

## Detailed User Manual

**PREMIER  
SERIES**

### Non-Programmable Thermostats

**3020** For 1 Heat / 1 Cool Systems

**3220** For Systems Up to 3 Heat / 2 Cool

*Read all instructions before proceeding.*

**Store this manual for future reference**

# Contents

## 1 About Your Thermostat

Thermostat Features .....	3
Thermostat and Display .....	4

## 2 Setting User Options

Advanced User Options .....	6
Table of User Options .....	7
Service Monitors (Filter, UV and Humidifier Pad) .....	8
Set Point Adjustment Limit .....	8
Thermostat Lock Code .....	9

## 3 Operating Your Thermostat

Setting the System Control Mode .....	9
Setting the Fan Control Mode .....	10
Setting the Temperature .....	11
Status Indicators .....	11
Resetting the Thermostat .....	12

## 4 Additional Operation Features

Auto Changeover Mode .....	13
Compressor Protection .....	14
Locking and Unlocking the Thermostat.....	15
AC Power Monitor .....	17
Indoor Remote Sensing .....	17
Outdoor Remote Sensing .....	18

## 5 Thermostat Maintenance

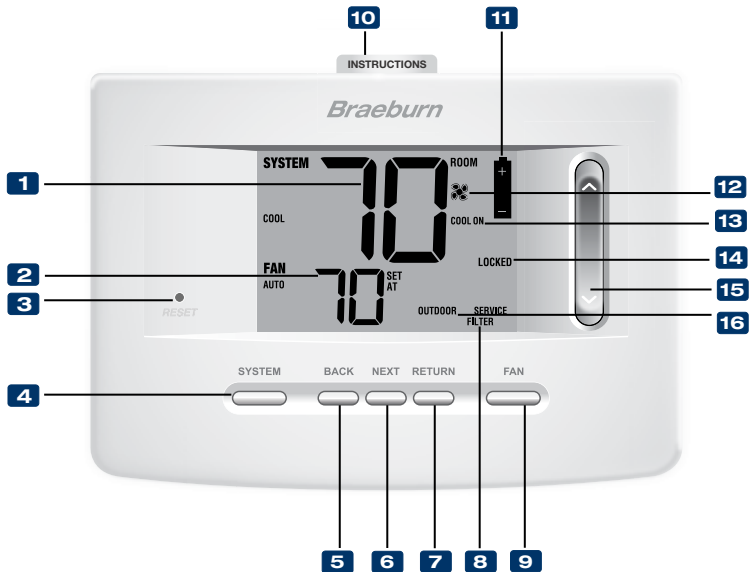
Thermostat Cleaning .....	19
Changing the Batteries .....	19

**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**

- SpeedBar® Multi-Function Button simplifies programming and setting changes.
- Large 4 sq. in. bright blue backlit display is easy to read.
- Extra large display characters make viewing settings even easier.
- User selectable service monitors remind you of required system maintenance.
- Precise temperature accuracy keeps you in control of your comfort.
- Optional indoor or outdoor remote sensing.

# 1 About Your Thermostat



## Thermostat and Display

- 1 Room Temperature** ..... Displays the current room temperature
- 2 Set Temperature** ..... Displays the current set point temperature
- 3 Reset Button** ..... Resets current time, program and user settings
- 4 SYSTEM Button** ..... Selects the system you want to control
- 5 BACK Button**..... Moves back in installer/user setup modes
- 6 NEXT Button** ..... Moves forward in installer/user setup modes
- 7 RETURN Button** ..... Returns to normal mode from installer/user setup modes
- 8 Service Indicators** ..... Displays various service/maintenance information
- 9 FAN Button** ..... Selects the system fan mode
- 10 Quick Reference Instructions**..... Stored in slot located at top of thermostat
- 11 Low Battery Indicator** ..... Indicates when the batteries need to be replaced
- 12 Fan Indicator** ..... Indicates when the system fan is running
- 13 System Status Indicator** ..... Displays information about the status of the system
- 14 Lock Mode Indicator** ..... Indicates if the thermostat is locked
- 15 SpeedBar®** ..... Increases or decreases settings (time, temperature, etc.)
- 16 Outdoor Temperature Indicator**.... Displays along with the outdoor temperature reading (see note below)
- Battery Compartment** ..... Located in the back of thermostat

**NOTE:** If a Braeburn® outdoor sensor was connected you can view the outdoor temperature by pressing the **BACK** and **NEXT** buttons at the same time.

## 2 Setting User Options

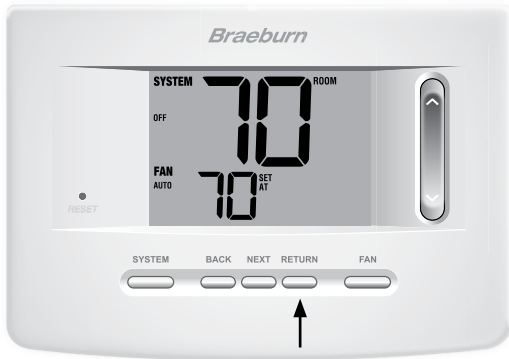
### Advanced User Options

User options allow you to customize some of your thermostat's features. Most users will not need to make any changes to the settings in this section.

To enter the User Options menu, press and hold the **RETURN** button for approximately 3 seconds until the screen changes and displays the first User Option.

Press the SpeedBar® up or down to change the setting for the displayed User Option. After you have changed your desired setting, press **NEXT** to advance to the next User Option. You may also press **BACK** to move backwards through the User Options.

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



## Table of User Options

**NOTE:** A detailed description of each User Option follows this table.

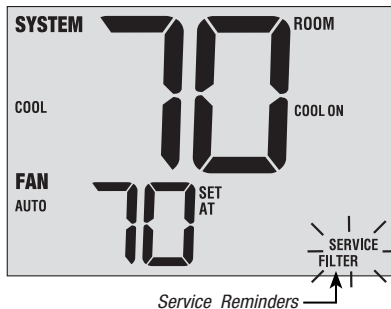
No.	User Options	Factory Default	Setting Options	Comments	Pg.
1	Filter Service Monitor	OFF	OFF	Disables filter service monitor feature.	8
			30, 60, 90, 120, 180, 365	Selects a number of days that must pass before the thermostat will flash a Service Filter reminder in the display screen.	
2	UV Light Service Monitor	OFF	OFF	Disables UV service monitor feature.	8
			180, 365	Selects a number of days before the thermostat will flash a Service UV reminder in the display screen.	
3	Humidifier Pad Service Monitor	OFF	OFF	Disables pad service monitor feature.	8
			180, 365	Selects a number of days before the thermostat will flash a Service Humid reminder in the display screen.	
4	Set Point Adjustment Limit*	0 ADJ	0, 1, 2, or 3 ADJ 0	Selects a temperature adjustment limit of 0 (disabled), 1°, 2° or 3°.	8
5	Thermostat Lock Code	000	0-9	Select a 3 digit lock code of 0-9 for each digit.	9

\* For this option to be available, thermostat must be set to security level 1 (See Installer Manual).

## Service Monitors (Filter, UV and Humidifier Pad)

### User Options 1, 2 and 3

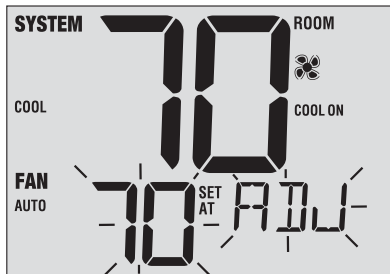
There are three user selectable service monitors that will display reminders for a required air filter, UV bulb or humidifier pad replacement. The SERVICE segment flashes in the display along with FILTER, UV or HUMID. When the service interval has been reached, and required cleaning or replacement has been performed, press the **RETURN** button to reset the timer. Select OFF or a set number of days before the reminder will appear.



## Set Point Adjustment Limit

### User Option 4

The Set Point Adjustment Limit will limit how much the temperature can be adjusted from the current set point when the thermostat is locked with security level 1 (See *Installer Manual*). This setting will not allow the user to override the temperature past the selected limit amount of 1, 2 or 3 degrees from the current set point. When the user reaches the adjustment limit the screen will flash ADJ. A setting of 0 disables the adjustment limit.





## Thermostat Lock Code

### User Option 5

The Thermostat Lock Code sets a 3-digit code that you may use at any time to lock or unlock the thermostat. Setting the code in the user options mode does not activate the lock feature (See *Locking/Unlocking Thermostat*, page 15). You may choose a 3-digit code with each digit being 0-9.

## 3 Operating Your Thermostat

### Setting the SYSTEM Control Mode

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

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

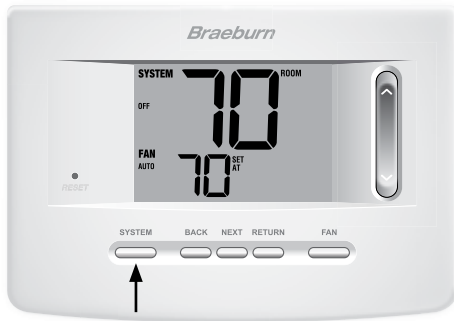
**AUTO** The system will cycle between heating and cooling automatically based on your program set points. AUTO will be displayed with either HEAT or COOL.

**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 (Model 3220 only).



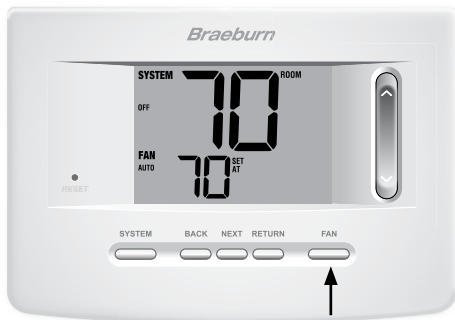
## Setting the FAN Control Mode

The Fan Control has 2 modes of operation – AUTO and ON. The mode can be selected by pressing the **FAN** button to scroll through the different 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.



## Setting the Temperature

**Temperature Adjustment** – Press the SpeedBar® up or down to adjust the current set temperature.

## Status Indicators

Status indicators appear in the display to let you know if your system is heating, cooling or off.

**HEAT ON** Indicates that your heating system is running.

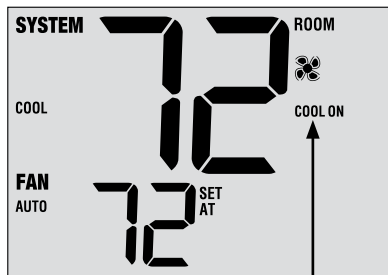
**COOL ON** Indicates that your cooling system is running.

**AUX** Indicates that the auxiliary stage of heating is running (Model 3220 - multi-stage systems only).

**EMER** Indicates that the emergency heating system is running (Model 3220 - heat pump systems only).

**CHECK** Indicates that there is a potential problem with your system. Contact a local service technician. (Model 3220 only)

**SERVICE** Indicates a user selectable service reminder for changing a filter, UV air purifier bulb or humidifier pad (*See Service Monitors, page 8*).

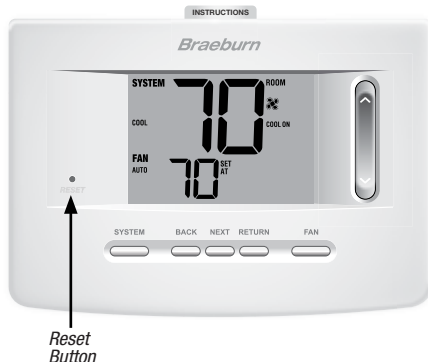


## Resetting the Thermostat

This thermostat provides you with a reset button that will erase all of your user settings. The reset feature does not affect the Installer Settings.

To reset the thermostat, use a small object such as a tooth pick or paperclip and gently press the button located inside the small hole on the front of the thermostat housing labeled “reset”.

**NOTE:** You cannot reset the thermostat if it is locked.

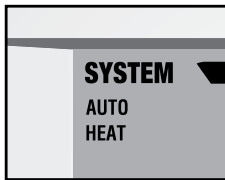


## 4 Additional Operation Features

### Auto Changeover Mode

*Auto Changeover mode is a feature enabled/disabled in the Installer Settings (see Installer Manual). If enabled, it is selected by pressing the SYSTEM button until AUTO HEAT or AUTO COOL appears in the display.*

When Auto Changeover mode is enabled and selected, the system automatically switches between heating and cooling when the room temperature meets the programmed heating or cooling set points. To operate properly, the thermostat requires a “dead band” setting to eliminate program conflicts. The dead band is set in the Installer Settings (*See Installer Manual*). The default setting is 3° F. Therefore, you will not be able to set your heat or cool temperature within 3° F of each other. If a setting is made in either heating or cooling which violates the dead band, the opposite mode will adjust up or down automatically to maintain the programmed dead band spacing.



## Compressor Protection

*Compressor protection is enabled/disabled in the Installer Settings (See Installer Manual). If enabled, this feature is automatically present in cooling and/or heating (heat pump only) modes.*

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 multi-stage 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. This cold weather compressor protection can be manually overridden at any time by changing the system mode to OFF momentarily, then back to HEAT.

## Locking and Unlocking the Thermostat

*Your 3-digit Lock Code is set in the “User Options” portion of this manual (See “Setting User Options”, page 7 and 9). 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 **NEXT** and **RETURN** buttons together for 5 seconds (Figure 1).

The screen will change, displaying 000 and LOCK will be flashing (Figure 2). Press the SpeedBar<sup>®</sup> up or down to enter the first digit of your lock code and then press **NEXT** 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 **RETURN**.

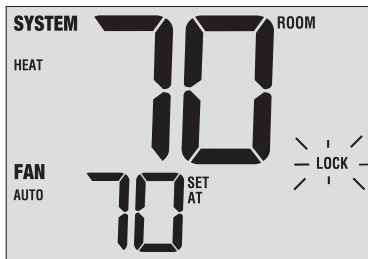


Figure 1

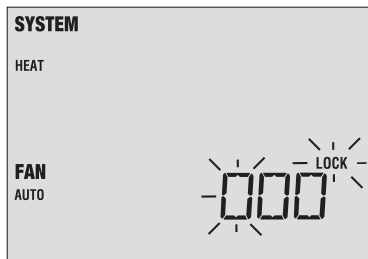


Figure 2

## Locking and Unlocking the Thermostat *(cont.)*

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 the word **NO** will briefly appear, indicating that an incorrect code was entered (Figure 4).

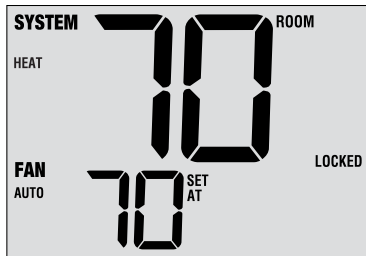


Figure 3

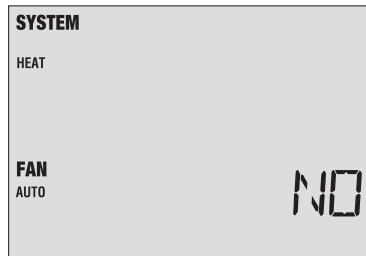


Figure 4



## AC Power Monitor

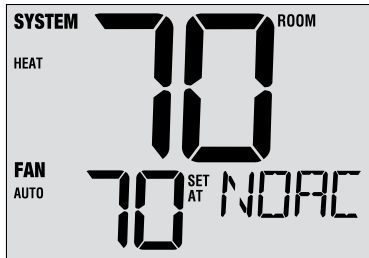
*The AC Power Monitor feature is enabled in the Installer Settings (See Installer Manual). If enabled, this feature will automatically be present.*

If your thermostat was hardwired (power provided from the system with batteries as a backup) then the AC Power Monitor feature will indicate when a loss of power to the thermostat has occurred by displaying NOAC.

## Indoor Remote Sensing

*Indoor remote sensing is achieved by installing a Braeburn® remote indoor sensor and is configured in the Installer Settings (See Installer Manual).*

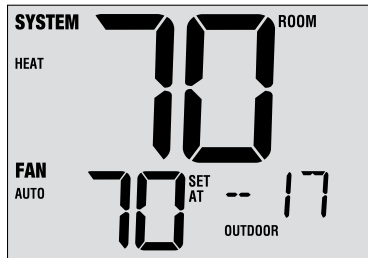
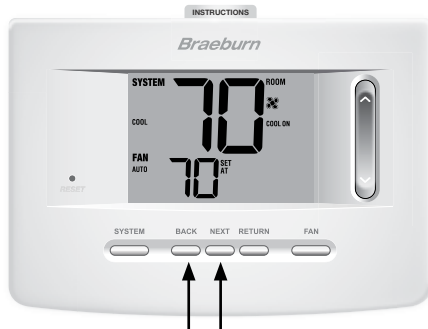
If a Braeburn indoor remote sensor was installed and properly configured in the Installer Settings, the thermostat will sense temperature at a remote location or at a combination of a remote location and the thermostat location.



## Outdoor Remote Sensing

*Outdoor remote sensing is enabled by installing a Braeburn® remote outdoor sensor. No additional configuration is required.*

If a Braeburn outdoor remote sensor was installed you may press the **BACK** and **NEXT** buttons at the same time to view the outdoor temperature.



## 5 Thermostat Maintenance

### Thermostat Cleaning

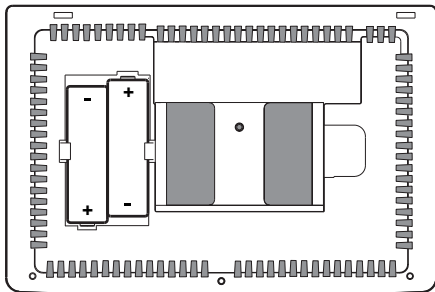
Never spray any liquid directly on the thermostat. Using a soft damp cloth wipe the outer body of the thermostat. Never use any abrasive cleansers to clean your thermostat.

### Changing the Batteries

This thermostat requires two (2) properly installed “AA” alkaline batteries to provide power for the thermostat if 24 volt AC power is not connected. (See *Installer Manual*).

**If batteries become low, a battery indicator will appear in the display.** You should change your batteries immediately when you see the low battery signal by following these instructions.

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.

## 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
- Write us: Braeburn Systems LLC  
2215 Cornell Avenue  
Montgomery, IL 60538



***Store this manual for future reference.***

## Braeburn®

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.)