

User Manual

Economy
Series

Non-Programmable Thermostat

This manual covers the following thermostat model:

1232 Up to 3 Heat / 2 Cool Heat Pump
Up to 2 Heat / 2 Cool Conventional

Read all instructions before proceeding.

Store this manual for future reference

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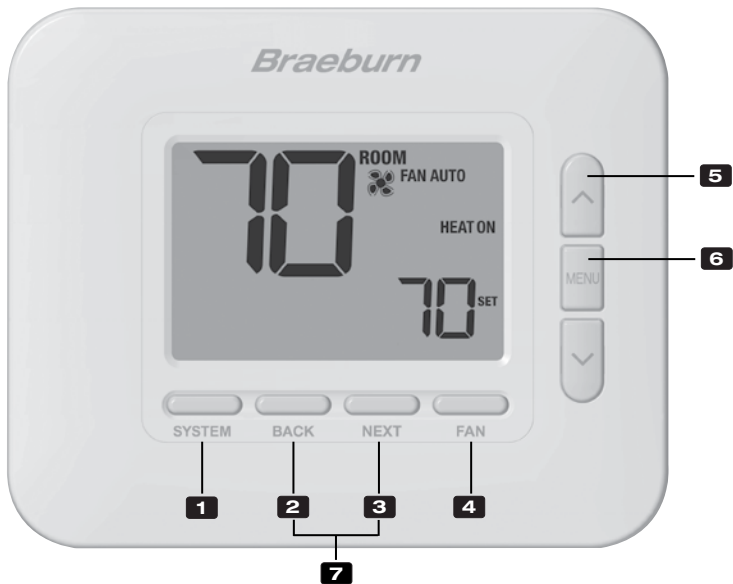
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Congratulations! You are in control of one of the easiest-to-use thermostats on the market today. This thermostat has been designed to provide you with years of reliable performance and comfort control.

Features

- Stylish new design with large display and bright blue backlight
- Extra large display characters make viewing settings even easier
- User selectable service monitor reminds you of required filter maintenance
- Multi-level keypad lockout prevents unauthorized use
- Precise temperature accuracy keeps you in control of your comfort
- Convenient circulating fan mode
- Optional indoor or outdoor remote sensing

1 About Your Thermostat

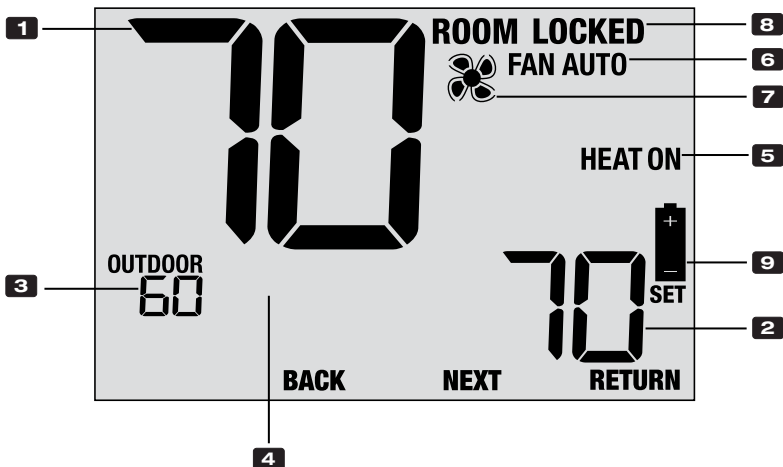


Thermostat

- 1 SYSTEM Button**Selects the system you want to control
 - 2 BACK Button**.....Moves to previous setting
 - 3 NEXT Button**Moves to next setting
 - 4 FAN Button**Selects the system fan mode
 - RETURN Button***Secondary function of the **FAN** button - Exits program or settings modes
 - 5 Up / Down Arrow Buttons**.....Increases or decreases settings (time, temperature, etc.)
 - 6 MENU Button**Used to access user settings mode
 - 7 Lock / Unlock Thermostat**Access user Lock / Unlock screen by holding **BACK** and **NEXT** together for 5 seconds
- Battery Compartment** Located on the back side of thermostat (if installed)

* **RETURN** is a secondary function of the **FAN** button. When in configuration mode, **RETURN** appears in the display screen indicating that the **FAN** button now functions as **RETURN**.

1 About Your Thermostat



Thermostat Display

- 1 Room Temperature**Displays the current room temperature
- 2 Set Temperature**Displays the current setpoint temperature
- 3 Outdoor Temperature**If a Braeburn® outdoor sensor is connected, the outdoor temperature will be displayed

- 4 Message Center**Displays various thermostat status and maintenance information
- 5 System Mode**Displays the system mode and current system status
- 6 Fan Mode Indicator**Indicates the current system fan mode
- 7 Fan Status Indicator**Indicates that the system fan is running
- 8 Lock Mode Indicator**Indicates if the thermostat is locked
- 9 Low Battery Indicator**Indicates when the batteries need to be replaced

2 User Settings

User Settings allow you to 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** to advance to the next User Setting. You may also press **BACK** to move backwards through the User Settings.

When your changes are complete, press **RETURN (FAN)** to exit.

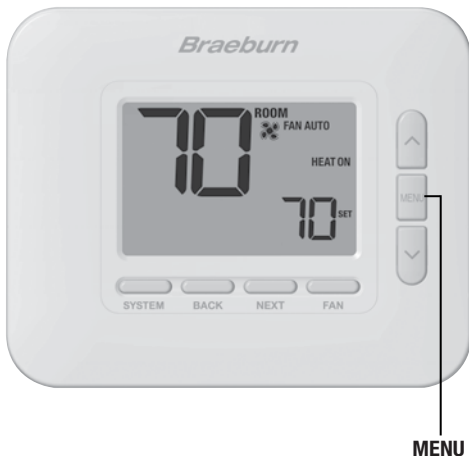


Table of User Settings

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	Reset SERVICE FILTER Message	RESET FILTER	NO	NO	Select to keep message displayed
				YES	Select to remove message and reset timer
				[Only appears if the service filter time interval has expired] If a service filter time interval was selected in setting 4, the thermostat will display a SERVICE FILTER message once that time interval is reached. Select NO to keep the message displayed or select YES to clear the message and reset the timer.	
2	Constant Backlight	BACKLITE	AUTO	AUTO	Backlight only turns on with button press
				ON	Backlight is always on
				[Only available if thermostat is hardwired with a 24 VAC common (C) wire] Select AUTO (default) for backlight to turn on only with the press of a button. Backlight will turn off automatically after approximately 10 seconds. Select ON for backlight to remain on at all times.	
3	Backlight Brightness	BACKLITE	3	1, 2, 3, 4, 5	Select the level of backlight brightness
					[Only available if thermostat is hardwired with a 24 VAC common (C) wire] Select the level of backlight brightness with 5 being the brightest.

No.	User Setting	Displayed	Default Setting	Available Settings	Description of Available Settings
4	Service Filter Timer	FILTER	OFF	OFF	Service filter timer is disabled
				30, 60, 90, 120, 180, 365	Select number of days for service filter timer
				[Not available on heat-only hydronic systems] 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.	
5	Thermostat Lock Code	SET LOCK	000	0-9	Select a 3-digit lock code of 0-9 for each digit
					The Thermostat Lock Code sets a 3-digit code that you may use at any time to lock or unlock the thermostat keypad. Setting the 3-digit code does not activate the lock feature. To lock or unlock the thermostat, see Locking/Unlocking Thermostat, section 4. The lock code 000 cannot be used.
6	User Reset	RESET	NO	NO	Reset disabled - no changes made
				YES	Reset enabled - resets thermostat
				Selecting YES will reset all user settings. Thermostat lock code and Installer Settings will not be affected.	

3 Operating Your Thermostat

Setting the **SYSTEM** Control Mode

The System Control has 5 modes of operation – COOL, OFF, HEAT, AUTO and EMER. The mode can be selected by pressing the **SYSTEM** button to scroll through the different system modes.

NOTE: Depending on how your thermostat was configured, some system modes may not be available.

COOL Only your cooling system will operate.

OFF Heating and cooling systems are off.

HEAT Only your heating system will operate

AUTO The system will cycle between heating and cooling automatically based on your temperature set points. AUTO will be displayed with either HEAT or COOL.

EMERGENCY Operates a backup heat source (Emergency Heat) for heat pump systems only.



Setting the FAN Control Mode

The Fan Control has 3 modes of operation – AUTO, ON and CIRC. The mode can be selected by pressing the **FAN** button to scroll through the different fan modes.

NOTE: Depending on how your thermostat was configured, some fan modes may not be available.

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

ON The system fan stays on.

CIRC The system fan will run from time to time to help circulate air and provide more even temperature when the heating or cooling system is not active.



Temperature Adjustment

Press **▲** or **▼** to adjust the current set temperature.

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.

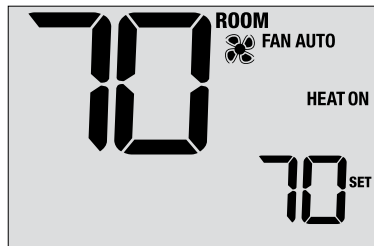
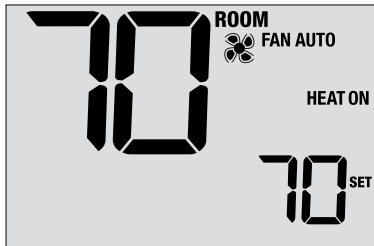
COOL ON The cooling system is running.

HEAT ON AUX The auxiliary stage of heating is running (multistage systems only).

**EMERGENCY
HEAT ON** The emergency heating system is running (heat pump systems only).

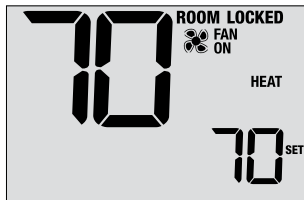


Indicates that the system fan is running.

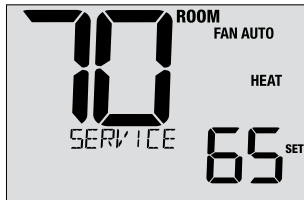


System Status and Maintenance Indicators *(continued)*

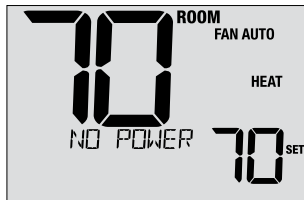
LOCKED Thermostat has been fully or partially locked.
See Locking and Unlocking thermostat, section 4.



SERVICE A user selectable service reminder for changing the filter has been triggered. To set or reset these reminders, see User Options, section 2.



NO POWER AC power to thermostat has been lost. Only available if thermostat is hardwired and thermostat is configured for power monitoring.



System Status and Maintenance Indicators *(continued)*

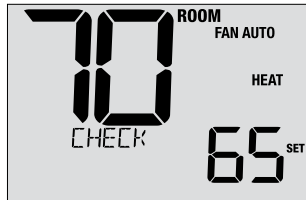
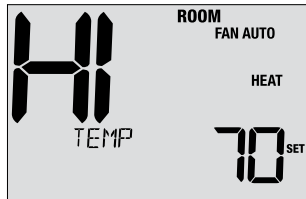
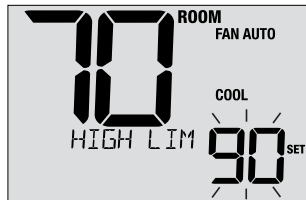
HIGH LIM Setpoint temperature has reached its upper limit maximum.

LOW LIM Setpoint temperature has reached its 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.

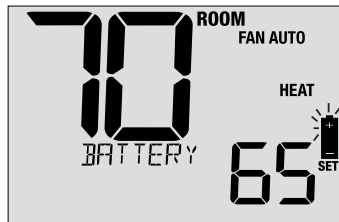
CHECK SYSTEM Indicates that there is a potential problem with your system. Contact a local service technician. Display will alternate between CHECK / SYSTEM.



System Status and Maintenance Indicators *(continued)*

CHANGE BATTERY

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, and CHANGE / BATTERY will alternate in the display (see “Changing the Batteries” in section 5).

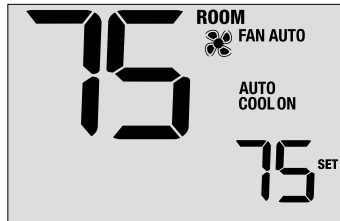


4 Additional Operating Features

Auto Changeover Mode

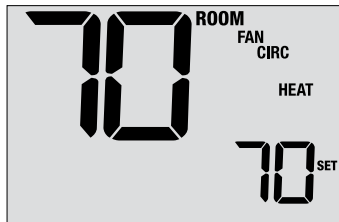
When Auto Changeover mode is enabled and selected, the system automatically switches between heating and cooling when the room temperature meets the current heating or cooling set points. To operate properly, the thermostat maintains a forced separation between the heating and cooling setpoints to prevent these systems from working against each other. If a setting is made in either heating or cooling which violates the forced separation, the opposite mode will adjust up or down accordingly to maintain the current forced separation.

Select Auto Changeover Mode by pressing the SYSTEM button until AUTO HEAT or AUTO COOL appears in the display. Whichever system was running last will remain in the display until the opposite system runs.



Circulating Fan Mode

Circulating Fan Mode is selected by touching the FAN button until CIRC appears in the display. When in CIRC mode the fan operates as required by the heating and cooling system (just like AUTO mode). When heating or cooling is not active, fan will run as needed to ensure a 35% minimum run time.



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.

Additionally, for multistage heat pump systems, this thermostat provides cold weather compressor protection by locking out the compressor stage(s) of heating for a period of time after a power outage greater than 60 minutes. During this lockout period, the thermostat will operate the auxiliary stage of heating.

Locking and Unlocking the Thermostat

Your 3-digit Lock Code is set in the User Settings portion of this manual (section 2). Once the code is set, the thermostat can be locked or unlocked at any time by entering that code.

To lock or unlock the thermostat, press and hold the **BACK** and **NEXT** buttons together for 5 seconds. While holding these buttons, **LOCK** will flash in the display (Figure 1).

The screen will change displaying **LOCK CODE 000** (Figure 2). Press **▲** or **▼** to enter the first digit of your lock code and then press the **NEXT** button to advance to the next digit. Repeat this process to enter the second and third digit of your lock code. After entering the third digit, press **NEXT** to advance to the next User Setting or **RETURN** to exit.

If you entered a valid code, the thermostat will be locked or unlocked (depending on its previous state). When locked, the word **LOCKED** appears in the display (Figure 3). If an invalid code is entered, **WRONG CODE** will briefly appear in the display.

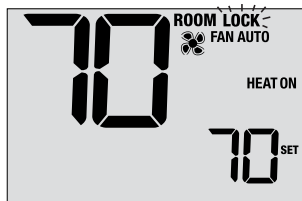


Figure 1



Figure 2

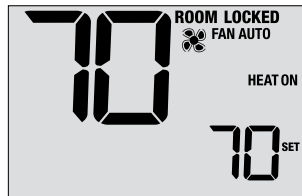


Figure 3

Outdoor Remote Sensing

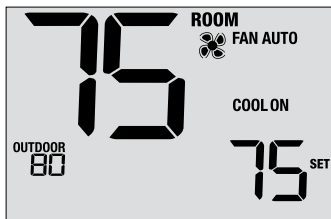
Outdoor remote sensing is achieved by installing a Braeburn® remote outdoor sensor (model 5490).

When properly connected, the current outdoor temperature can be viewed in the left side of the display. An outdoor sensor can also be used in certain Heat Pump applications for heating and cooling balance points.

Indoor Remote Sensing

Indoor remote sensing is achieved by installing a Braeburn remote indoor sensor (model 5390).

If a Braeburn indoor remote sensor was installed and properly configured, the thermostat will sense temperature at a remote location or an average of a remote location and the thermostat location.



5 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, and CHANGE / BATTERY will alternate in the display.

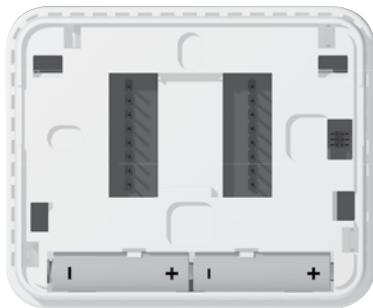
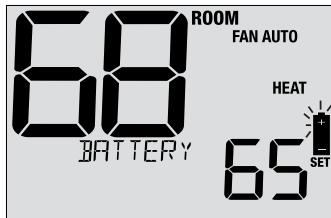
To change your batteries:

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

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, phone us: 866.268.5599 or write us: Braeburn Systems LLC, 2215 Cornell Avenue, Montgomery, IL 60538.



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