

Manuals+

[Q & A](#) | [Deep Search](#) | [Upload](#)

manuals.plus /

- › [Braeburn](#) /
- › [Braeburn 5-2 Day Programmable Thermostat \(1 Heat/1 Cool\) - User Manual](#)

Braeburn 2020NC

Braeburn 5-2 Day Programmable Thermostat

Model 2020NC / BRA1220NC - User Manual

INTRODUCTION

This manual provides comprehensive instructions for the installation, operation, programming, and maintenance of your Braeburn 5-2 Day Programmable Thermostat. Please read this manual thoroughly before attempting to install or operate your new thermostat.



Figure 1: Front view of the Braeburn 5-2 Day Programmable Thermostat, showing the large blue backlit display, system mode switch, fan mode switch, and programming buttons.

FEATURES

- 5-2 Day Programmability
- Large 2 Sq. In. Display with Bright Blue Backlight
- Adjustable Temperature Limits
- Hardwire or Battery Powered (24V AC)
- Permanent Memory Retains Settings
- Filter Check Monitor

- Adjustable Temperature Differential
- Adaptive Recovery Mode (ARM)
- ESD Guard Electronic Circuitry
- Compressor Short Cycle Protection
- Temporary Program Override
- Programmable Extended Hold Mode
- Front Access Reset Button
- F° / C° Switch

INSTALLATION AND SETUP

Safety Precautions

- **WARNING:** Disconnect power to the heating and cooling system before installing or servicing the thermostat.
- Installation should be performed by a qualified technician.
- Ensure wiring complies with local electrical codes.

Mounting Location

Install the thermostat on an inside wall, approximately 5 feet (1.5m) above the floor. Avoid locations near heat sources (lamps, sunlight, fireplaces), drafts (windows, doors), or unconditioned spaces (unheated hallways, outside walls).

Wiring Instructions

This thermostat is designed for single-stage (1 Heat/1 Cool) systems. It can be powered by 24V AC hardwire or batteries.

Typical Terminations: Rc, Rh, O, B, Y1, W1, G, C

1. Turn off power to the HVAC system at the circuit breaker.
2. Remove the old thermostat from the wall plate.
3. Label each wire with the terminal designation from your old thermostat.
4. Mount the new thermostat base plate to the wall.
5. Connect the labeled wires to the corresponding terminals on the new thermostat. Refer to the wiring diagram provided with your thermostat for specific connections.
6. Insert 2 AA alkaline batteries (not included) into the battery compartment if using battery power or as a backup.
7. Attach the thermostat body to the base plate.
8. Restore power to the HVAC system.

OPERATING YOUR THERMOSTAT

System Mode Switch

Located on the front of the thermostat, this switch controls the overall operation mode:

- **COOL:** The thermostat will operate your cooling system.
- **OFF:** The heating and cooling systems are turned off.
- **HEAT:** The thermostat will operate your heating system.

Fan Mode Switch

Located on the front of the thermostat, this switch controls the fan operation:

- **AUTO:** The fan runs only when the heating or cooling system is active.
- **ON:** The fan runs continuously, regardless of heating or cooling calls.

Setting Temperature

Use the **UP** and **DOWN** arrow buttons on the right side of the display to adjust the desired temperature (setpoint). The display will show both the current room temperature and the setpoint.

PROGRAMMING (5-2 DAY)

The 5-2 day programming allows you to set different schedules for weekdays (Monday-Friday) and weekends (Saturday-Sunday). Each day can have up to 4 program periods: Morning, Day, Evening, and Night.

Setting Time and Day

1. Press the **PROG** button once. The display will show the current time flashing.
2. Use the **UP** or **DOWN** arrows to adjust the time.
3. Press **PROG** again to advance to the day setting. The day will flash.
4. Use the **UP** or **DOWN** arrows to adjust the day.
5. Press **PROG** or wait 15 seconds to exit.

Setting Program Schedule

1. Press the **PROG** button until "MON-FRI" appears and the time for the first period (Morning) flashes.
2. Use the **UP** or **DOWN** arrows to set the desired time for the Morning period.
3. Press **PROG**. The temperature for the Morning period will flash.
4. Use the **UP** or **DOWN** arrows to set the desired temperature.
5. Repeat steps 2-4 for the Day, Evening, and Night periods for "MON-FRI".
6. After setting the "MON-FRI" schedule, press **PROG** to advance to "SAT-SUN" and repeat the process for weekend programming.
7. Press **RETURN** or wait 15 seconds to exit programming mode.

Temporary Program Override

To temporarily change the temperature without affecting the program, simply use the **UP** or **DOWN** arrows. The thermostat will hold this temperature until the next program period begins.

Permanent Hold

Press the **HOLD** button. The thermostat will maintain the current temperature indefinitely. To cancel, press **HOLD** again or press **PROG** to resume the schedule.

MAINTENANCE

Battery Replacement

When the battery indicator appears on the display, replace the 2 AA alkaline batteries immediately to

ensure proper operation and prevent loss of settings. The thermostat has permanent memory, so settings will be retained during battery replacement.

1. Gently pull the thermostat body away from the wall plate.
2. Remove the old batteries.
3. Insert new AA alkaline batteries, observing polarity (+/-).
4. Snap the thermostat body back onto the wall plate.

Cleaning

Clean the thermostat with a soft, damp cloth. Do not use abrasive cleaners or solvents.

Filter Check Monitor

The thermostat may feature a filter check monitor that reminds you to change your air filter. Consult your HVAC system manual for recommended filter replacement intervals.

TROUBLESHOOTING

Problem	Possible Cause	Solution
No display or blank screen	No power, dead batteries, loose wiring.	Check circuit breaker, replace batteries, check wiring connections.
System not responding (no heat/cool)	System switch in OFF position, wrong mode selected, blown fuse in HVAC system, wiring issue.	Set system switch to HEAT or COOL, verify mode, check HVAC fuse, inspect wiring.
Temperature inaccurate	Thermostat located near heat source/draft, sensor issue.	Relocate thermostat if possible, ensure proper airflow around unit.
Fan runs continuously in AUTO mode	Fan switch set to ON.	Set fan switch to AUTO.
Programming not holding	Temporary override active, HOLD mode active, programming error.	Cancel temporary override, press HOLD to deactivate, re-enter program schedule carefully.

If problems persist, contact a qualified HVAC technician or Braeburn customer support.

SPECIFICATIONS

Model Numbers	2020NC, BRA1220NC
Application	Single Stage (1 Heat / 1 Cool)
Programmability	5-2 Day Programmable
Power Method	24V AC Hardwire or Battery Powered (2 AA Alkaline)
Voltage	24 Volts
Display Type	LED with Blue Backlight

User Interface	Push Button
Mounting Type	Wall Mount (Horizontal)
Dimensions (H x D)	3.62" x 1.38" (approximate)
UPC	384929207680





WARRANTY AND SUPPORT

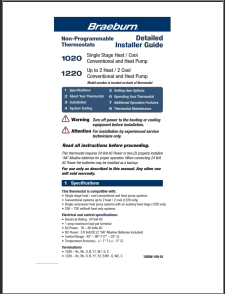
For warranty information and technical support, please refer to the documentation included with your product or visit the official Braeburn website. Keep your purchase receipt as proof of purchase.

Manufacturer: Braeburn

© 2023 Braeburn. All rights reserved.

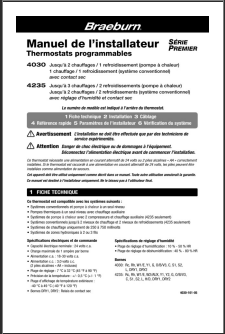
Related Documents - 2020NC

	<p>Braeburn 2020NC & 2220NC Programmable Thermostat User Guide</p> <p>Detailed user guide for Braeburn 2020NC and 2220NC programmable thermostats, covering installation, operation, programming, maintenance, and warranty information.</p>
	<p>Braeburn Thermostats: Programmable, Non-Programmable & Touchscreen Models</p> <p>Explore the full range of Braeburn thermostats, including Builder, Economy, Premier, and Deluxe series. Find features, specifications, and contractor solutions for optimal home comfort and energy efficiency.</p>
	<p>Braeburn 2020NC Programmable Thermostat - Features and Specifications</p> <p>Detailed information on the Braeburn 2020NC single-stage heat/cool conventional or heat pump programmable thermostat, including features, architectural and product specifications, and compatibility.</p>
	<p>Braeburn 3000 Series Single Stage Digital Thermostat Installation and Operation Manual</p> <p>Comprehensive guide for installing and operating the Braeburn 3000 Series Single Stage Digital Thermostat. Covers features, specifications, installation steps, testing, programming, troubleshooting, and warranty information.</p>



[Braeburn 1020 & 1220 Non-Programmable Thermostat Installer Guide](#)

Detailed installation guide for Braeburn 1020 and 1220 non-programmable thermostats, covering specifications, wiring, installation, testing, and operation for conventional and heat pump systems.



[Manuel de l'installateur Braeburn 4030/4235 : Thermostats Programmables](#)

Guide d'installation et de câblage pour les thermostats programmables Braeburn modèles 4030 et 4235 de la Série Premier. Inclut les spécifications techniques, les paramètres et les procédures de vérification du système.