Broan-NuTone PTE511RK

Broan-NuTone EVOLVE Premium Bathroom Exhaust Fan

Model: PTE511RK

Product Overview

The Broan-NuTone EVOLVE Premium Bathroom Exhaust Fan is designed to revolutionize bathroom ventilation. This model features advanced motor technology to guarantee airflow performance regardless of ductwork complexity, reducing installation callbacks. Its modular design allows for easy installation and future upgrades with optional sensing modules.

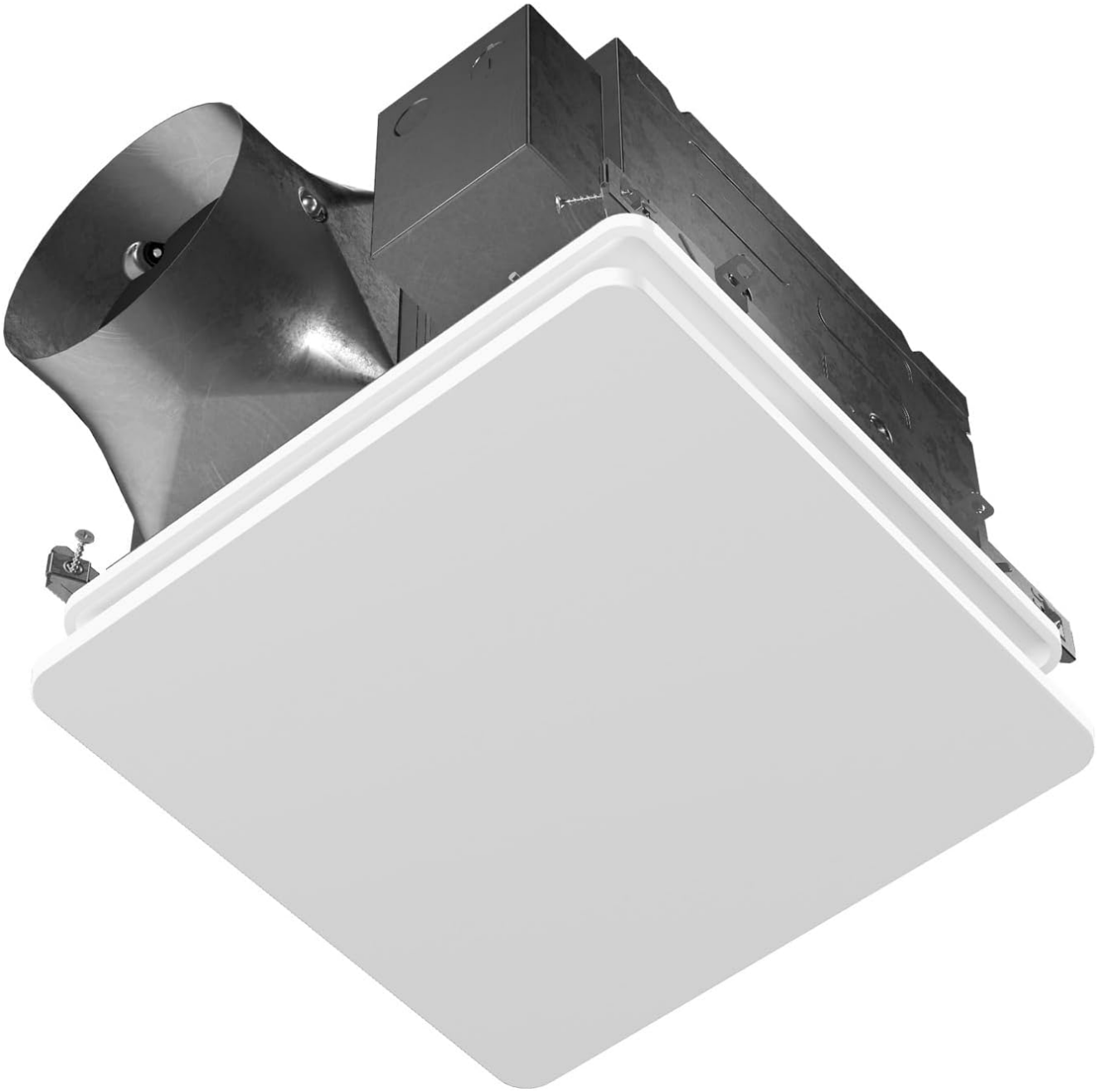


Image: The Broan-NuTone EVOLVE Premium Bathroom Exhaust Fan, showcasing its sleek, non-lit design and compact housing.

Key Features

- **TRUECFM:** Guaranteed performance maintaining CFM through 0.4" static pressure, with selectable speeds of 50-80-110 CFM.
- **Near Silent Operation:** Operates at <0.3-0.5-0.6 Sones for a quiet environment.
- **Fast Installation:** Save up to 30% on installation time with easy snap-in housing and slide-and-lock blower attachment.
- **Seamless Design:** Blends into the ceiling with a CleanCover grille and floating mounted positioning.
- **Slide-Clip Grille/Cover:** Allows for fast grille attachment and easy maintenance without springs.
- **Modular Solution:** Universal housing with modularity allows for optional humidity and/or motion sensing modules (sold separately).



Image: Visual representation highlighting the near-silent operation of the EVOLVE fan, indicated by a subtle ear icon and airflow lines.

Setup and Installation

This section provides detailed instructions for installing your Broan-NuTone EVOLVE Premium Bathroom Exhaust Fan. For a visual guide, please refer to the installation video below.

Official Installation Video

Your browser does not support the video tag.

Video: A comprehensive guide demonstrating the step-by-step installation process for the Broan-NuTone EVOLVE fan, including tools required, unboxing, mounting, wiring, and final assembly.

Tools Required

- Power screwdriver with Phillips bit
- Phillips and Flathead manual screwdrivers
- Pliers

- Wire insulation stripper/cutter
- Tape measure
- Foil tape
- Safety glasses
- Work gloves

Installation Steps

1. **Prepare the Unit:** Locate the parts bag. Punch out the housing mask template from the packaging and remove the instruction sheet from the mounting frame. Tilt and slide the fan assembly out of the housing until the three housing clips are free from the blower plate. Set the blower plate aside for later.



Image: An exploded view of the EVOLVE fan, illustrating its various components including the housing, blower, and grille, highlighting the ease of assembly.

2. **Install the Mounting Frame:** Install the mounting frame 1/2 inch above the bottom of the joist. Align the bottom of the tabs with the bottom of the joist. Secure the frame using appropriate screws.



Image: Diagram illustrating the installation of the mounting frame into the ceiling joists, emphasizing the adjustable and secure snap-in features.

3. **Mount the Fan Housing:** Slide the fan housing onto the mounting frame. The housing will snap into place with button snaps. Insert two screws to secure the fan housing to the mounting frame using the two holes located behind the trim mounting's metal brackets. Position the housing between the joists and use your pliers to crimp the channel on both sides, securing it in place.
4. **Wiring:** Run 120V AC wiring to your installation location. Attach the cable clamp to the power box and secure the house wiring using the cable clamp. Connect the wires on the power panel to the 120V AC wiring according to the diagram in the installation guide. Insert the power box into the housing. Use one screw to secure the power panel to the power box and housing.
5. **Duct Connection:** Insert the duct connector and attach the flexible ductwork using foil tape.
6. **Insert the Blower:** Tilt and slide the blower to clear the metal tabs. Ensure all three housing clips lock into place. Install the blower plate mounting screw for recommended installation. Connect the blower power connector to the controller and the controller connector to the power panel.
7. **Set CFM and Time Delay:** Set the CFM levels (50-80-110 CFM) and time delay on the controller according to your ventilation needs.
8. **Drywall Protection:** Use the housing mask template to cut the fan opening in the drywall. Measure and cut accordingly. Attach the mask to protect the fan housing during construction. Once construction is complete, remove the mask.
9. **Install Muffler Plate:** Insert the muffler plate into the housing. There are two points where the muffler plate snaps in. If using an optional humidity sensor, connect the sensor to the controller. The muffler plate provides a snap-in mounting location to secure the trim cover in place with two screws.
10. **Install Grille:** For lit models, connect the jumper wire to the backside of the grille. The EVOLVE features our Slide-Clip Grille that allows for easy attachment with no springs. Simply slide the grille into place until it clicks securely.



Image: Detailed view of the Slide-Clip Grille mechanism, demonstrating how it easily slides and locks into place without the need for springs, simplifying installation and maintenance.

Operating Instructions

The EVOLVE fan offers selectable CFM settings (50-80-110 CFM) to match your specific ventilation requirements. The continuous run feature ensures consistent air quality by maintaining airflow even with complex ductwork. Adjust the CFM and time delay settings on the controller located within the unit to customize operation.

Features and Benefits Overview

Your browser does not support the video tag.

Video: An overview of the key features and benefits of the Broan-NuTone EVOLVE fan, including its TrueCFM technology, quiet operation, and easy installation.

Maintenance

Regular cleaning of the grille is recommended to ensure optimal performance and airflow. The Slide-Clip Grille design allows for easy removal and reattachment for hassle-free maintenance. Simply slide the grille off, clean it with a mild detergent and soft cloth, and slide it back into place until it snaps securely.

Troubleshooting

If you experience issues with your EVOLVE fan, consider the following common troubleshooting steps:

- **No Power:** Check the circuit breaker and ensure all wiring connections are secure according to the installation diagram.
- **Reduced Airflow:** Verify that the ductwork is not obstructed or kinked. Ensure the grille is clean and free of debris. Check the CFM setting on the controller.
- **Excessive Noise:** Confirm that the blower assembly is properly seated and secured. Check for any loose components or obstructions within the housing.
- **Sensor Malfunction (if applicable):** Ensure the optional humidity or motion sensor is correctly connected and

free from obstructions. Refer to the sensor's specific instructions for calibration or troubleshooting.

For persistent issues, please contact Broan-NuTone customer support.

Specifications

Attribute	Value
Brand	Broan-NuTone
Model Name	EVOLVE Premium Bathroom Exhaust Fan w/ Continuous Run, 50-80-110 Selectable CFM
Model Number	PTE511RK
Style	Non Lit
Air Flow Capacity	50-80-110 Cubic Feet Per Minute (Selectable)
Noise Level	0.3 Sones
Power Source	AC
Voltage	120 Volts
Wattage	70 watts
Product Dimensions	14"D x 13.13"W x 7.13"H
Item Weight	12.1 Pounds
Room Type	Bathroom
Special Features	Continuous Run, Selectable CFM
Efficiency	High Efficiency, Energy Star Certified
Manufacturer	Broan- NuTone
UPC	026715272204



Image: Diagram showing the precise dimensions of the EVOLVE fan unit and highlighting its various certifications including HVI, cULus, Energy Star, and ASHRAE compliance, along with "Made in USA" emblem.

Warranty and Support

The Broan-NuTone EVOLVE Premium Bathroom Exhaust Fan comes with a 5-Year Part Warranty from the manufacturer, Broan-NuTone. For any product inquiries, technical assistance, or warranty claims, please contact Broan-NuTone customer support directly. You can find contact information on the official Broan-NuTone website or within the product packaging.
Additional protection plans may be available for purchase through authorized retailers.

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Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

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Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question