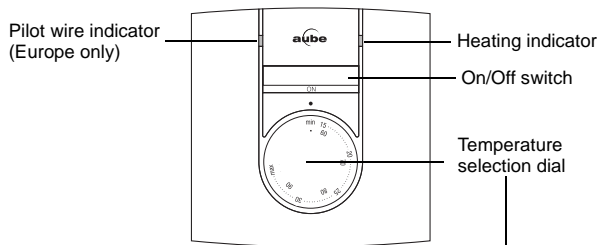


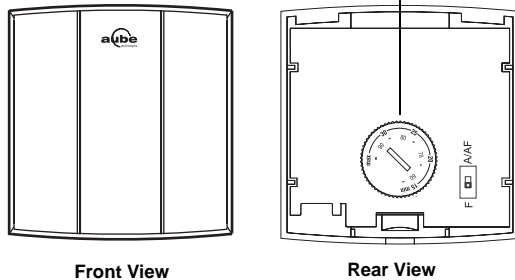
### WARNING

This thermostat provides fast-cycling control and **MUST** therefore be used **ONLY** with solid-state relays. The use of electromechanical relays will result in reduced life expectancy and possibility of overheating of these devices.

#### TH131-15S



#### TH133-15S



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

## 1 Description

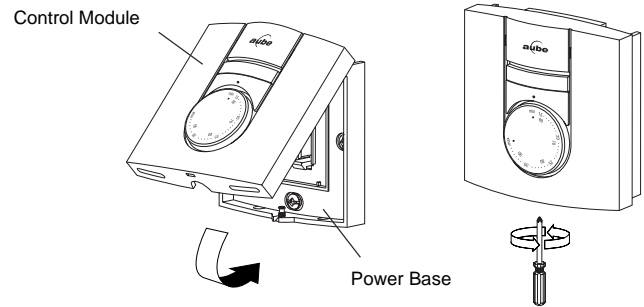
This user guide covers the following thermostat models:

- TH131-15S A/F/AF
- TH133-15S A/F/AF

The TH131-15S 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



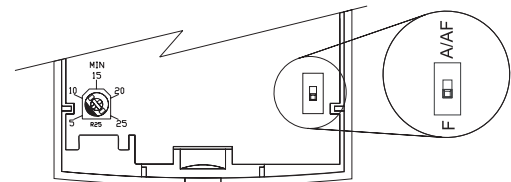
**NOTE:** Keep the thermostat's air vents clean and free from obstructions.

## 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.

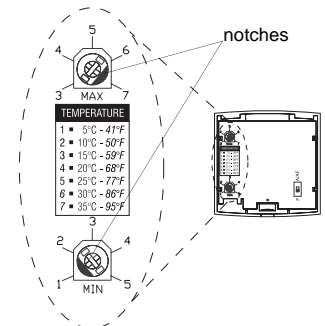


### 3.2 Minimum and Maximum Limits (TH131-15S only)

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

#### TH131-15S

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).*

#### TH133-15S

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 (TH131-15S only)

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

## 5 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 seconds

**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.

## Customer Assistance

If you have any questions about the product installation or operation, or concerning the warranty, contact us at:



705 Montrichard  
Saint-Jean-sur-Richelieu  
Quebec, Canada J2X 5K8  
Tel.: (450) 358-4600  
Toll Free: 1-800-831-AUBE  
Fax: (450) 358-4650  
Email: aube.service@honeywell.com



10 rue Ampère  
95500 Gonesse  
France  
Tel.: 33 (0) 1 34 07 99 00  
Fax: 33 (0) 1 34 07 99 19  
Email: advaube@comintes.com

For more information on our products, go to

[www.aubetech.com](http://www.aubetech.com)

### 1 Applications

This document describes the connections when the PB130-024T power base is used on any TH13x-15S series thermostat. When used on a TH13x-15S thermostat, this low-voltage power base must be connected to the line-voltage load using a solid-state relay (SSR). The PB130-024T is compatible with most solid-state relays; however, the following Aube relays are optimized for use with this power base:

- RT850 solid-state relay (SSR)
- RT850T solid-state relay (SSR) with built-in 24-V transformer

### 2 Supplied Parts

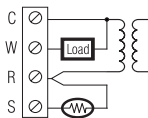
- 1 One (1) power base
- 2 Two (2) plastic anchors
- 3 Two (2) mounting screws

### 3 Installation Guidelines

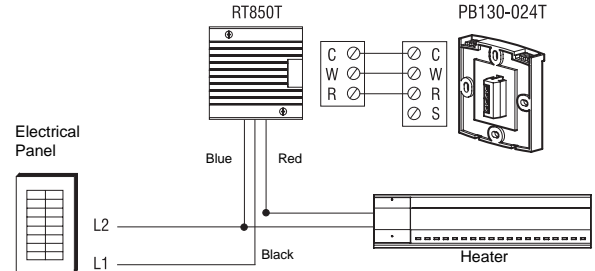
- ▶ For a new installation, choose a location about 1.5 m (5 ft.) above the floor.
- ▶ The thermostat must be installed on an inside wall facing the heating system (except for floor heating systems).
- ▶ Avoid locations where there are air drafts (top of staircase, air outlet), dead air spots (behind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

### 4 Installation Procedure

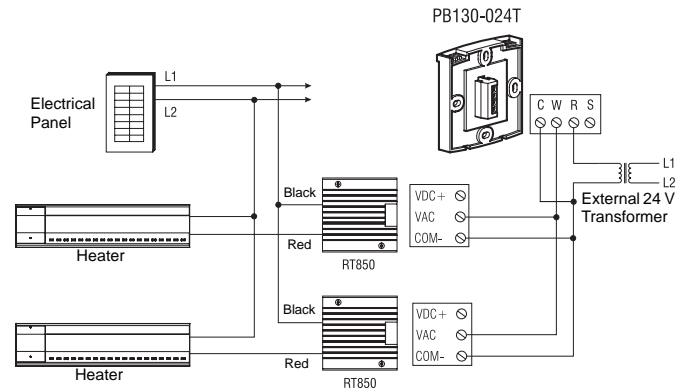
The installation must be carried out by an electrician and must comply to local electrical codes.

- 1 Turn off power to the heating system at the main electrical panel to avoid electrical shock.
- 2 Wire the base according to your application. See typical wiring diagrams in sections 4.1 and 4.2.
- 3 For a floor heating system installation, connect the floor sensor between the S and R terminals.
 
- 4 Secure the base to the wall using the provided screws and wall anchors.
- 5 Configure the switches located on the control module (if any). Refer to the user guide.
- 6 Install the control module onto the base.
- 7 Apply power to the heating system.
- 8 Verify the installation by checking that the heating system can be turned On or Off using the thermostat.

#### 4.1 Single SSR with Built-in Transformer



#### 4.2 Multiple SSRs with External Transformer



### 5 Technical Specifications

Maximum load: 0.5 A / 24 VAC

Operating temperature: 0°C to 50°C (32°F to 122°F)

Storage: -20°C to 50°C (-4°F to 122°F)

Size (H • W • D): 75 x 75 x 13 mm (2.9 x 2.9 x 0.5 in)

Wire gauge: 14 to 22 AWG