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› Broan-NuTone 110 CFM CleanCover Bathroom Exhaust Fan Instruction Manual

## Broan-NuTone AE110K

# Broan-NuTone 110 CFM CleanCover Bathroom Exhaust Fan Instruction Manual

Model: AE110K

## 1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your Broan-NuTone 110 CFM CleanCover Bathroom Exhaust Fan, Model AE110K. This high-quality, single-speed fan is designed to effectively control air quality and reduce moisture in full-size bathrooms with its ultra-quiet 1 Some operation and 110 CFM airflow capacity. The innovative CleanCover grille offers a low-profile, streamlined design that is easy to clean and coordinates with various decor styles. Its versatile design supports both new construction and room-side retrofit installations, eliminating the need for attic access in many scenarios.



*Image: The Broan-NuTone 110 CFM CleanCover Bathroom Exhaust Fan, showcasing its sleek design and exhaust duct.*

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## 2. SAFETY INFORMATION

Please read and understand all instructions before beginning installation or operation. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- Always disconnect power at the service panel before working on the fan.
- This unit is UL listed for use over bathtubs or showers when connected to a GFCI-protected branch circuit. Ensure proper GFCI protection is in place.
- The fan is UL listed for use in insulated ceilings (Type I.C.).
- All wiring must be performed by a qualified electrician in accordance with all applicable codes and standards.
- Wear safety glasses and gloves during installation.
- Ensure proper ducting to the outside to prevent backdrafting and moisture buildup.

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## 3. PACKAGE CONTENTS

Verify that all components are present before beginning installation:

- Fan Housing
- Blower Assembly
- CleanCover Grille
- Duct Connector (4-inch)
- SnapFit Flange Kit
- Mounting Hardware (screws, wire nuts)
- Installation Template
- Instruction Manual

## 4. SPECIFICATIONS

Feature	Specification
Model Number	AE110K
Air Flow Capacity	110 Cubic Feet Per Minute (CFM)
Noise Level	1 Sone
Housing Dimensions (L x W x H)	9.25" x 10" x 5.75"
Fits Ceiling Construction	2" x 6"
Duct Connector Size	4-inch
Voltage	120 Volts
Energy Efficiency	ENERGY STAR Certified
Installation Type	Room-side installation
Warranty	3 Years Limited

## 5. SETUP & INSTALLATION

The Broan-NuTone AE110K fan is designed for easy room-side installation, often without requiring attic access. Follow these general steps, referring to the included template and detailed instructions for your specific installation type.

### 5.1. Preparation

- Turn off power at the circuit breaker.
- Determine the desired location for the fan. Ensure there are no obstructions (pipes, wires, etc.) and that the location is suitable for ducting to the outside.
- Use the provided template to mark the ceiling cutout.

## 5.2. Room-Side Installation (No Attic Access)

This method is ideal for retrofitting or replacing existing fans without entering the attic.

1. Carefully cut the opening in the ceiling using the template.
2. Remove the blower assembly and wiring panel from the fan housing.
3. Fold the mounting ears on the fan housing back to allow it to slide into the ceiling hole.
4. Insert the fan housing into the ceiling opening. Secure it to the ceiling structure using the provided screws through the housing wall.
5. Install the duct connector into the fan housing, ensuring the tabs engage. Connect the 4-inch ductwork to the connector and seal with foil tape.
6. Connect the electrical wiring (black to hot, white to neutral, green to ground) inside the wiring enclosure. Secure the wiring enclosure cover.
7. Reinstall the blower assembly and wiring panel into the fan housing.
8. Plug in the LED module (if applicable) and attach the CleanCover grille by sliding the mounting springs into the slots.



**Faster Roomside Install**  
No Attic Access Needed



**VERSATILE,**  
easy installation



Easy Fit / No Cut

*Image: Demonstrates the room-side installation process, highlighting the ease of fitting the fan housing without attic access.*

### 5.3. New Construction Installation

For new construction, the mounting ears can be used to attach the fan housing directly to the ceiling joists before drywall installation.

1. Position the fan housing between ceiling joists. Extend the mounting ears and secure them to the joists with screws.
2. Install the duct connector and connect the ductwork.
3. Complete electrical wiring as described in step 6 of room-side installation.
4. Install drywall, ensuring the opening aligns with the fan housing.
5. Reinstall the blower assembly and wiring panel.
6. Plug in the LED module (if applicable) and attach the CleanCover grille.

### 5.4. Installation Video

Your browser does not support the video tag.

*Video: Official Broan-NuTone installation guide for Flex Ventilation Fans, demonstrating key steps for both new construction and retrofit scenarios.*

Your browser does not support the video tag.

*Video: Official Broan-NuTone guide on how to install the BEL8 series, which shares similar installation principles with the AE110K model.*

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## 6. OPERATING INSTRUCTIONS

Once installed and wired correctly, your Broan-NuTone exhaust fan is ready for operation. The fan is designed for continuous operation to maintain optimal air quality and humidity levels in your bathroom.

- Turn on the fan using your wall switch. The fan will begin to extract moist air and odors from the bathroom.
- For best results, operate the fan during and for at least 15-20 minutes after showering or bathing to ensure all moisture is removed.
- The fan operates at an ultra-quiet 1 Sone level, providing effective ventilation without disruptive noise.



*Image: An illustration depicting the quiet and efficient operation of the 110 CFM, 1 Sone fan in a bathroom setting.*

## 7. MAINTENANCE

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

### 7.1. Grille Cleaning

- The CleanCover grille is designed to minimize dust and debris accumulation.
- Gently pull down on the grille to disengage the mounting springs.
- Wash the grille with mild soap and water, rinse thoroughly, and dry completely before reattaching.

### 7.2. Motor and Blower Cleaning

- After removing the grille, carefully detach the blower assembly from the housing.
- Use a soft brush or vacuum cleaner to remove dust and lint from the motor and blower wheel. Do not use water directly on electrical components.

- Reassemble the blower and grille once clean and dry.

## 8. TROUBLESHOOTING

If your fan is not operating correctly, consult the following table for common issues and solutions:

Problem	Possible Cause	Solution
Fan does not turn on	No power to the fan; Loose wiring; Faulty switch	Check circuit breaker; Verify wiring connections; Test or replace switch.
Fan is noisy	Loose mounting screws; Dirty blower wheel; Obstruction in ductwork	Tighten mounting screws; Clean blower wheel; Check ductwork for blockages.
Poor ventilation/Moisture buildup	Ductwork obstruction; Improperly sized fan for room; Damper stuck closed	Check and clear ductwork; Ensure fan runs long enough; Inspect damper for free movement.
Light not working	Loose LED module connection; Faulty LED module	Check LED module connection; Replace LED module if necessary.

## 9. WARRANTY & SUPPORT

Your Broan-NuTone 110 CFM CleanCover Bathroom Exhaust Fan (Model AE110K) is backed by a **Three Year Limited Warranty**. This warranty covers defects in materials and workmanship under normal use and service. For detailed warranty terms and conditions, please refer to the documentation included with your product or visit the official Broan-NuTone website.

For technical assistance, troubleshooting, or warranty claims, please contact Broan-NuTone customer service. Our US-based customer service teams are dedicated to helping you every step of the way.

- **Online Support:** Visit [www.broan-nutone.com](http://www.broan-nutone.com)
- **Customer Service:** Refer to your product packaging for the most current contact information.