

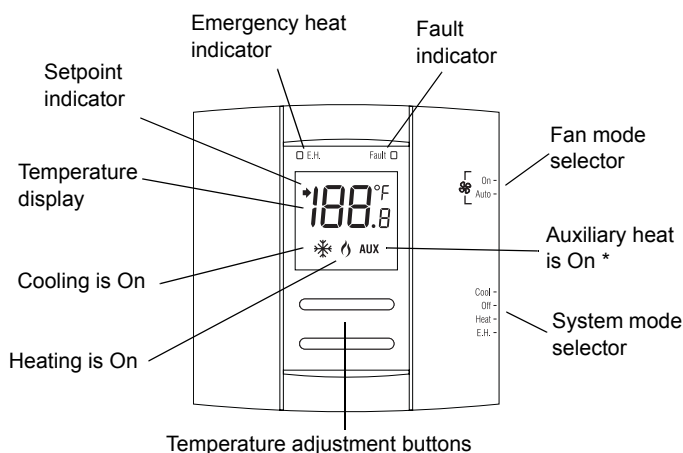
1 Introduction

The TH149 thermostat is used for the following systems:

- Heat pump (1H1C and 2H1C)
- HVAC (1H1C)

The thermostat incorporates the following functions:

- System mode selection: heat, cool, auxiliary heat and off
- Fan mode selection: automatic or on (continuous)
- Emergency heat and fault LEDs
- Activation indicators (heat, cool, and auxiliary heat)
- Temperature display in °C or °F
- Backlit display
- Programmable heating and cooling cycle lengths
- Keypad lock



* Auxiliary heat is available only for 2H1C systems.

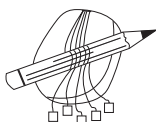
2 Installation

Note: The installation must be performed by a qualified electrician.

2.1 Removing the Old Thermostat

IN ORDER TO AVOID ANY RISK OF ELECTRIC SHOCK, CUT POWER TO THE HEATING SYSTEM.

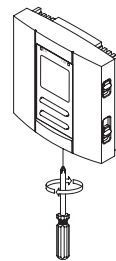
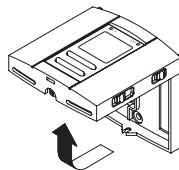
- 1 Remove the old thermostat to access the wires.
- 2 Identify and label each wire (with the corresponding letter on the old thermostat terminals) and remove them from the terminals.
- 3 If necessary, strip the end of each wire (maximum of 6 mm).
- 4 If necessary, wrap the wires around a pencil to prevent them from falling into the wall cavity.
- 5 If the opening in the wall is too big, insulate it using a non-flammable material to avoid air draughts behind the thermostat.



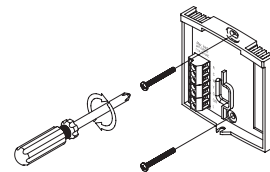
2.2 Installing the Back Plate

Note: For a new installation, choose a location approximately 1.5 m (5 feet) above the floor and on an inside wall. Avoid draughty areas (top of staircase, air outlet, etc.) or dead air spots (behind doors). Do not install the thermostat on a wall concealing air ducts nor expose it to direct sunlight.

- 1 Loosen the locking screw (the screw cannot be completely removed).
- 2 Detach the front module from the back plate by pulling the bottom part.



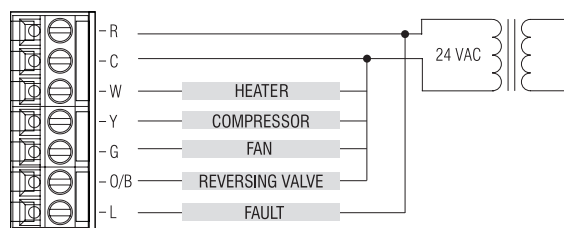
- 3 If necessary, bore the mounting holes and insert anchors.
- 4 Pass the wires through the opening of the back plate and fix the plate to the wall using the screws provided.



2.3 Connecting the Thermostat

The connection of the new thermostat should be similar to that of the old thermostat; however, it can vary depending on the installation.

R; C	Power; 24 VAC
W	Heater. This connection is not required for HP-1H1C.
Y	Compressor
G	Fan
O/B	Reversing valve (see section 2.4). This connection is not required for HVAC-1H1C.
L	Fault



2.4 Jumper settings

The jumpers (JP1 and JP2), on the back of the front module, are used to configure the thermostat according to your system type:

Jumper	Parameter	Settings
JP1	System	• Heat pump (HP position - default) • HVAC (CN position)
JP2	Reversing valve	• Activated in cool mode (O position - default) • Activated in heat mode (B position)

2.5 Completing the Installation

- 1 Reinstall the front module onto the back plate and tighten the locking screw.
- 2 Place the system mode selector switch to OFF.

Note: Leave the switch to OFF until you have verified that the thermostat is properly configured (see section 3).

- 3 Apply power back to the system.
- 4 Ensure that the thermostat is configured according to your system type (see section 3).

3 Configuration Menu

The configuration parameters appear in the order shown below.

PARAMETERS	DEFAULT	OPTIONS
Temperature display	°C	°C or °F
Heating cycles per hour ¹	4	2, 3, 4, 5 or 6 ²
Cooling cycles per hour ¹	4	2, 3, 4, 5 or 6 ²
System type	2H	2H (2H1C) or 1H (1H1C)
1H1C type ³	HP	HP (Heat Pump) or Cn (HVAC)
¹ When either the heating or the cooling parameter is displayed, use the mode selector switch to toggle between the two parameters.		
² The corresponding cycle lengths are: 2 = 30 min., 3 = 20 min., 4 = 15 min., 5 = 12 min., 6 = 10 min.		
³ This parameter appears only if you select 1H1C for the system type.		

- 1 To access the configuration menu, press and hold both temperature adjustment buttons for more than 3 seconds.
- 2 To go to the next parameter, once in the menu, press both temperature adjustment buttons for more than 2 seconds.
- 3 To modify the displayed parameter, press one of the temperature adjustment buttons.
- 4 You will exit the configuration menu at the end of the menu.

Note: The settings are not erased during a power outage.

4 Operation

4.1 System Mode

Use the system mode selector switch to place the system in heat mode, cool mode, emergency heat (E.H.) mode, or off.

Note: Emergency heat mode is not available on 1H1C systems. For these systems, placing the selector on E.H. is the same as placing it on Off.

Auxiliary Heat

Only 2H1C systems are equipped with auxiliary heat. The auxiliary heat is used in the following conditions:

- When the setpoint is not attained after a 15-minute delay following the compressor activation. After the delay, the auxiliary heating is used along with the compressor.
- When the thermostat is placed in emergency heating (E.H.). In this mode, only the auxiliary heat is used.

4.2 Fan Mode

Use the fan mode selector switch to place the fan in automatic mode (AUTO) or continuous mode (ON).

Note: This switch is not functional if the fan is not connected to the thermostat.

AUTO	The fan operates only when heating or cooling is activated.
ON	The fan operates continuously.

4.3 Viewing and Setting the Temperature

The actual temperature is normally displayed. To view the setpoint, press once on one of the temperature adjustment buttons. The setpoint is displayed for 5 seconds and is indicated by the  icon display. To change the setpoint, press the appropriate temperature adjustment button during the setpoint display.

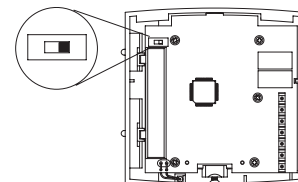
4.4 Backlight

The display illuminates for 12 seconds when either of the temperature adjustment buttons is pressed.

4.5 Setpoint Lock

A switch on the back of the front module can be used to lock the setpoint.

- 1 Remove the front module from the back plate to access the switch.
- 2 Place the switch (S1) to the I position.
- 3 Reinstall the front module.



5 Technical Specifications

Power supply: 24 VAC

Maximum load: 1.5 A per output @ 24 VAC

Setpoint range (heat): 5 to 28°C (41 to 82°F)

Setpoint range (cool): 15 to 35°C (59 to 95°F)

Setpoint increment: ± 0.5°C (1°F)

Display range: -5 to 50°C (23 to 122°F)

Display resolution: 0.5°C (1°F)

Short-cycle protection: 2 minutes

Storage temperature: -20 to 50°C (-2 to 122°F)

Dimensions: 79 mm x 81 mm x 25 mm (3.1 in. x 3.2 in. x 1.0 in.)

6 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,

- (i) 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 and states 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 and states 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 by province, state or region.

7 Technical Support

For any questions regarding product installation or operation, contact our technical support team 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
Email: service@aubetech.com

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