

Manuals+

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

manuals.plus /

- › [Broan-NuTone](#) /
- › [Broan-NuTone BHFLED110 PowerHeat Bathroom Exhaust Fan, Heater, and LED Light Combination User Manual](#)

Broan-NuTone BHFLED110

Broan-NuTone BHFLED110 PowerHeat Bathroom Exhaust Fan, Heater, and LED Light Combination User Manual

Model: BHFLED110

1. INTRODUCTION

This manual provides detailed instructions for the safe and efficient installation, operation, and maintenance of your Broan-NuTone BHFLED110 PowerHeat Bathroom Exhaust Fan, Heater, and LED Light Combination. This unit is designed to enhance comfort and air quality in your bathroom by providing powerful ventilation, instant heating, and adjustable LED lighting.



Figure 1: Broan-NuTone BHFLED110 unit installed in a bathroom ceiling.

2. PRODUCT FEATURES

The Broan-NuTone BHFLED110 combines multiple functionalities into a single, efficient unit:

- **Powerful Ventilation:** Operates at 110 Cubic Feet Per Minute (CFM) with a quiet 2.0 sones level to effectively remove moisture and odors.
- **Instant Heat:** A 1300-watt heater provides immediate warmth, ideal for chilly mornings.
- **Dimmable LED Lighting:** Integrated LED light with Color Correlated Temperature (CCT) control allows selection between Warm White (2700K), Bright White (3500K), and Daylight (5000K) options. The light is also dimmable.
- **Independent Operation:** Fan, heater, and light functions can be operated together or independently.
- **Durable Construction:** Features rugged galvanized steel housing and a modern white grille.



Figure 2: Key features of the BHFLED110 unit.

3. SAFETY INFORMATION

Please read and understand all safety instructions before installation and use. Failure to follow these instructions may result in electric shock, fire, or personal injury.

- **Electrical Safety:** Always disconnect power at the service panel before wiring or servicing the unit. Ensure all wiring is performed by a qualified electrician and complies with all applicable electrical codes and standards.
- **Dedicated Circuit:** The heater component requires a dedicated 20 Amp circuit with 12 AWG wiring.
- **Proper Ventilation:** Ensure the unit is properly ducted to the outside to prevent moisture buildup and maintain effective ventilation.
- **Clearance:** Maintain adequate clearance around the unit as specified in the installation guide to prevent overheating.
- **Location:** Do not install this unit in a cooking area.
- **Grounding:** The unit must be properly grounded.

4. SETUP AND INSTALLATION

The Broan-NuTone BHFL110 is designed for ceiling mount installation and fits 2" x 6" ceiling construction. Professional installation is recommended for electrical connections.

4.1 Pre-Installation Checks

- Verify that the ceiling joists can support the unit's weight and dimensions.
- Ensure a dedicated 20 Amp circuit is available for the heater.
- Confirm all necessary tools and materials are on hand.

4.2 Dimensions and Requirements

The full housing dimensions are 16" x 10-1/4" x 5-7/8" (Depth x Width x Height). The unit is HVI Certified and UL listed, ensuring compliance with safety and performance standards.



Figure 3: Unit dimensions and electrical requirements.

4.3 Wiring

Connect the unit to appropriate power sources as per the wiring diagram provided in the separate installation guide. Ensure proper grounding and secure all electrical connections.

5. OPERATING INSTRUCTIONS

The Broan-NuTone BHFLED110 offers flexible control over its fan, heater, and light functions.

5.1 Fan Operation

Activate the exhaust fan using the designated wall switch. The fan will begin to remove air from the bathroom at 110 CFM, reducing humidity and odors.

5.2 Heater Operation

Turn on the 1300-watt heater using its dedicated wall switch. The heater provides immediate warmth to the bathroom space.



Figure 4: The PowerHeat feature provides instant warmth.

5.3 LED Light Operation

The integrated LED light can be turned on/off and its settings adjusted via the wall switch. The CCT control allows you to select from three color temperatures:

- **Warm White (2700K):** For a cozy, inviting ambiance.
- **Bright White (3500K):** A neutral, balanced light for general use.
- **Daylight (5000K):** A crisp, bright light ideal for tasks.

The LED light is also dimmable, allowing you to adjust the brightness to your preference.



Figure 5: Adjustable CCT LED lighting options.

6. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your unit. Always disconnect power before performing any maintenance.

6.1 Cleaning the Grille and Light Lens

Wipe the exterior grille and light lens with a soft, damp cloth. Do not use abrasive cleaners or solvents.

6.2 Cleaning the Fan Motor and Blades

Periodically remove the grille and light lens to access the fan motor and blades. Use a vacuum cleaner with a brush attachment or a soft cloth to gently remove dust and debris. Do not bend the fan blades.

7. TROUBLESHOOTING

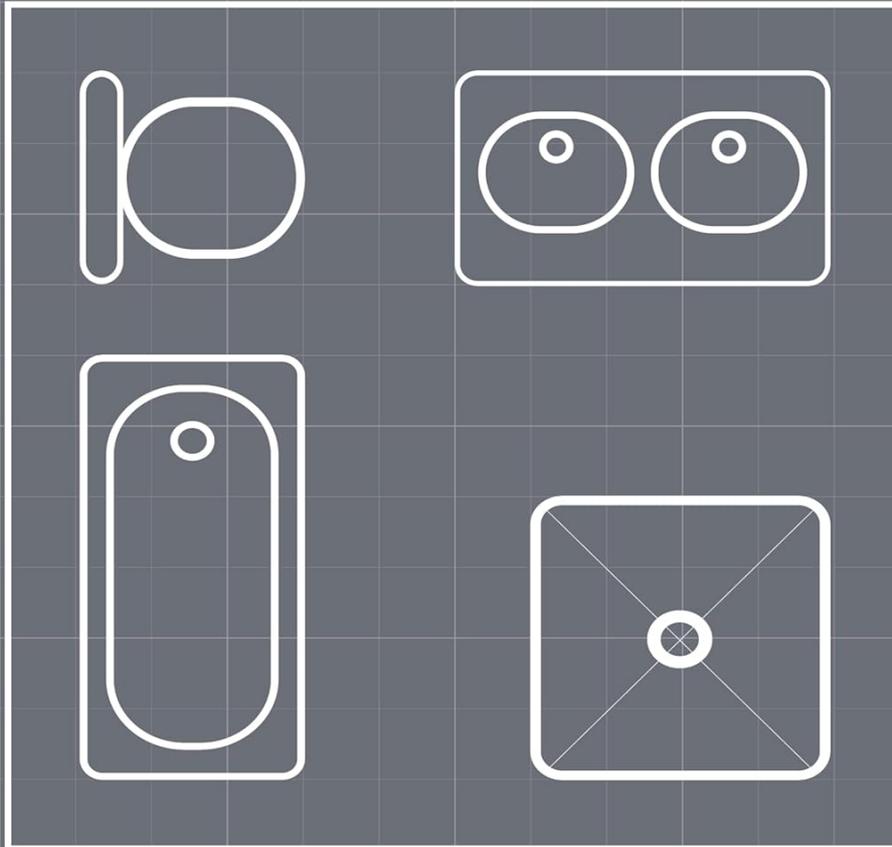
If you experience issues with your unit, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution
Unit does not operate (fan, heater, or light)	No power, tripped circuit breaker, loose wiring.	Check power supply, reset circuit breaker, inspect wiring connections (with power off).
Heater not producing heat	Incorrect wiring, thermal overload tripped.	Verify wiring (consult electrician), allow unit to cool down.
Excessive noise	Loose mounting, debris in fan, damaged fan blade.	Ensure unit is securely mounted, clean fan blades, contact support if damage is suspected.
Light not working	No power, LED driver issue.	Check power, consult electrician or Broan-NuTone support.

8. SPECIFICATIONS

Detailed technical specifications for the Broan-NuTone BHFLED110 unit:

- **Brand:** Broan-NuTone
- **Model Name:** BHFLED110
- **Air Flow Capacity:** 110 Cubic Feet Per Minute (CFM)
- **Noise Level:** 2 Sones
- **Wattage:** 1300 watts (Heater)
- **Voltage:** 120.0 V
- **Product Dimensions:** 5.88"D x 10.25"W x 16"H
- **Item Weight:** 12.7 Pounds
- **Installation Type:** Ceiling Mount
- **Ceiling Construction:** Fits 2" x 6"
- **Special Feature:** Dimmable LED Light with CCT Control (2700K, 3500K, 5000K)
- **Electric Fan Design:** Exhaust Fan
- **Power Source:** Corded Electric
- **Control Method:** App (Note: This may refer to compatible smart home systems or optional accessories, not necessarily built-in app control for the base unit.)
- **Efficiency:** 0.085 CFM per Watt
- **Specification Met:** HVI



Ideal for Large Rooms
up to 105 Square Feet

Figure 6: Recommended room size for optimal performance.

 <p>BHFLED80 Broan® Heater Fan w/Dimmable Color Temperature 80 CFM</p>	Sones	Lighting	Finish	Ducting	Housing	Cover
	1.5	LED	Bright White	4"	14.25" x 8.25" x 5.75"	16.25" x 9.725"
 <p>BHFLED110 Broan® Heater Fan w/Dimmable Color Temperature 100 CFM</p>	Sones	Lighting	Finish	Ducting	Housing	Cover
	2.0	LED	Bright White	4"	16" x 10.25" x 5.875"	17.75" x 11.75"
 <p>BHF80 Broan® Heater Fan 80 CFM</p>	Sones	Lighting	Finish	Ducting	Housing	Cover
	1.5	n/a	Bright White	4"	14.25" x 8.25" x 5.75"	16.25" x 9.725"
 <p>BHF110 Broan® Heater Fan 100 CFM</p>	Sones	Lighting	Finish	Ducting	Housing	Cover
	2.0	n/a	Bright White	4"	16" x 10.25" x 5.875"	17.75" x 11.75"

Figure 7: Model comparison table including BHFLED110 specifications.

9. WARRANTY AND SUPPORT

Your Broan-NuTone BHFLED110 unit comes with a 1-year warranty. For technical assistance, warranty claims, or to purchase replacement parts, please contact Broan-NuTone customer support. Refer to the official Broan-NuTone website or the packaging for the most current contact information.