



# PRO 2000 Series

PROGRAMMABLE THERMOSTATS  
TH2110DV1008, TH2210DV1006

## OPERATING MANUAL

### THIS MANUAL COVERS THE FOLLOWING MODELS:

**TH2110D:** For 1-Heat / 1-Cool systems

**TH2210D:** For 2-Heat / 1-Cool heat pump systems  
(Remove the thermostat from its wallplate to find the model number.)



### CAUTION

#### EQUIPMENT DAMAGE HAZARD.

To prevent possible compressor damage, do not use Cooling mode when the outdoor temperature is below 50 °F (10 °C).

### NEED HELP?

For assistance with this product please visit  
**[www.resideo.com](http://www.resideo.com)**  
or call Resideo Customer Care toll-free at  
**1-800-468-1502.**

### READ AND SAVE THESE INSTRUCTIONS.

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### ABOUT YOUR NEW THERMOSTAT

Your new Resideo thermostat has been designed to give you many years of reliable service and easy-to-use, push-button climate control.

### Features

- Backlit display is easy to read
- Displays ambient (measured) temperature at all times
- One-touch access to setpoint temperature
- Preprogrammed schedule can greatly reduce your heating/cooling expenses
- Separate programmable weekday/weekend schedules (5+2 day programming)
- Temporary and permanent override of schedule
- Adaptive Intelligent Recovery™ ensures right temperature at the right time
- Built-in compressor protection

### THIS THERMOSTAT IS READY TO GO

Simply perform the three steps below and the thermostat is in operation:

1. Set the clock. See page 2.
2. Select whether to heat or cool. See page 2.
3. Select whether to run the fan continuously or only when needed. See page 3.

If you do not wish to use the pre-programmed schedule settings, you can:

- Modify the schedule. See page 3.
- Temporarily override the schedule. See page 4.
- Permanently override the schedule. See page 4.



## QUICK REFERENCE TO CONTROLS

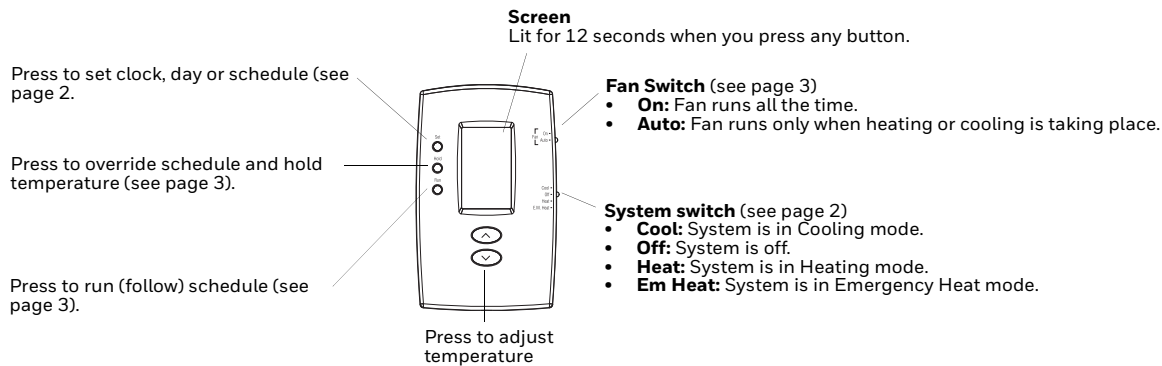


Fig. 1.

## QUICK REFERENCE TO DISPLAY

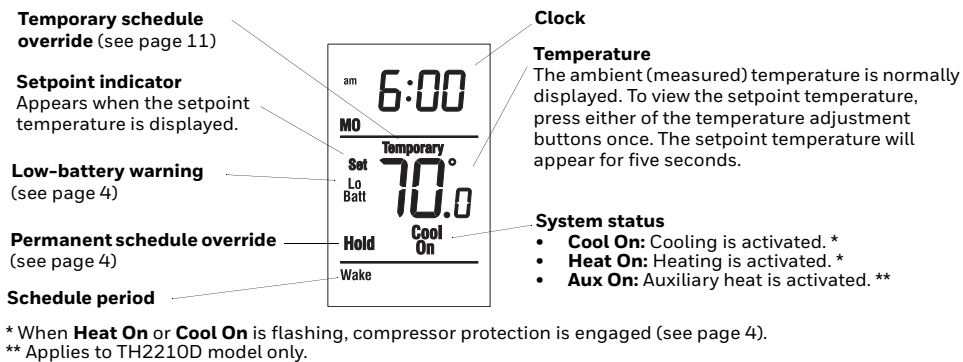


Fig. 2.

## SET THE CLOCK

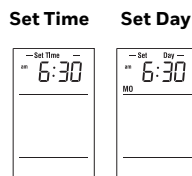


Fig. 3.

1. Press the **Set** button. **Set Time** will appear on the screen and the time display will flash.
2. Press the  $\wedge$  or  $\vee$  button to set the time.
3. Press the **Set** button again. **Set Day** will flash on the screen.
4. Press the  $\wedge$  or  $\vee$  button to select the day of the week.
5. Press the **Run** button to save the changes & exit. (The changes are also saved if you do not press any button for 60 seconds.)

**NOTE:** The clock has lost its settings when the time display flashes. If the thermostat is following the schedule, it will use the temperature settings programmed for the **Wake** period of the weekdays until you readjust the clock.

## SYSTEM SWITCH

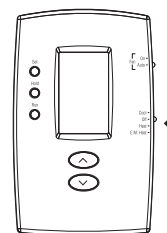


Fig. 4.

Use the **System** switch to place the system in one of the following modes:

- **Cool:** System is in Cooling mode.
- **Off:** System is off.
- **Heat:** System is in Heating mode.
- **Em Heat:** System is in Emergency Heat mode. Only auxiliary heating can be activated. The compressor is disabled. (This mode is available on the TH2210D model only.)



## CAUTION EQUIPMENT DAMAGE HAZARD.

Do not use Cooling mode when the outdoor temperature is below 50 °F (10 °C).

## FAN SWITCH

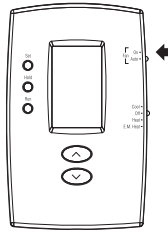


Fig. 5.

Use the **Fan** switch to select the fan operation.

- **Auto:** The fan runs only when heating or cooling is activated (commonly used setting).
- **On:** The fan runs all the time.

## USING THE SCHEDULE

Press the **Run** button to follow the programmed schedule. For maximum energy savings while maintaining comfort, you can program the schedule such that the temperature is at an economical level when you sleep or leave for work and at a comfortable level when you are awake and at home. You can program up to four periods per day:

<b>Wake</b>	Starts when you wake up
<b>Leave</b>	Starts when you leave for work
<b>Return</b>	Starts when you return home
<b>Sleep</b>	Starts when you go to sleep

To program a period, you need to set its start time and its two temperature settings (one when the thermostat is in cooling mode and another one when it is in heating mode). The same settings are used every day from Monday to Friday and another set of settings are used for Saturday and Sunday. For example, you could program all four periods for the weekdays but only two periods (Wake and Sleep) for the weekends.

## PREPROGRAMMED SCHEDULE SETTINGS

The thermostat is preprogrammed with the following settings.

Table 1.

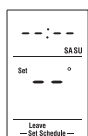
Period	Weekdays			Weekends		
	Start time	Heat	Cool	Start time	Heat	Cool
<b>Wake</b>	6:00 am	70 °F (21 °C)	75 °F (24 °C)	6:00 am	70 °F (21 °C)	75 °F (24 °C)
<b>Leave</b>	8:00 am	62 °F (16.5 °C)	83 °F (28.5 °C)	--	--	--
<b>Return</b>	6:00 pm	70 °F (21 °C)	75 °F (24 °C)	--	--	--
<b>Sleep</b>	10:00 pm	62 °F (16.5 °C)	78 °F (25.5 °C)	10:00 pm	60 °F (15.5 °C)	78 °F (25.5 °C)

These settings can reduce your energy bills. See the next page if you wish to modify them.

## MODIFYING THE SCHEDULE



The **Wake** period for the weekdays is set to 6 a.m. and 70 °F (Heating mode).



To skip a period (except **Wake**), press the **Hold** button for 4 sec. while that period is displayed.

Fig. 6.

1. Press the **Set** button 3 times until **Set Schedule** appears. The start time of the first period (Wake) of the week days (Mon-Fri) will flash.
2. Press the **^** or **v** button to set the time.
3. Press the **Set** button. The temperature setting for that period will flash.
4. To program the temperature settings for the cooling mode, place the **System** switch in **Cool**. To program the temperature settings for the heating mode, place the switch in **Heat**.
5. Press the **^** or **v** button to set the temperature.
6. Press the **Set** button. The start time of the next period will flash.
7. Repeat steps 2 through 6 for each of the remaining periods.
8. Once all adjustments are made, press the **Run** button to save them and exit. (The changes are also saved if you do not press any button for 60 seconds.)

## TEMPORARY OVERRIDE OF SCHEDULE

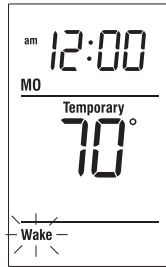


Fig. 7.

To temporarily ignore the schedule, press **▲** or **▼** until the desired temperature is displayed. The word **Temporary** will appear on the screen and the period display will flash to indicate that the current period has been overridden. The new temperature will be used until the next period begins.

NOTE: Pressing **▲** or **▼** once will display the setpoint temperature. To change the setpoint temperature, press either button more than once.

Press the **Run** button if you wish to cancel the temporary setting before the beginning of the next period.

## PERMANENT OVERRIDE OF SCHEDULE

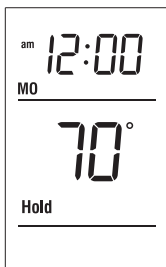


Fig. 8.

To permanently ignore the schedule, press **▲** or **▼** until the desired temperature is displayed. Then, press the **Hold** button to maintain the new temperature indefinitely. The word **Hold** will appear on the screen.

Press the **Run** button if you wish to cancel the override and resume the schedule. The word **Hold** will disappear and the thermostat will be set to the temperature programmed for the current period.

## ADAPTIVE INTELLIGENT RECOVERY (AIR)

Adaptive Intelligent Recovery™ allows the thermostat to “learn” how long your furnace or air conditioner takes to reach the set temperature. Simply program the desired times and desired temperatures into the schedule. The thermostat will determine when to activate heating or cooling so that the desired temperature is attained at the desired time.

**Example:** If you set the Wake time to 6 a.m. and the temperature to 70 °F (21 °C), the heat will come on before the set time, so the temperature is 70 °F (21 °C) by the time you wake at 6 a.m.

## BUILT-IN COMPRESSOR PROTECTION

Your thermostat has a feature that helps prevent damage to the compressor of your air conditioning or heat pump system. Because damage can occur if the compressor is restarted too soon after shutdown, this feature forces the compressor to wait 5 minutes before restarting. During the wait time, the message **Cool On** or **Heat On** flashes on the screen. When the safe wait time has elapsed, the message stops flashing and the compressor turns on.

## BATTERY REPLACEMENT

NOTE: Batteries are optional (serving as backup power) only if your thermostat is connected to 24 VAC.



### CAUTION

**Set the System switch to Off before removing the batteries. Otherwise, the heating/cooling system could remain activated even when batteries are removed.**

Install two fresh AAA batteries when **Lo Batt** (low batteries) flashes on the screen. The message appears for 60 days before the batteries are depleted.

Replace batteries once a year, or when you will be away for more than a month.

Most settings are stored in non-volatile (permanent) memory. Only the clock and the day must be set if the thermostat was without AC power or batteries.

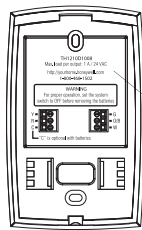
NOTE: The low-battery icon will not appear when the batteries are depleted if the thermostat is connected to 24 VAC.

## IN CASE OF DIFFICULTY

**Table 2.**

Screen is blank.	<ul style="list-style-type: none"> <li>Check circuit breaker and reset if necessary.</li> <li>Ensure the heating/cooling system is powered up.</li> <li>Ensure the furnace door is properly closed.</li> <li>Ensure two fresh AAA alkaline batteries are correctly installed.</li> </ul>
Temperature settings cannot be changed.	<ul style="list-style-type: none"> <li>The <b>System</b> switch is off.</li> <li>You are setting the temperature outside its allowable range:               <ul style="list-style-type: none"> <li>Heat: 40 °F to 90 °F (4.5 °C to 32 °C).</li> <li>Cool: 50 °F to 99 °F (10 °C to 37 °C).</li> </ul> </li> </ul>
<b>Cool On</b> or <b>Heat On</b> is flashing.	<ul style="list-style-type: none"> <li>The compressor protection delay is underway. Wait for the delay to end (maximum of 5 minutes).</li> </ul>
<b>HI</b> appears on the screen.	<ul style="list-style-type: none"> <li>The ambient (measured) temperature is above 122 °F (50 °C).</li> </ul>
<b>LO</b> appears on the screen.	<ul style="list-style-type: none"> <li>The ambient (measured) temperature is below 32 °F (0 °C).</li> </ul>
<b>E1</b> appears on the screen.	<ul style="list-style-type: none"> <li>The temperature sensor circuit is opened. Replace the thermostat.</li> </ul>
<b>E2</b> appears on the screen.	<ul style="list-style-type: none"> <li>The temperature sensor circuit is shorted. Replace the thermostat.</li> </ul>

## CUSTOMER ASSISTANCE



For assistance with this product, please visit **[www.resideo.com](http://www.resideo.com)**.

Or call Resideo Customer Care toll-free at **1-800-468-1502**.

To save time, please note your model number and date code before calling.

**Fig. 9.**

## 2-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 two (2) 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.

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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 1-800-468-1502.



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

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