

**Honeywell** Home

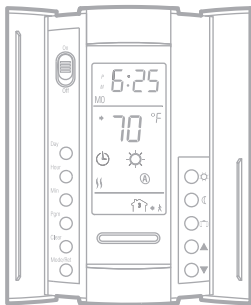


# TL8230A1003

## 7-Day Programmable Thermostat

Owner's Guide

**Read before installing**



M38427A

# Table of contents

## Overview

Before you start .....	3
About your thermostat.....	4
Controls .....	5
Display .....	6

## Installation

Installing the thermostat.....	7
Wiring diagram.....	8
Setting the configuration switches.....	9

## Setup

Time and day .....	10
Daylight Saving Time.....	11
Preset temperatures .....	12

Default schedule.....	13
Modifying the schedule .....	14

## Operation

Running the schedule (Automatic mode) .....	15
Temporary override of schedule .....	15
Permanent override (Manual mode) .....	16

## Appendices

Error messages .....	17
Technical specifications .....	18
Warranty.....	19
Customer assistance.....	20

## Before you start

### Read the entire document

#### CAUTION:

- Installation must be carried out by a certified electrician and must comply with national and local electrical codes.
- To prevent severe shock or electrocution, always cut the power at the service panel before working with wiring.
- Use this thermostat for resistive loads only.
- Do NOT install the thermostat in an area where it can be exposed to water or rain.
- 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).
- For a new installation, choose a location about 5 ft. (1.5 m) above the floor.
- Install the thermostat on an inside wall facing the heating system.
- Install the thermostat onto an electrical box.
- Use special CO/ALR solderless connectors if you connect the thermostat to aluminum wires.
- Keep the thermostat's top and bottom air vents (openings) clean and unobstructed at all times.

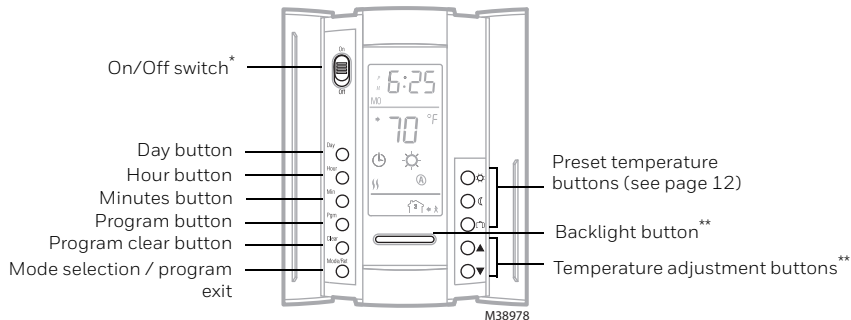
## **About your thermostat**

Resideo's TL8230A1003 thermostat can be connected to an electric heater to control the room temperature.

### **Supplied Parts**

- One (1) thermostat
- Two (2) mounting screws
- Four (4) solderless connectors for copper wires

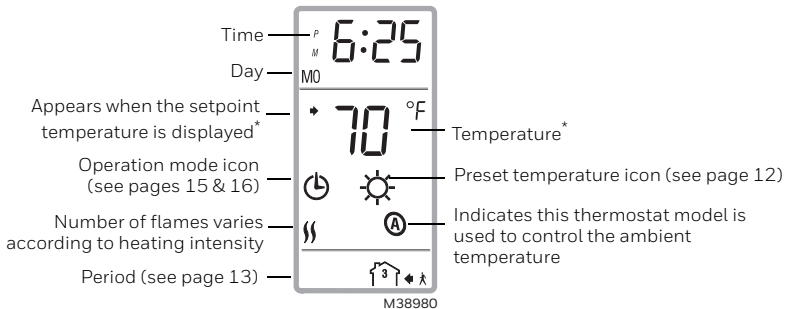
## Controls



\* Place at Off to cut power to the heater (e.g., in the summer). This will not affect the time and temperature settings.

\*\* When the backlight button or either of the ▲▼ buttons is pressed, the display illuminates for 12 seconds.

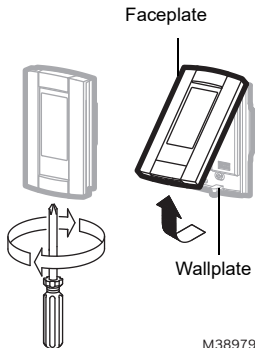
## Display



\* The thermostat normally displays the actual (measured) temperature. To view the setpoint temperature, briefly press either of the ▲▼ buttons. The setpoint will appear for 5 seconds. To change the setpoint temperature, press one of the ▲▼ buttons until the desired temperature is displayed. To scroll faster, press and hold the button.

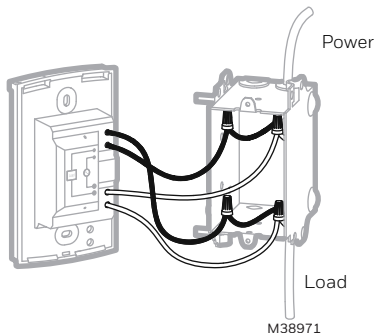
## Installing the thermostat

- 1) Turn the heating system off at the main electrical panel.
- 2) Loosen the bottom screw and remove the thermostat faceplate from its wallplate. (The screw cannot be completely removed.)
- 3) Connect the thermostat to the load and to the power supply (see page 8).
- 4) Install the wallplate to the electrical box using the provided screws.
- 5) Set the configuration switches on the back of the faceplate (see page 9).
- 6) Install the faceplate back on the wallplate and tighten the screw. If there is a sticker on the screen, peel it off.
- 7) Return power to the heating system at the main electrical panel.



## Wiring diagram

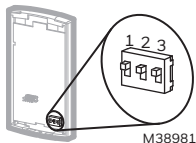
**NOTE:** Connect the wires using the provided solderless connectors for copper wires.



## Set the configuration switches

Configuration switches are on the back of the faceplate.

#	Configurations	Up	Down
1	Display format	°F / 12 h	°C / 24 h
2	Early Start <sup>1</sup>	Enable	Disable
3	Not Used		



1. Early Start is used in Automatic mode only. When Early Start is enabled (on), the thermostat determines when to start heating so the Comfort temperature is attained at the beginning of periods 1 and 3. When Early Start is disabled (**off**), heating starts only at the beginning of periods 1 and 3; thus there is a delay before the Comfort temperature is reached.

## Time and day

To set the clock and the day:

- 1) Press the **Hour** button to set the hour.
- 2) Press the **Min** button to set the minutes.
- 3) Press the **Day** button to set the day.
- 4) Press the **Mode/Ret** button to return the thermostat to normal display.

**NOTE:** The thermostat will automatically return to normal display if no button is pressed for 60 seconds.

## 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.

**NOTE:** The Daylight Saving Time function is disabled (default setting) when the clock loses its setting.




To set the Daylight Saving Time function and to set the date:

- 1) Press the **Day** button (3 seconds) until **DLS** appears on the screen.
- 2) Press either of the **▲▼** buttons to toggle between **On** (enabled) and **Off** (disabled).
- 3) Press the **Day** button briefly. The year setting is displayed.
- 4) Press either of the **▲▼** buttons to set the current year.
- 5) Press the **Day** button briefly. The month setting is displayed.
- 6) Press either of the **▲▼** buttons to set the current month.
- 7) Press the **Day** button briefly. The date setting is displayed.
- 8) Press either of the **▲▼** buttons to set the current date.
- 9) Press the **Mode/Ret** button to return the thermostat to normal display.




**NOTE:** The thermostat will automatically return to normal display if no button is pressed for 60 seconds.

## Preset temperatures






The thermostat has 3 preset temperatures. Their default settings are shown in the following table.

Preset temperature	Intended use	Icon	Default Settings
Comfort	When at home		70°F (21.0°C)
Economy	When asleep or away from home		62°F (16.5°C)
Vacation	During prolonged absence		50°F (10.0°C)

### To use a preset temperature:

Briefly press the appropriate preset temperature button (  ,  or  ). The preset temperature will become the current setpoint and its icon will appear on the screen.

### To modify a preset temperature:


- 1) Press one of the   buttons to display the desired temperature.
- 2) Press and hold the appropriate preset temperature button (  ,  or  ) until its icon is displayed.

## Default schedule

The schedule consists of 4 periods per day, which represents a typical work day. The Comfort (☀) preset temperature is automatically used in Periods 1 and 3 and the Economy (☾) preset temperature in Periods 2 and 4. You can program the thermostat to skip (cancel) the periods that do not apply to your situation. For example, you can skip periods 2 and 3 for the weekend.

**NOTE:** If you wish to use only 2 periods, use the following combinations: “1 and 4” or “2 and 3”. Early Start (see page 11) will not work with any other combinations.

You can have a different program every day; i.e., each period can start at a different time every day. The thermostat has been programmed with the following schedule.


Period	Description	Setting	MO	TU	WE	TH	FR	SA	SU
	Wake	Comfort ☀	6:00 AM	6:00 AM	6:00 AM	6:00 AM	6:00 AM	6:00 AM	6:00 AM
	Leave	Economy ☾	8:00 AM	8:00 AM	8:00 AM	8:00 AM	8:00 AM	--:--	--:--
	Return	Comfort ☀	6:00 PM	6:00 PM	6:00 PM	6:00 PM	6:00 PM	--:--	--:--
	Sleep	Economy ☾	10:00 PM	10:00 PM	10:00 PM	10:00 PM	10:00 PM	10:00 PM	10:00 PM

## Modifying the schedule






- 1) Press **Pgm**. Period 1 for Monday is displayed.
- 2) To program another period, press **Pgm** to display that period.
- 3) To program another day, press **Day** to display that day (hold for 3 seconds to select the entire week).
- 4) Press **Hour** and **Min** to set the period start time, or press **Clear** to skip (cancel) the period (--:-- will be displayed).
- 5) Repeat steps 2 to 4 to program another period.
- 6) Press **Mode/Ret** to return the thermostat to normal display.

**NOTE:** The thermostat will automatically return to normal display if no button is pressed for 60 seconds.





## Running the schedule (Automatic mode)

In Automatic mode, the thermostat follows the programmed schedule (see page 13). To place the thermostat in this mode, press **Mode/Ret** until  is displayed.

## Temporary override of schedule

If you modify the setpoint temperature (by pressing the , ,  or  button) when the thermostat is in Automatic mode, the new temperature will be used until the beginning of the next period.  flashes during the temporary override. You can cancel the temporary override by pressing **Mode/Ret**.

## **Permanent override of schedule (Manual mode)**

To place the thermostat in Manual mode, press **Mode/Ret** to display  on the screen. In this mode, the thermostat does not follow the programmed schedule. Press the ,  or  button to set the temperature.

## Error Messages

- L0** The measured temperature is below the display range. Heating is activated.
- H1** The measured temperature is above the display range. Heating is deactivated.
- Er** Verify the thermostat connection and sensor connection.

## Technical Specifications

**Power supply:** 240/208 VAC, 50/60 Hz

**Maximum load:** 15.0 A (3600 W @ 240 VAC)  
(3120 W @ 208 VAC)

**Heating cycle:** 15 minutes

**Setpoint range:** 40 °F to 86 °F (5 °C to 30 °C)

**Display range:** 32 °F to 158 °F (0 °C to 70 °C)

**Resolution:** 1 °F (0.5 °C)

**Data protection:** In the event of a power failure, most settings are saved. However the time and Daylight Saving Time must be set if the power failure lasts more than 6 hours. The thermostat will return to the mode that was active prior to the power failure.



## 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 five (5) 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 1-800-468-1502. 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.

THIS WARRANTY IS THE ONLY EXPRESS WARRANTY RESIDEO 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 FIVE YEAR DURATION OF THIS WARRANTY. Some 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 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 1-800-468-1502.

## **Customer assistance**

If you have any questions about the operation of your thermostat, please go to **resideo.com**.