

1 Applications

This power base has been designed for floor heating applications. It has ground fault protection (GFCI¹ or EGFPD²) and an input for connecting a floor sensor.

If your thermostat has the Vacation Mode, the mode can be activated by connecting an Aube telephone controller (CT240 or CT241) or any other remote control device equipped with a normally open (NO) dry contact. For more information on this mode, see the thermostat's user guide.

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

¹ Ground Fault Circuit Interrupter

² Equipment Ground Fault Protection Device

2 Supplied Parts

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

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

- 4 One (1) floor sensor
- 5 One (1) flat-tip screwdriver

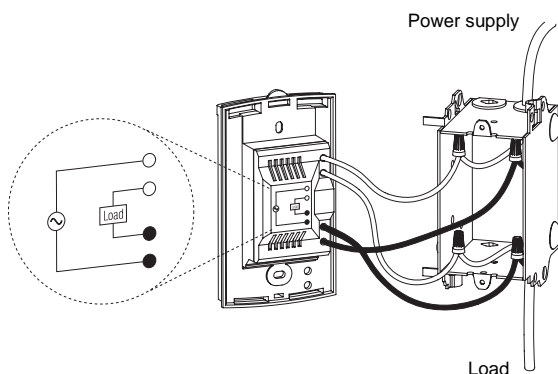
3 Installation Guidelines

- ▶ Install the thermostat onto an electrical box.
- ▶ Do NOT install the thermostat in an area where it can be exposed to water or rain.

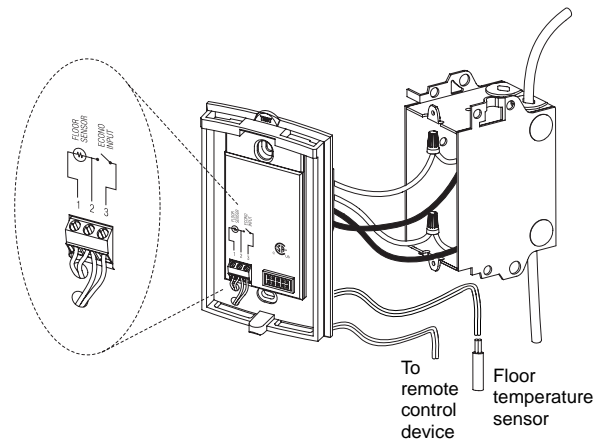
4 Installation Procedure

Installation should be carried out by an electrician and must comply with local electrical codes.

- 1 Turn off power to the heating system at the main power panel in order to avoid any risk of electrical shock.



- 2 Connect the power base wires to the power supply and to the load using solderless connectors for copper wires.
- 3 Insert the floor sensor cable through one of the two openings on the base and connect the sensor wires to terminals 1 and 2 (no polarity).
 - The sensor cable must pass outside the electrical box and follow the wall down to the floor.
 - Position the sensor cable such that it does not come in contact with the floor heating wires. The sensor must be centered between two floor heating wires for best temperature control.
 - Do NOT staple the sensor head (epoxy section) to the floor. Doing so might damage the sensor. The damage might not be noticeable during testing but can become apparent several days later.

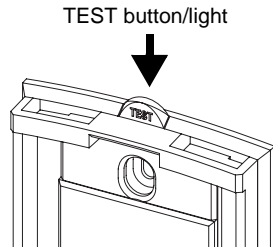


- 4 If you wish to connect a remote control device, insert the wires (use 18- to 22-gauge flexible wires) through one of the two openings on the base and connect them to terminals 2 and 3 (no polarity).
- 5 Push the excess length of the high-voltage wires back inside the electrical box.
- 6 Secure the power base to the electrical box using the provided screws.
- 7 Verify the settings of the configuration switches (if any) on the back of the control module (see user guide).
- 8 Install the control module on the base (see user guide).
- 9 Apply power to the heating system. Verify the installation by making sure that the heating system can be turned on and turned off by increasing and decreasing the setpoint.
- 10 Test the ground fault protection.

5 Ground Fault Protection

5.1 Description

The power base protects against risks of electrocution caused by leakage current. If the leakage current exceeds 5 mA or 15 mA (depending on the model), the ground fault protection will automatically trigger, cutting power to the floor heating system. To indicate the fault, the **TEST** light on the top of the base will illuminate (red).



WARNING: Ground fault protection does not protect against electrical shocks resulting from contact with both conductor wires.

5.2 Ground Fault Protection Reset

When the ground fault protection has triggered, to reset it, switch the thermostat to **Standby** or **Off** and back to **On**. The **TEST** light will go off if the ground fault protection is functioning properly.

5.3 Ground Fault Protection Test

To ensure the ground fault protection is always in working order, test it once the thermostat is installed and on a monthly basis thereafter.

- 1 Increase the setpoint temperature above the measured floor temperature in order to activate the floor heating system.
- 2 Press the **TEST** button. If the **TEST** light does not turn On, the ground fault protection is not functioning properly and therefore the power base must be replaced. If the **TEST** light turns On, continue the test.
- 3 Switch the thermostat to **Off** or **Standby**, wait a few seconds and switch it back to **On**. The **TEST** light should now be Off. If the light stays On, the ground fault protection is not functioning properly and therefore the power base must be replaced.
- 4 Place the thermostat back to the desired temperature.

6 Technical Specifications

Model	Supply	Maximum Load		Wiring
		Current	Power	
120GA	120 VAC, 50/60Hz	15 A	1800 W	4 wires double pole
120GB	120 VAC, 50/60Hz	15 A	1800 W	4 wires double pole
240GA	240 VAC, 50/60Hz	15 A	3600 W	4 wires double pole
	208 VAC, 50/60Hz		3120 W	
240GB	240 VAC, 50/60Hz	15 A	3600 W	4 wires double pole
	208 VAC, 50/60Hz		3120 W	

Model	Ground Fault Protection	Leakage Current
120GA	Ground Fault Circuit Interrupter (GFCI)	5 mA
120GB	Equipment Ground Fault Protection Device (EGFPD)	15 mA
240GA	Ground Fault Circuit Interrupter (GFCI)	5 mA
240GB	Equipment Ground Fault Protection Device (EGFPD)	15 mA

Heating cycle length: 15 minutes

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

Size (H • W • D): 124 x 70 x 23 mm (4.89 x 2.76 x 0.91 in.)

Certifications:

