OREiN 80/110 CFM

OREiN 3-in-1 Bathroom Fan with LED Light & Humidity Sensor Instruction Manual

Model: 80/110 CFM

1. INTRODUCTION

Thank you for choosing the OREiN 3-in-1 Bathroom Fan. This innovative unit combines a powerful exhaust fan, an energy-efficient LED light with selectable color temperatures, and a smart humidity sensor to provide optimal ventilation and illumination for your bathroom. Designed for quiet operation and easy installation, this fan ensures a fresh and comfortable environment. Please read this manual thoroughly before installation and operation to ensure safe and proper use.
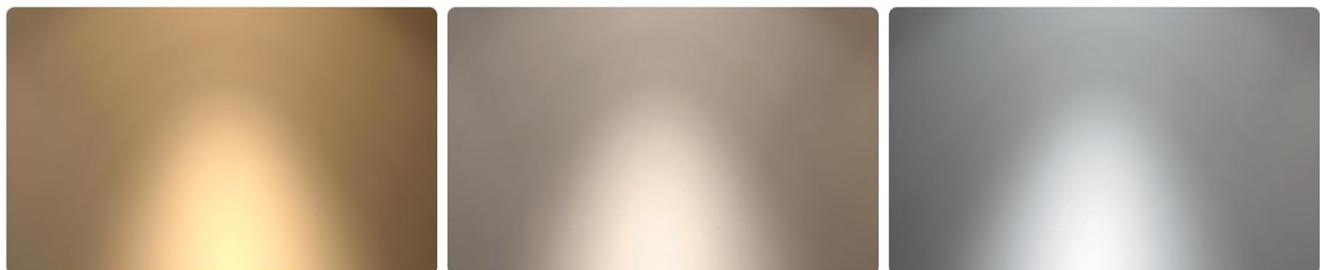
Image 1.1: OREiN 3-in-1 Bathroom Fan with LED Light and Humidity Sensor.

2. SAFETY INFORMATION

Always follow basic safety precautions when installing, operating, or maintaining this product to reduce the risk of fire, electric shock, or injury to persons.

- **WARNING:** To reduce the risk of fire, electric shock, or injury to persons, observe the following:
- Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.
- Before servicing or cleaning the unit, switch power off at the service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.
- Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction codes and standards.
- Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel-burning equipment to prevent back-drafting. Follow the heating equipment manufacturer's guideline and safety standards such as those published by the National Fire Protection Association (NFPA), and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and the local code authorities.

- When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
- Ducted fans must always be vented to the outdoors.
- This unit is suitable for use in a shower or tub enclosure when installed in a GFCI protected branch circuit.

3. PACKAGE CONTENTS

Upon opening the package, please verify that all components are present and undamaged:

- OREiN 3-in-1 Bathroom Fan Unit
- LED Light Cover
- Fast-Install Mounting Bracket
- Instruction Manual (this document)
- Installation Hardware (screws, wire connectors)

4. PRODUCT FEATURES

- **Smart Humidity Sensor:** Automatically activates the fan when humidity reaches 60% to prevent moisture buildup and fogged mirrors. A green LED indicator confirms humidity mode is active.
- **Adjustable Light Colors:** Choose between 3000K (warm white), 4000K (natural white), and 5000K (daylight) to suit your preference.
- **Night Light Function:** A 2200K nightlight provides soft illumination for safe nighttime navigation.
- **Quiet Operation:** Operates at ultra-quiet 0.8/1.0 sones for minimal noise disruption.
- **Selectable Airflow:** Choose between 80 CFM and 110 CFM airflow settings for efficient moisture removal.
- **Integrated LED Light:** Delivers 1500lm of bright, energy-efficient illumination.
- **Easy Installation:** Designed for simple mounting between ceiling joists with a fast-install bracket.

Quiet & Energy-effecient

CFM 80/110	Fan 30W	Humidity Sensor	Light 20W	SONE<0.8/1.0

Image 4.1: Internal design highlighting quiet and energy-efficient components.
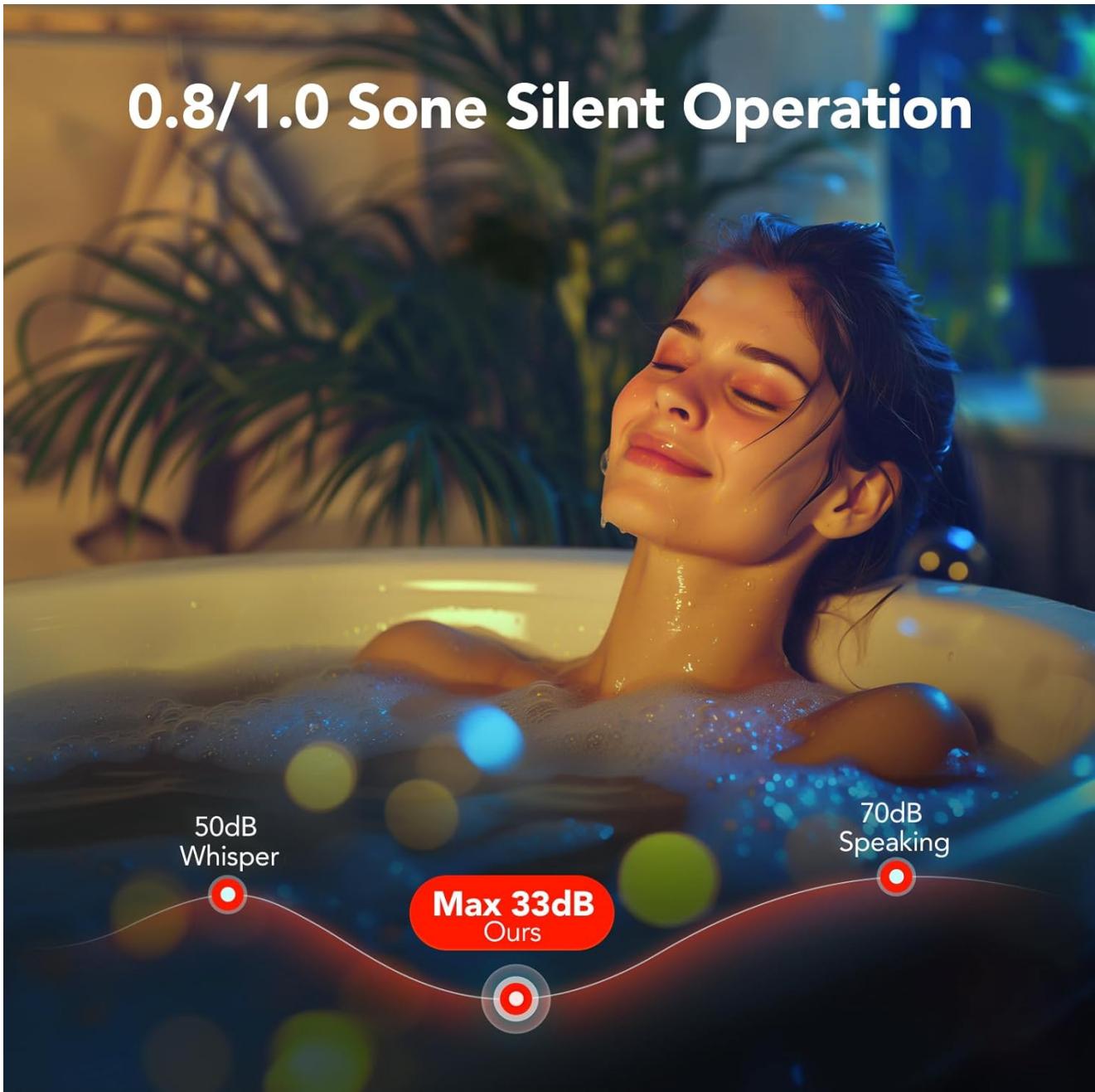
Image 4.2: Visual representation of the fan's quiet operation at low decibel levels.

5. SETUP AND INSTALLATION

This section provides general guidance for installation. For detailed electrical wiring, consult a qualified electrician.

1. **Preparation:** Ensure power is turned off at the circuit breaker before beginning any installation work.
2. **Opening Size:** The fan unit requires a ceiling opening of approximately 10.24" x 9.37" (260mm x 238mm). Ensure there are no obstructions like joists in the desired installation area.
3. **Mounting:** The fast-install bracket allows for secure mounting between ceiling joists. Position the fan unit and secure the bracket using appropriate screws. The design allows for installation from below the ceiling, eliminating the need for attic access in many cases.
4. **Ducting:** Connect the fan to standard 4-inch ducting and ensure it is vented to the outdoors.
5. **Electrical Connection:** Connect the electrical wiring according to local codes and the provided wiring diagram. The light and fan may have independent wiring for separate control.
6. **Light Cover Installation:** Once the fan unit is secured and wired, attach the LED light cover. It typically connects with spring clips for easy removal and maintenance.

Product Size

4 in

9.75"

9.25"

7.1 in

2.8 in

13"

13"

OREIN

Install Size is
10.24 * 9.37 inch
260 * 238 mm

Fast Bracket
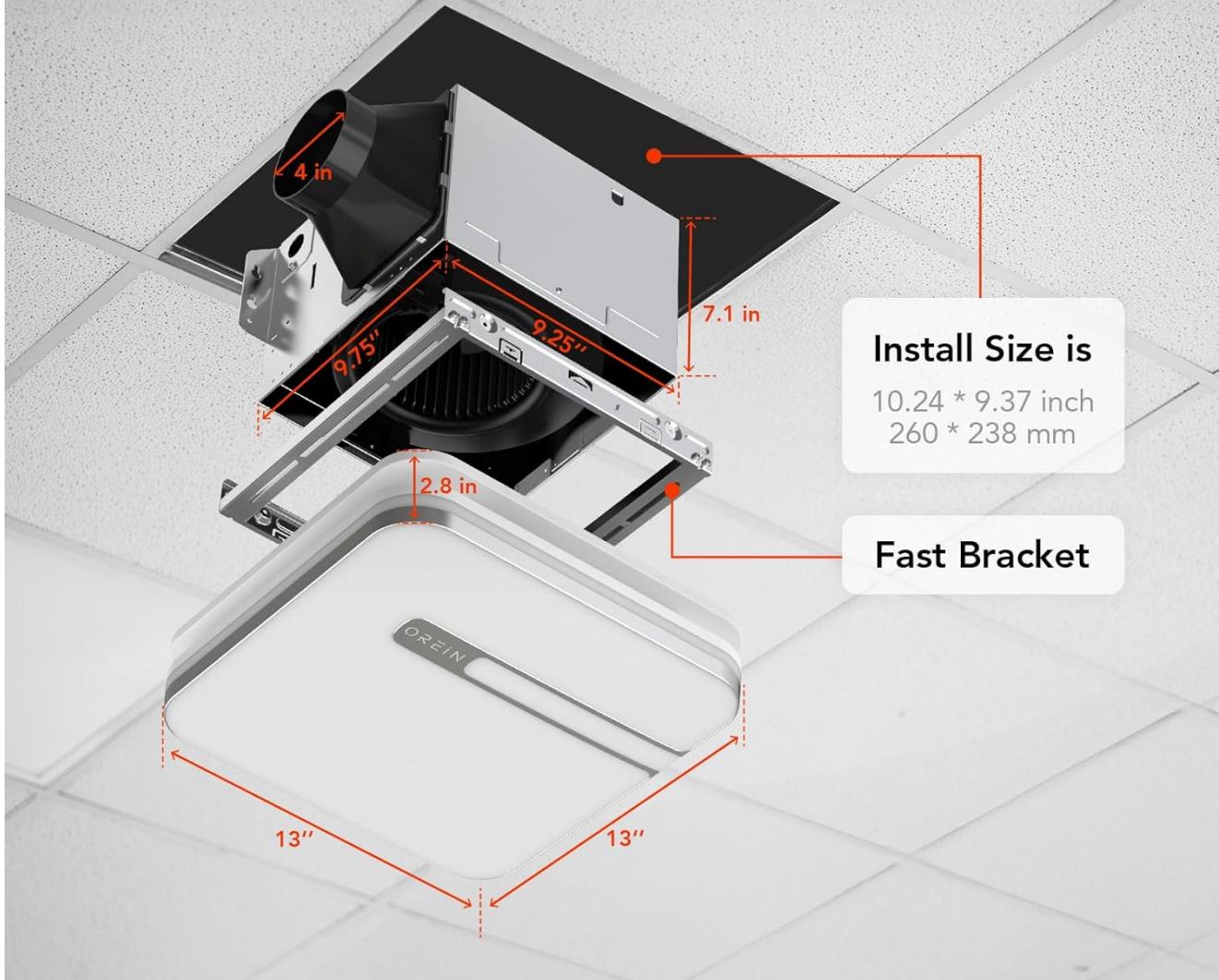
Image 5.1: Product dimensions and recommended installation opening size.

Image 5.2: Simplified installation process showing the fan unit being placed into the ceiling opening.

6. OPERATING INSTRUCTIONS

6.1. Humidity Sensing Mode vs. Manual Mode

The fan offers two operating modes: Manual and Humidity Sensing. You can switch between these modes by cycling the wall switch of the fan to the "OFF" position and then back to the "ON" position.

- **Manual Mode (Red LED Indicator):** The fan will run continuously when turned on via the wall switch.
- **Humidity Sensing Mode (Green LED Indicator):** The fan will automatically turn on when the humidity level in the room reaches 60%. It will continue to run until the humidity drops below the threshold, then run for an additional 20 minutes before turning off.
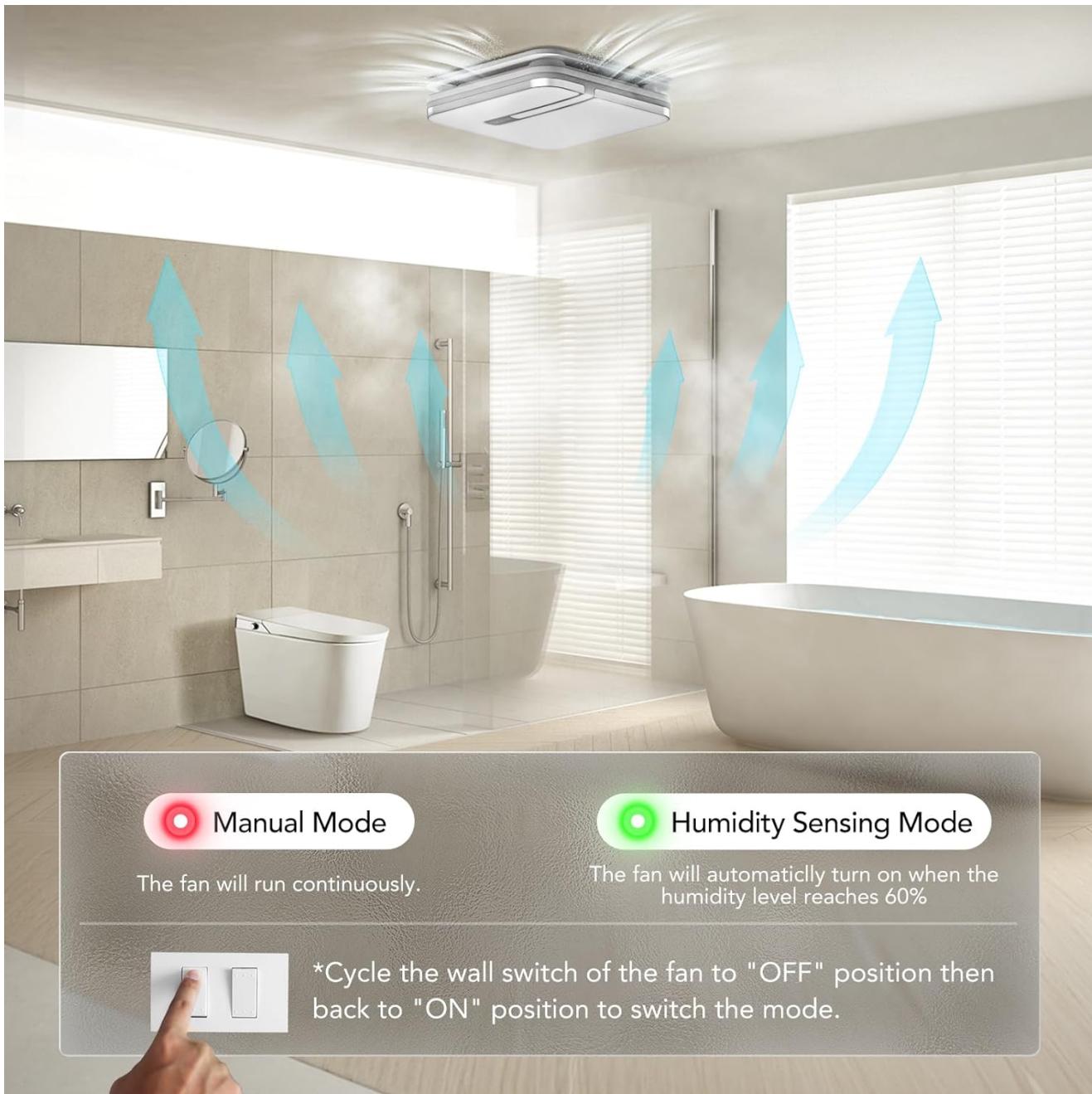

Image 6.1: Switching between Manual and Humidity Sensing Modes.

Image 6.2: How the humidity sensor automatically activates the fan.

100CFM
Install Size: 8.11" x 7.48"

100CFM
Install Size: 8.11" x 7.48"

160CFM
Install Size: 11.81''*11.02''

110/160CFM
Install Size: 11.39''*10.42''

80/110CFM / 10.24'' * 9.37''

Image 6.3: Humidity sensor logic: fan turns on above 60% humidity and runs for 20 minutes after humidity drops.

6.2. Adjusting Light Color Temperature

The LED light offers three color temperature options: 3000K (Warm White), 4000K (Natural White), and 5000K (Daylight). To select the desired color temperature, locate the toggle switch on the back of the lampshade and slide it to your preferred setting.

Image 6.4: Selecting the light color temperature (3000K, 4000K, 5000K).

Image 6.5: Visualizing the different light color temperatures in a bathroom setting.

6.3. Activating Night Light

To activate the 2200K night light mode, quickly cycle the light switch ON-OFF-ON within 2 seconds. This will switch the main light to

the softer night light setting.

Nightlight- 100lm 2200k

ON-OFF-ON Circling the switch of light to switch the nightlight mode
(Must occur within 2 seconds)

Image 6.6: The 2200K night light provides subtle illumination.

Powerfully Quiet & VERY Well Made

0.8/1.0 Sone

Image 6.7: Instructions for activating the nightlight mode.

6.4. Selecting CFM Airflow

The fan allows you to select between 80 CFM and 110 CFM airflow settings. This selection is made by sliding a toggle switch located on the fan housing. Choose the appropriate CFM based on your bathroom size and ventilation needs.

Image 6.8: Location of the CFM selection switch (80 CFM or 110 CFM).

7. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your OREiN bathroom fan.

- **Cleaning the Light Cover:** The light cover can be easily removed for cleaning. Gently unclip the cover from the fan housing. Clean with a soft, damp cloth and mild detergent. Ensure it is completely dry before reattaching.
- **Fan Blade Cleaning:** Periodically, inspect the fan blades for dust and debris buildup. Turn off power at the circuit breaker before attempting to clean the fan blades. Use a soft brush or vacuum cleaner to remove any accumulation.
- **Ducting Inspection:** Annually inspect the ducting for any blockages or damage that could impede airflow.

8. TROUBLESHOOTING

If you encounter issues with your OREiN bathroom fan, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution
Fan does not turn on.	No power to the unit.	Check circuit breaker. Ensure wall switch is ON. Verify electrical connections.
Light does not turn on.	Loose connection or faulty LED module.	Check the push clip connection for the light. If issue persists, contact support.
Fan is excessively noisy.	Obstruction in fan blades or motor.	Turn off power and inspect fan blades for debris. Ensure proper installation and secure mounting.
Humidity sensor not activating.	Incorrect mode selected or sensor malfunction.	Cycle the wall switch to ensure Humidity Sensing Mode (green LED) is active. Ensure humidity in the room is above 60%.
Poor ventilation/steam not clearing.	Incorrect CFM setting, blocked ducting, or undersized fan for room.	Ensure 110 CFM is selected if needed. Check ducting for blockages. Ensure proper room sealing.

If the problem persists after trying these solutions, please contact OREiN customer support.

9. SPECIFICATIONS

Feature	Detail
Brand	OREiN
Model	80/110 CFM
Airflow (CFM)	Selectable 80 / 110 CFM
Sones (Noise Level)	0.8 / 1.0 Sones
Light Output	1500lm
Color Temperature (CCT)	3000K / 4000K / 5000K Selectable
Night Light CCT	2200K
Power Source	DC
Product Dimensions	Approx. 1"D x 1"W x 1"H (Unit), 13.1" x 13.1" (Light Cover)
Install Size	10.24" x 9.37" (260mm x 238mm)
Duct Diameter	4 inch
Mounting Type	Flush Mount
Item Weight	18.06 pounds
UPC	734376313753

Note: Product dimensions provided as 1"D x 1"W x 1"H are likely placeholders and may not reflect actual physical size. Refer to

installation size for accurate cutout dimensions.

Image 9.1: Overview of different OREiN fan models and their specifications.

10. Warranty and Support

OREiN is committed to providing high-quality products and excellent customer service. For any questions, concerns, or support needs regarding your 3-in-1 Bathroom Fan, please contact us through the following channels:

- **Amazon Contact:** You can contact us directly through Amazon's messaging system for assistance with your purchase.
- **Phone Support:** For 24-hour service, please call: 1 (844) 506-1530
- **Online:** Search for 'OREiN' online to find our official website and additional support resources.

Please retain your proof of purchase for warranty claims. For detailed warranty information, refer to the product packaging or contact customer support.

Image 10.1: OREiN Customer Support is available to assist you.