



aube
technologies

Owner's Guide

TH105PLUS

Programmable Thermostat



69-2788EF-03

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About your new thermostat

This thermostat is designed to control an electric heating system such as a baseboard heater, a convector, or a fan-forced heater.

The thermostat **CANNOT** be used with:

- a resistive load under 0.83 A
- a resistive load over 14.6 A
- a system driven by a contactor or a relay (inductive load)
- a central heating system

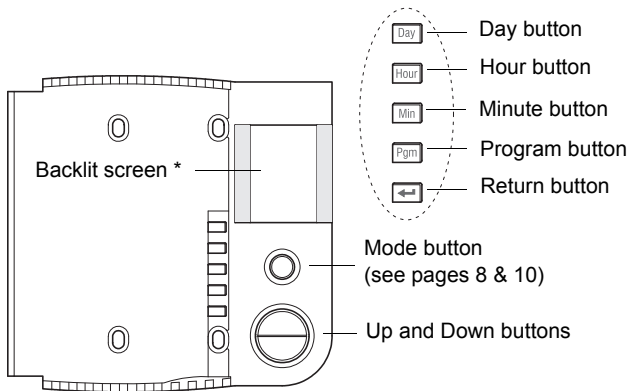
SUPPLIED PARTS

- One (1) thermostat
- Two (2) 6-32 mounting screws
- Two (2) solderless connectors



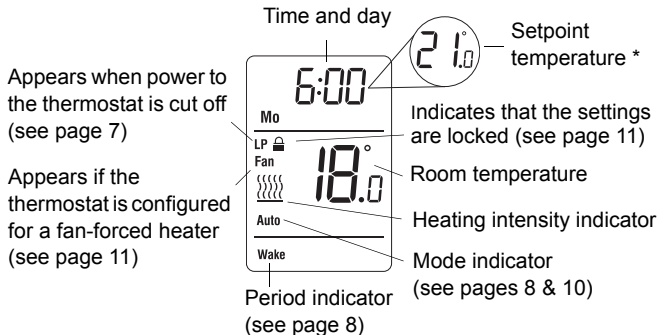
Do you need assistance?
We are here to help.
Call 1-800-831-2823.

Controls



* The screen is backlit for 12 seconds when you press any button.

Display



* To display the set temperature (setpoint), press the **Up** or **Down** button once. The thermostat will display the setpoint instead of the clock for 5 seconds.

Installation guidelines

TURN OFF POWER TO THE HEATING SYSTEM AT THE MAIN POWER PANEL TO AVOID ELECTRICAL SHOCK.

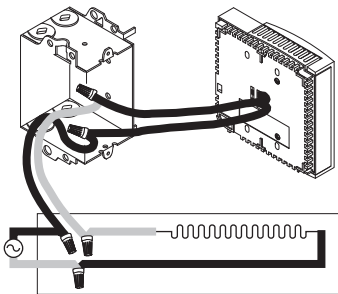
- Must be installed by a trained, experienced technician.
- All cables and connections must comply with local electrical codes.
- This thermostat has tinned copper wires for line and load connections. Special CO/ALR solderless connectors must be used if these wires will be connected to aluminium conductors.
- Install the thermostat onto an electrical box.
- Install the thermostat about 1.5 m (5') high, on an inside wall facing the heater.
- Avoid locations where there are air drafts (such as the top of a staircase or an air outlet), dead air spots (such as behind a door), or direct sunlight.
- Do not install the thermostat on a wall that conceals chimney or stove pipes.
- The thermostat wires are not polarized; either wire can be connected to the load or to the power supply.

Wiring

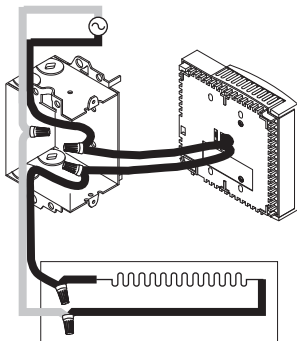
Connect the thermostat wires to the power and to the load using solderless connectors for copper wires.

2-wire Installation

(Where permissible by code)



4-wire Installation



Thermostat mounting

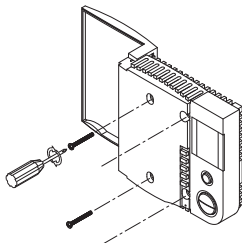
Push the excess wires back inside the electrical box.

Secure the thermostat to the electrical box using the provided screws.

Insert the screws through either the right or left pair of mounting holes on the thermostat.

NOTE: *If there is a protective film or sticker on the thermostat's screen, peel it off.*

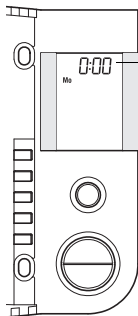
Apply power to the heating system. Verify the installation by checking that the heater can be turned on by raising the setpoint using the **Up** button and off by lowering the setpoint using the **Down** button.



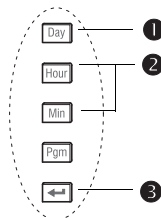
WARNING: *Keep the thermostat's air vents clean and free from obstructions.*

Clock and day setting

- 1 Press the **Day** button to set the day.
- 2 Use the **Hour** and **Min** buttons to set the clock.
- 3 Press the **←** button to exit.



The clock must be set when the time is incorrect or flashes on the screen.



Automatic mode

In Automatic mode, the thermostat adjusts its temperature setpoint according to the period of the day. To place the thermostat in this mode, press the **Mode** button until **Auto** appears on the screen. The current period name also appears (unless the thermostat has not been programmed with a schedule).

You can program up to 4 periods (Wake, Leave, Return or Sleep) in a day. You can set 2 different programs: one for the weekdays (Monday to Friday) and another one for the weekend (Saturday and Sunday).



The thermostat uses the following default schedule:

	Monday to Friday		Saturday & Sunday	
Period	Start Time	Temperature	Start Time	Temperature
Wake	6:00	21.0°C (70°F)	6:00	21.0°C (70°F)
Leave	8:00	16.5°C (62°F)	--:--	--
Return	18:00	21.0°C (70°F)	--:--	--
Sleep	22:00	16.5°C (62°F)	22:00	16.5°C (62°F)

Temporary Override

You can temporarily modify the setpoint temperature while the thermostat is in Automatic mode using the **Up** or **Down** button. The new setpoint will be used until the beginning of the next period. During the override, **Auto** flashes on the screen. You can cancel the override by pressing the **↵** button.

Automatic mode (cont'd)

To modify the schedule:

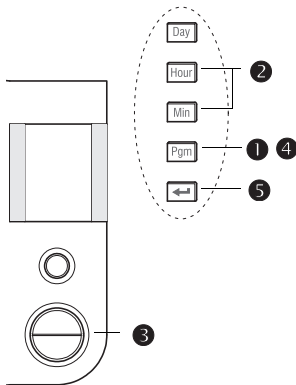
- 1 Press the **Pgm** button. Each time you press the **Pgm** button, the thermostat displays one of the periods of the schedule in the following order:

Weekdays (MO TU WE TH FR)				Weekend (SA SU)			
1	2	3	4	1	2	3	4

- 2 Press the **Hour** and **Min** buttons to set the start time of the displayed period.

NOTE: To cancel the period, press the **Mode** button. Instead of displaying the start time of the period, the thermostat will display --:--. During operation, the thermostat will skip over that period.

- 3 Press the **Up** or **Down** button to set the temperature.
- 4 To set another period, press the **Pgm** button and repeat steps 2 and 3.
- 5 Press the **←** button to return to normal display.



Manual (Man) mode

To place the thermostat in Manual mode, press the **Mode** button until **Man** appears on the screen. In this mode, any modification to the temperature setpoint must be done manually. To set the temperature, press the **Up** or **Down** button. The default setting is 21.0°C (70°F).



Away mode

To place the thermostat in Away mode, press the **Mode** button until **Away** appears on the screen. This mode is a quick way to lower the temperature to a predetermined setting before you go away for an extended length of time. The temperature is 15.0°C (59°F) by default and can be modified using the setup menu (see page 11).



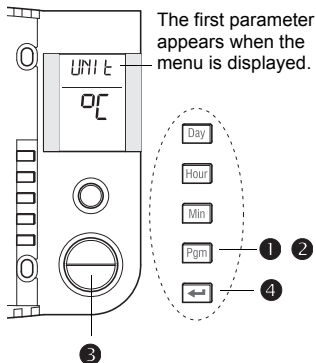
Standby mode

To disable heating, press the **Mode** button until **Standby** appears on the screen. In this mode, the setpoint temperature cannot be displayed or modified. For frost protection, heating will turn on only to prevent the room temperature from dropping below 5°C (41°F).



Advanced settings

- 1 Press the **Pgm** button for 3 seconds.
- 2 To display the next parameter, press the **Pgm** button.
- 3 To modify the displayed parameter, press the **Up** or **Down** button.
- 4 To exit the menu, press the **Left** button or do not press any button for 1 minute.



Advanced settings (cont'd)

Display	Parameter	Options	Default setting
UNIT	Temperature unit	°C / °F	°C
TIME	Time format	12 hr / 24 hr	24 hr
FAN	Fan ¹	No / Yes	No
AWAY	Away temperature ²	5.0°C - 30.0°C (41°F - 86°F)	15.0°C (59°F)
DST	Daylight Saving Time ³	On / Off	Off
YEAR	Year ⁴	00 - 99	09
MONTH	Month ⁴	01 - 12	01
DAY	Day ⁴	01 - 31	01
ES	Early Start ⁵	On / Off	Off
SPLO	Minimum setpoint	5.0°C - 30.0°C (41°F - 86°F)	5.0°C (41°F)
SPHI	Maximum setpoint	5.0°C - 30.0°C (41°F - 86°F)	30.0°C (86°F)
LOCK	Keypad lock ⁶	On / Off	Off

Advanced settings (cont'd)

¹ Fan

Place at Yes if you have a fan-forced heater (to prevent premature burnout of the motor). Leave at No for better temperature regulation if you do not have a fan-forced heater.

² Away temperature

Set the temperature you wish to use when the thermostat is in Away mode (see page 10).

³ Daylight Saving Time

When the Daylight Saving Time function is enabled (**On**), the thermostat automatically switches to Daylight Saving Time on the second Sunday of March and to normal time on the first Sunday of November.

⁴ Year, Month, Day

These parameters are available only if the Daylight Saving Time function is enabled (**On**).

⁵ Early Start

Early Start is used in Automatic mode only. When Early Start is enabled (**On**), the thermostat determines when to start heating so the desired temperature is attained at the beginning of **Wake** and **Return** periods. When Early Start is disabled (**Off**), heating starts only at the beginning of **Wake** and **Return** periods; thus there is a delay before you reach the desired temperature.

⁶ Keypad lock


The settings are locked. The temperature adjustment buttons only allow you to view the temperature setpoint.

In case of difficulty

PROBLEM	SOLUTIONS
Thermostat is hot.	This condition is normal. Ensure that the heater capacity does not exceed the thermostat's maximum load.
Wrong temperature is displayed.	Correct it if any of the following situations exists: <ul style="list-style-type: none">• The thermostat is exposed to an air draft.• The thermostat is located near or above a heat source such as a light dimmer.
Wrong time is displayed.	The thermostat was without power for more than 5 hours.
Temperature does not change according to the programmed schedule.	Check that the thermostat is in Automatic mode. Check the schedule and clock settings. If the thermostat is configured in 12-hour format, ensure that PM appears on the screen when afternoon times are displayed.
LP appears on the screen or the screen is blank despite there is no power outage.	The thermal circuit breaker in the heater is opened. This can happen if the heater is obstructed by furniture or curtain and has overheated, or if the thermal circuit breaker is defective or too sensitive.
The settings cannot be changed.	The settings are locked (see page 13).

Resetting the thermostat (default settings)

WARNING: All parameters, except the clock (time and day), return to their default settings when the thermostat is reset.

- ➊ Press the **Mode** button until **Standby** appears on the screen.
- ➋ Press the  button for 6 seconds.
- ➌ The thermostat will display **rSt** (reset) for 2 seconds to indicate it is reset and will then return to normal display.

Power outage

During a power outage, the thermostat display remains lit for the first 2 minutes. During this time, the **LP** (low power) indicator appears and all buttons are disabled. Then the screen turns blank. The settings are stored in memory. When power returns, the thermostat returns to the mode of operation preceding the power outage. If the power failure has exceeded 5 hours, the clock and date must be re-adjusted.

Specifications

Supply: 120/240 V AC, 60 Hz

Minimum load: 0.83 A (resistive only)
200 W @ 240 V AC
100 W @ 120 V AC

Maximum load: 14.6 A (resistive only)
3500 W @ 240 V AC
1750 W @ 120 V AC

Display range: 0°C to 50.0°C (32°F to 99°F)

Setpoint range: 5.0°C to 30.0°C (41°F to 86°F)

Resolution: 0.5°C (1°F)

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



3-year limited warranty

Resideo warrants this product, excluding battery, to be free from defects in workmanship or materials, under normal use and service, for a period of three (3) years from the date of first purchase by the original purchaser. If at any time during the warranty period the product is determined to be defective due to workmanship or materials, Resideo shall repair or replace it (at Resideo'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) call Resideo Customer Care at 1-800-831-2823. Customer Care will make the determination whether the product should be returned to the following address: Resideo Return Goods, 1985 Douglas Dr. N., Golden Valley, MN 55422, 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 Resideo that the defect was caused by damage which occurred while the product was in the possession of a consumer.

Resideo's sole responsibility shall be to repair or replace the product within the terms stated above. RESIDEO 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 states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation may not apply to you.

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This warranty gives you specific legal rights, and you may have other rights which vary from state to state. If you have any questions concerning this warranty, please write Resideo Customer Care, 1985 Douglas Dr, Golden Valley, MN 55422 or call 1-800-831-2823.

Customer Assistance

If you have any questions about the product, contact us at:
1-800-831-2823

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