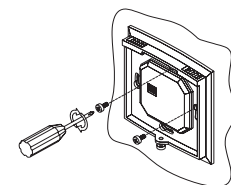


**Note 1** If a contactor is used between the thermostat and the load, install a snubber at the contactor's coil terminal to ensure the proper operation of the thermostat.

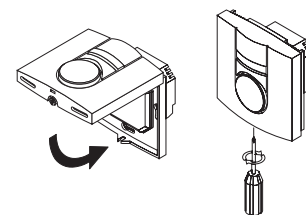
**Note 2** This connection is required on some models only.

**Note 3** For the proper operation of the thermostat, the floor sensor must be centered between two heater wires having a maximum temperature of 80°C. The floor sensor wire must not cross any heater wire or be placed close to it.

- 5 Push wires into the electrical box and secure the base to the electrical box anchorage. The head of the screw must be less than 2 mm thick.



- 6 BEFORE installing the control module onto the base, set the configuration switches (if any) on the control module (refer to the user guide).



**WARNING:** This power base must be used **only** with 15-minute heating cycles. If your control module has a selector switch for choosing the heating cycle, ensure that the switch is correctly set.

- 7 Return power to the heating system.