

# User Manual

**ECONOMY  
SERIES**

## Programmable Thermostats

*This manual covers the following thermostat models:*

**2030** 1 Heat / 1 Cool Conventional  
or Heat Pump

**2230** Up to 2 Heat / 1 Cool  
Conventional or Heat Pump

***Read all instructions before proceeding.***

**Store this manual for future reference**

# Contents

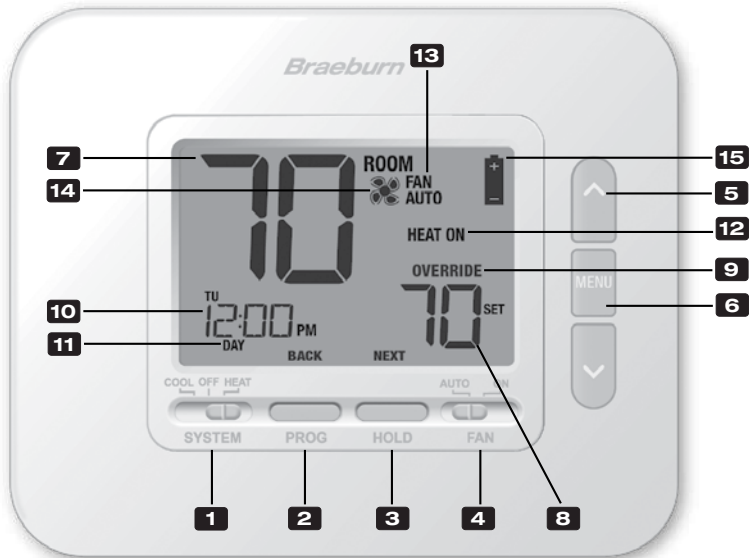
|   |    |
|---|----|
| <b>1 About Your Thermostat</b>                  |    |
| Quick Reference - Thermostat and Display .....  | 4  |
| <b>2 User Settings</b>                          |    |
| Accessing User Settings .....                   | 6  |
| Table of User Settings .....                    | 7  |
| Resetting Service Reminders .....               | 7  |
| Setting the Time and Day .....                  | 7  |
| Service Reminders .....                         | 7  |
| Hold and Override .....                         | 8  |
| Resetting Thermostat .....                      | 8  |
| <b>3 Setting Your Program Schedule</b>          |    |
| Tips Before Setting Your Program Schedule ..... | 9  |
| Programming a 7 Day Schedule .....              | 11 |
| Programming a 5-2 Day Schedule .....            | 13 |
| <b>4 Operating Your Thermostat</b>              |    |
| Setting the System Control Mode .....           | 14 |
| Setting the Fan Control Mode .....              | 15 |
| Temperature Adjustment .....                    | 16 |
| Program Event Indicators .....                  | 17 |
| System Status and Maintenance Indicators .....  | 18 |
| <b>5 Additional Operation Features</b>          |    |
| Adaptive Recovery Mode .....                    | 21 |
| Compressor Protection .....                     | 21 |
| <b>6 Thermostat Maintenance</b>                 |    |
| Battery Replacement .....                       | 22 |
| Thermostat Cleaning .....                       | 22 |

**Congratulations! You are in control of one of the easiest-to-use thermostats on the market today. This thermostat has been designed to provide you with years of reliable performance and comfort control.**

## **Features**

- Stylish new design with large display and bright blue backlight
- SpeedSet® programming gives you the option of programming all 7 days at once
- Convenient HOLD feature lets you override the program schedule
- Extra large display characters make viewing settings even easier
- User selectable filter monitor reminds you of required filter maintenance
- Precise temperature accuracy keeps you in control of your comfort

# 1 About Your Thermostat



# Thermostat and Display

- 1** **SYSTEM Switch**.....Selects the system you want to control
- 2** **PROG Button**.....Enters programming mode or hold for 3 seconds to enter SpeedSet® mode
- BACK Button\***.....Secondary function of the **PROG** button - Moves to previous setting
- 3** **HOLD Button**.....Enters / Exits the **HOLD** mode (program bypass mode)
- NEXT Button\***.....Secondary function of the **HOLD** button - Moves to next setting
- 4** **FAN Switch**.....Selects the system fan mode
- 5** **Up / Down Arrow Buttons**.....Increases or decreases settings (time, temperature, etc.)
- 6** **MENU Button**.....Used to access thermostat User setting mode or exit program mode
- 7** **Room Temperature** ..... Displays the current room temperature
- 8** **Set Temperature** ..... Displays the current setpoint temperature
- 9** **Override Indicator** ..... Indicates that the current program schedule has been temporarily overridden
- 10** **Time of Day** ..... Displays the current time of day
- 11** **Program Event Indicator** ..... Indicates which part of the program is currently active
- 12** **System Mode** ..... Displays the system mode and current system status
- 13** **Fan Mode Indicator** ..... Indicates the current system fan mode
- 14** **Fan Status Indicator** ..... Indicates that the system fan is running
- 15** **Low Battery Indicator** ..... Indicates when the batteries need to be replaced
- Battery Compartment**.....Located on the back side of thermostat (if installed)

\* **BACK** and **NEXT** are secondary functions of the **PROG** and **HOLD** buttons. When in programming or configuration modes, **BACK** and **NEXT** appear in the display screen indicating that the **PROG** and **HOLD** now function as **BACK** and **NEXT**.

## 2 User Settings

User Settings allow you set the current time of day as well as customize various thermostat features.

To access the User Settings, press and release the **MENU** button to display the first User Setting.

Press the **▲** or **▼** buttons to change the value for the displayed User Setting. After your desired setting is displayed, press **NEXT** (HOLD) to advance to the next User Setting. You may also press **BACK** (PROG) to move backwards through the User Settings.

You will exit the user settings after the last setting.



## Table of User Settings

**NOTE:** Some user settings may not be available, depending on how the thermostat was configured during installation.

| No.  | User Setting                        | Displayed      | Default Setting | Available Settings                  | Description of Available Settings        |
|--|-------------------------------------|----------------|-----------------|-------------------------------------|--|
| 1  | <b>Reset SERVICE FILTER Message</b> | CLR            | NO              | NO                                  | Select to keep message displayed         |
|  |                                     |                |                 | Y                                   | Select to remove message and reset timer |
| <p><b>[Only appears if the service filter time interval has expired]</b> If a service filter time interval was selected in setting 6, the thermostat will display a SERVICE FILTER message once that time interval is reached. Select NO to keep the message displayed or select Y (YES) to clear the message and reset the timer.</p> |                                     |                |                 |                                     |  |
| 2  | <b>Current Time of Day (Hour)</b>   | (current time) | 12:00           | 1-12                                | Select the current hour of day           |
|  |                                     |                |                 | Set the current hour of the day.    |  |
| 3  | <b>Current Time of Day (Minute)</b> | (current time) | 12:00           | 00-60                               | Select the current minute of the hour    |
|  |                                     |                |                 | Set the current minute of the hour. |  |
| 4  | <b>Current Day of the Week</b>      | (current day)  | M               | M-SU                                | Select the current day of the week       |
|  |                                     |                |                 | Set the current day of the week.    |  |

| No.   | User Setting                        | Displayed      | Default Setting | Available Settings  | Description of Available Settings                  |
|---|-------------------------------------|----------------|-----------------|---|--|
| 5   | Service Filter Timer                | SERVICE FILTER | OFF             | OFF   | Service filter timer is disabled                   |
|   |                                     |                |                 | 30, 60, 90, 120, 180, 365   | Select number of days for service filter timer     |
| Select the number of days before receiving a reminder to change your system filter (if equipped). When the timer interval has expired, the thermostat will display the message SERVICE FILTER. To reset this reminder, see setting 1. To disable, select OFF.               |                                     |                |                 |   |  |
| 6   | Temperature Hold Time (HOLD Button) | HOLD           | LONG            | 4HR, 3HR<br>24HR, 1HR   | Select a program override time limit of 1-4 hours. |
|   |                                     |                |                 | <b>[Only available if programming is enabled]</b> Temperature Hold Time lets you select the time that your thermostat will hold the temperature when the HOLD button has been pressed. When LONG is selected, the thermostat will hold your temperature indefinitely. When 24HR is selected, the thermostat will hold your temperature for 24 hours and then return to the current program temperature. |  |
| 7   | Program Override Time Limit         | OVERRIDE       | 4 HR            | LONG  | Select for long (permanent) HOLD mode              |
|   |                                     |                |                 | 24HR  | Select for 24 hour (temporary) HOLD mode           |
| <b>[Only available if programming is enabled]</b> The Program Override Time Limit allows you to set a maximum time limit (in hours) that the thermostat will return to the program after a temporary temperature override has been made. You may select 1, 2, 3 or 4 hours. |                                     |                |                 |   |  |
| 8   | User Reset                          | CLR            | NO              | NO  | Reset disabled - no changes made                   |
|   |                                     |                |                 | Y   | Reset enabled - resets thermostat                  |
| Selecting (Y) YES will reset all user settings, program and current time.   |                                     |                |                 |   |  |



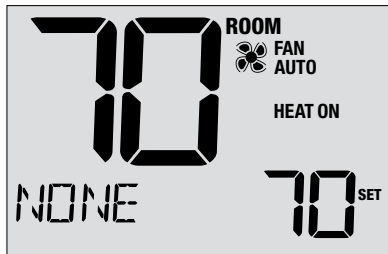
### 3 Setting Your Program Schedule

#### Tips Before Setting Your Program Schedule

- Make sure your current time and day of the week are set correctly.
- Make sure the AM and PM indicators are correct.
- Your NITE event cannot exceed 11:50 p.m.
- **BACK** and **NEXT** are secondary functions of the PROG and HOLD buttons.

#### This thermostat has been configured with one of the following programming options:

- 7-day programming mode with 4 events per day
- 5-2 (weekday/weekend) programming mode with 4 events per day
- Non-Programmable mode



**NOTE:** If this thermostat was configured to be non-programmable, then you cannot set a program schedule. If you press the **PROG** or **HOLD** buttons, the word “NONE” will appear in the display.

## Energy Saving Programs

This thermostat comes pre-programmed with a default energy saving program. The following tables outline the pre-programmed times and temperatures for heating and cooling in each of your 4 daily events. If you wish to use these settings, then no further programming is necessary:

| <b>Residential 7 Day Programming</b><br><i>Factory Settings</i> |  | <b>5-2 Day Programming</b><br><i>Weekday/Weekend Factory Settings</i> |  |
|---|--|---|--|
| <b>4 Event</b>  | <b>All Days</b>  | <b>Weekday</b>  | <b>Weekend</b>   |
| <b>MORN</b>   | Time: 6:00 am<br>Heat: 70° F (21° C)<br>Cool: 78° F (26° C)  | Time: 6:00 am<br>Heat: 70° F (21° C)<br>Cool: 78° F (26° C)           | Time: 6:00 am<br>Heat: 70° F (21° C)<br>Cool: 78° F (26° C)  |
| <b>DAY</b>  | Time: 8:00 am<br>Heat: 62° F (17° C)<br>Cool: 85° F (29° C)  | Time: 8:00 am<br>Heat: 62° F (17° C)<br>Cool: 85° F (29° C)           | Time: 8:00 am<br>Heat: 62° F (17° C)<br>Cool: 85° F (29° C)  |
| <b>EVE</b>  | Time: 6:00 pm<br>Heat: 70° F (21° C)<br>Cool: 78° F (26° C)  | Time: 6:00 pm<br>Heat: 70° F (21° C)<br>Cool: 78° F (26° C)           | Time: 6:00 pm<br>Heat: 70° F (21° C)<br>Cool: 78° F (26° C)  |
| <b>NITE</b>   | Time: 10:00 pm<br>Heat: 62° F (17° C)<br>Cool: 82° F (28° C) | Time: 10:00 pm<br>Heat: 62° F (17° C)<br>Cool: 82° F (28° C)          | Time: 10:00 pm<br>Heat: 62° F (17° C)<br>Cool: 82° F (28° C) |

## Setting a 7-Day program – All 7 Days at Once (SpeedSet®)

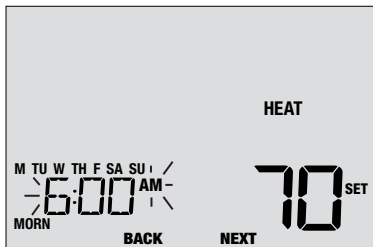
(7-day programming mode only)

**NOTE:** Setting all 7 days at once will copy over any previously programmed individual days.

### Available Daily Events:

**MORN, DAY, EVE, NITE**

1. Hold the **PROG** button for 3 seconds until M-SU appears.
2. Use **SYSTEM** switch to select HEAT or COOL. Press **NEXT**.
3. Press **▲** or **▼** to adjust the hour for the first event. Press **NEXT**.
4. Press **▲** or **▼** to adjust the minute for the first event. Press **NEXT**.
5. Press **▲** or **▼** to adjust the temp for the first event. Press **NEXT**.
6. Repeat steps 3-5 for the remaining daily events.
7. If needed, repeat steps 2-6 to program the opposite mode.
8. Press **MENU** to exit.



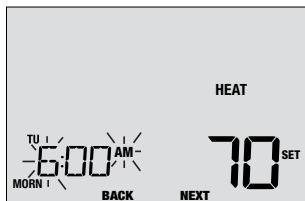
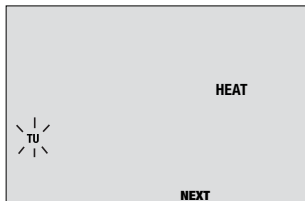
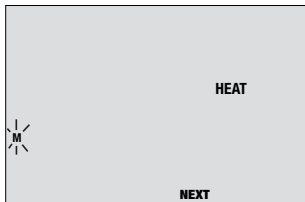
## Setting a 7-Day program – Individual Days

(7-day programming mode only)

### Available Daily Events:

**MORN, DAY, EVE, NITE**

1. Press and release the **PROG** button.
2. Use **SYSTEM** switch to select HEAT or COOL.
3. Press **▲** or **▼** to select the day you want to program. Press **NEXT**.
4. Press **▲** or **▼** to adjust the hour for the first event. Press **NEXT**.
5. Press **▲** or **▼** to adjust the minute for the first event. Press **NEXT**.
6. Press **▲** or **▼** to adjust the temp for the first event. Press **NEXT**.
7. Repeat steps 4-6 for your remaining daily events.
8. If needed, repeat steps 3-7 to program additional days.
9. If needed, repeat steps 2-8 to program the opposite mode.
10. Press **MENU** to exit.



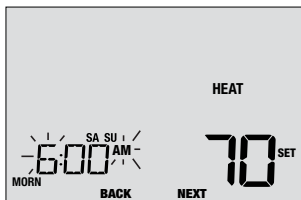
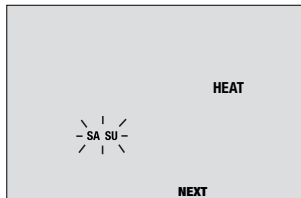
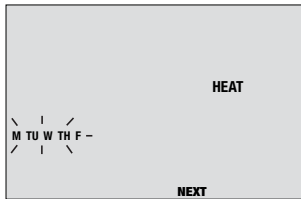
## Setting a 5-2 Day Weekday/Weekend Program

(5-2 day programming mode only)

### Available Daily Events:

#### MORN, DAY, EVE, NITE

1. Press and release the **PROG** button.
2. Use **SYSTEM** switch to select HEAT or COOL.
3. Press **▲** or **▼** to select weekdays or weekend. Press **NEXT**.
4. Press **▲** or **▼** to adjust the hour for the first event. Press **NEXT**.
5. Press **▲** or **▼** to adjust the minute for the first event. Press **NEXT**.
6. Press **▲** or **▼** to adjust the temp for the first event. Press **NEXT**.
7. Repeat steps 4-6 for your remaining daily events.
8. If needed, repeat steps 3-7 to program additional days.
9. If needed, repeat steps 2-8 to program the opposite mode.
10. Press **MENU** to exit.



## 4 Operating Your Thermostat

### Setting the **SYSTEM** Control Mode

The System Control has 4 modes of operation – COOL, OFF, HEAT, and EMER (2230 only). The mode can be selected by moving the **SYSTEM** switch to the appropriate mode.

**COOL** Only your cooling system will operate.

**OFF** Heating and cooling systems are off.

**HEAT** Only your heating system will operate

**EMER** Operates a backup heat source (Emergency Heat) for heat pump systems only (2230 only).



## Setting the FAN Control Mode

The Fan Control has 2 modes of operation – AUTO and ON. The mode can be selected by moving the **FAN** switch to the appropriate mode.

**AUTO** The system fan will run only when your heating or cooling system is running.

**ON** The system fan stays on.

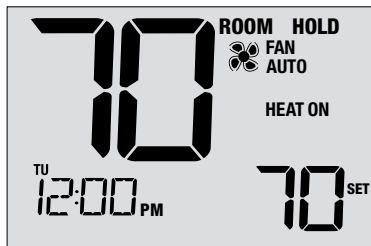
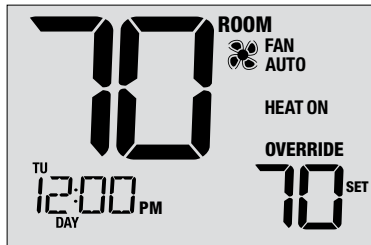


## Temperature Adjustment

**Temporary Adjustment (OVERRIDE)** – Press **▲** or **▼** to adjust the current set temperature. The set temperature will change back to your programmed temperature a few hours later or at the start of the next scheduled program event. **OVERRIDE** will appear in the display during the entire override period.

**Extended Adjustment (HOLD)** – Press the **HOLD** button to override all programming. **HOLD** will appear in the display. You can continue to use the **▲** or **▼** buttons to adjust the current set temperature. Press **HOLD** again to resume the program schedule. You can limit your hold time to 24-hours by adjusting User Setting 6 in section 2.

**NOTE:** *If your thermostat was configured to be non-programmable, HOLD and OVERRIDE are not available.*





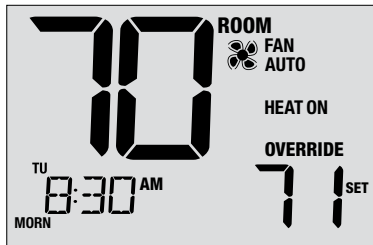
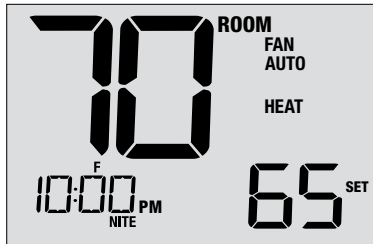
## Program Event Indicators

Program event indicators appear in the display to let you know what part of your current program is active.

MORN, DAY, EVE or NITE

When **OVERRIDE** appears, your program has been temporarily overridden and will resume in 1-4 hours depending on the selection for User Setting 7 in section 2. The program will also resume at the beginning of the next scheduled program event.

**NOTE:** *If your thermostat was configured to be non-programmable, or is in HOLD mode, you will not see a Program Event or OVERRIDE indicator.*



## System Status and Maintenance Indicators

Status indicators are messages or symbols that appear in the display to let you know what function your system is currently performing. They are also used to inform you of various service and maintenance functions.

**HEAT ON** The heating system is running.

**COOL ON** The cooling system is running.

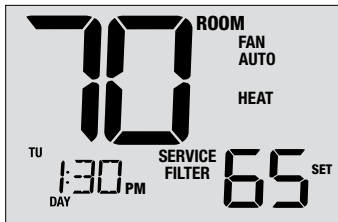
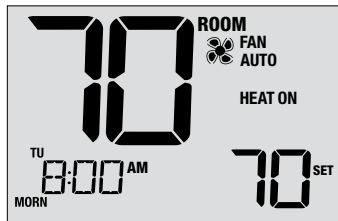
**HEAT ON AUX** The auxiliary stage of heating is running (2230 only).

**EMERGENCY HEAT ON** The emergency heating system is running (2230 only).



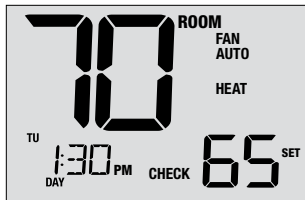
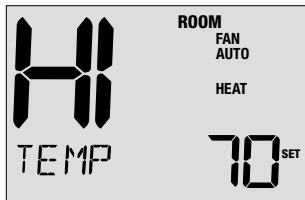
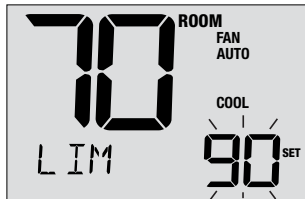
Indicates that the system fan is running.

**SERVICE FILTER** A user selectable filter service reminder for changing the filter has been triggered. To set or reset this reminder, see User Setting 5 in section 2.



## System Status and Maintenance Indicators *(continued)*

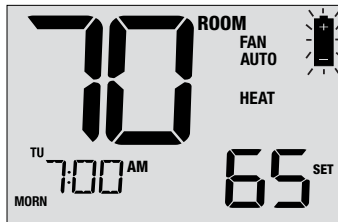
- LIM** Setpoint temperature has reached its upper or lower limit maximum.
- HI TEMP** Room temperature has risen above the display range. Cooling will still operate to help lower temperature.
- LO TEMP** Room temperature has fallen below the display range. Heat will still operate to help raise temperature.
- CHECK** Indicates that there is a potential problem with your system. Contact a local service technician.



## System Status and Maintenance Indicators *(continued)*



If batteries are installed and they become low, the battery symbol appears in the display. When the batteries become critically low, the battery symbol will flash (see “Changing the Batteries” in section 6).



## 5 Additional Operating Features

### **Adaptive Recovery Mode (ARM™)**

If enabled, Adaptive Recovery Mode attempts to achieve your desired heating or cooling temperature at the time you have set in your current program schedule, after a setback period. For example, if you set your heat down to 62° at night and have a set point of 70° scheduled for 7:00 AM, the thermostat may turn on your heating system early in order to achieve a temperature of 70° by 7:00 AM.

This feature does not operate when the thermostat is in HOLD mode; if the program is temporarily overridden or if emergency heat is selected on a multistage heat pump system.

### **Compressor Protection**

This thermostat includes an automatic compressor protection delay to avoid potential damage to your system from short cycling. This feature activates a short delay after turning off the system compressor.

## 6 Thermostat Maintenance

### Changing the Batteries

Depending on your installation, this thermostat may be equipped with two (2) “AA” type alkaline batteries.

If batteries are installed and they become low, the battery symbol appears in the display. When the batteries become critically low, the battery symbol will flash.

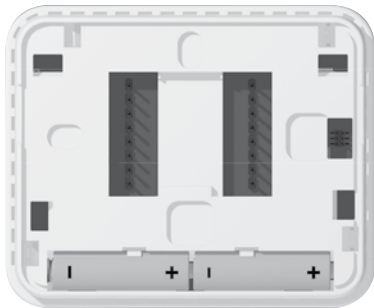
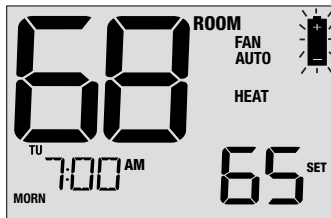
#### To change your batteries:

1. Remove thermostat body by gently pulling it from base.
2. Remove old batteries and replace with new batteries.
3. Make sure to correctly position the (+) and (-) symbols.
4. Gently push thermostat body back onto base.

**NOTE:** We recommend replacing the thermostat batteries annually or if the thermostat will be unattended for an extended period of time.

### Thermostat Cleaning

Never spray any liquid directly on the thermostat. Spray your cleaning liquid on a soft cloth and then proceed to clean the screen with the damp cloth. Only use water or household glass cleaner. Never use any abrasive cleansers to clean your thermostat.



***For more information, visit [www.braeburnonline.com](http://www.braeburnonline.com)***

## **Limited Warranty**

When installed by a professional contractor, this product is backed by a 5 year limited warranty. Limitations apply. For limitations, terms and conditions, you may obtain a full copy of this warranty.

- Visit us online: [www.braeburnonline.com/warranty](http://www.braeburnonline.com/warranty)
- Phone us: 866.268.5599
- Or write us: Braeburn Systems LLC  
2215 Cornell Avenue  
Montgomery, IL 60538



Braeburn Systems LLC  
2215 Cornell Avenue • Montgomery, IL 60538  
Technical Assistance: [www.braeburnonline.com](http://www.braeburnonline.com)  
Call us toll-free: 866-268-5599 (U.S.)  
630-844-1968 (Outside the U.S.)