

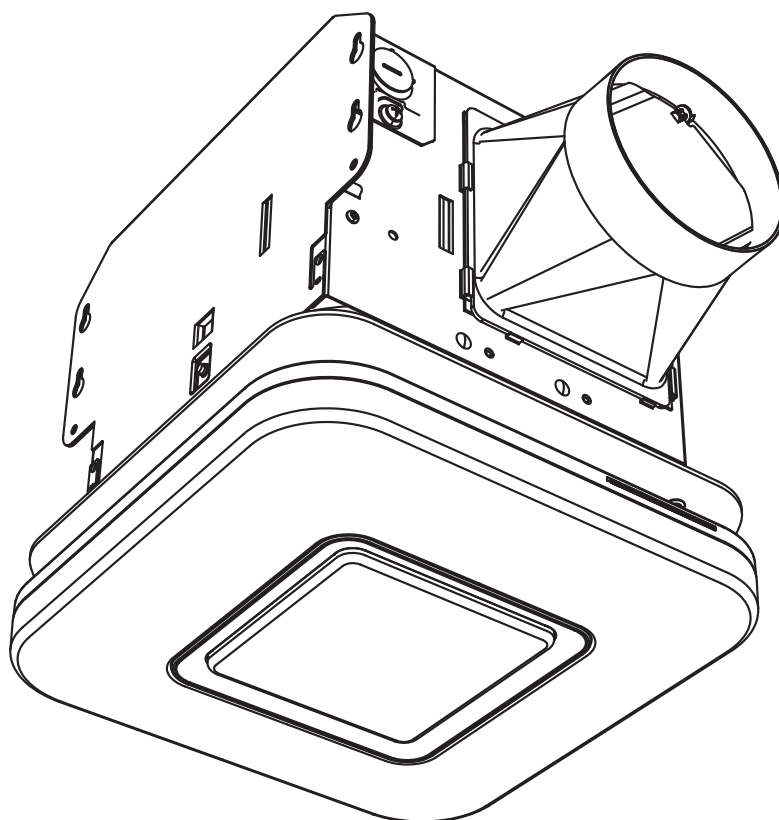
OREiN

illuminate for a better life

Matter smart 110CFM Bathroom Fan with RGBTW 1200lm LED Light & Night Light

Quick User Guide

Model ID: OL1700282



We appreciate the trust and confidence you have placed in OREiN through the purchase of VENTILATION FAN with LED LIGHT. We strive to continually create quality products designed to enhance your home. Visit us online to see our full line of products available for your home improvement needs.

Thank you for choosing OREiN.♥

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■ Safety Information

Please read and understand this entire manual before attempting to assemble, operate or install the product.

1. Always disconnect the power supply prior to servicing the fan, motor or junction box.
2. Follow all local building, safety and electrical codes as well as NEC (National Electrical Code) and OSHA (Occupational Safety and Health Act).
3. Electric Service supply must be 120 volts, 60 hertz.
4. This product must properly connect to the grounding conductor of the supply circuit.
5. Do not bend or kink the power wires.
6. Do not use this fan with any solid state control device, such as a remote control, switch, or certain timers. Mechanical timers are not solid state devices.
7. Do not install in a ceiling with insulation greater than R50.
8. Duct work should be installed in a straight line with minimal bends.
9. Duct work size must be the same size as the discharge and should not be reduced. Reducing the duct size may increase fan noise.



WARNING: To reduce the risk of fire, electric shock, or injury to persons, observe the following:

To reduce the risk of fire, electric shock, or injury to persons, observe the following:

1. Use this unit in the manner intended by the manufacturer. If you have any questions. Please call customer service.
2. Before servicing or cleaning unit, switch power off at 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 warning tag, to the service panel.
3. Installation work and electrical wiring must be done by qualified persons in accordance with all applicable codes and standards, including fire-rated construction.
4. Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent backdraft. 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 local code authorities.
5. When cutting or drilling into the wall or ceiling, do not damage electrical wiring and other hidden utilities.
6. Ducted fans used to exhaust contaminants must always be vented to the outdoors.
7. If this unit is to be installed over a tub or shower, it must be marked as appropriate for the application and be connected to a GFCI (Ground Fault Circuit Interrupter) — protected branch circuit.
8. FOR USE IN MIDDLE ROOM SIZE (UP TO 110 SQUARE FEET).
9. TYPE IC-INHERENTLY PROTECTED.
10. FOR USE IN NON FIRE RATED INSTALLATIONS ONLY.
11. WHEN INSTALLED ON A GFCI PROTECTED BRANCH CIRCUIT, SUITABLE FOR INDOOR WET LOCATIONS, ACCEPTABLE FOR USE OVER A BATHTUB OR SHOWER.
12. To reduce risk of fire and to properly exhaust air, be sure to duct air outside-Do not vent exhaust air into spaces within walls or ceilings or into attics, crawl spaces, or garages.
13. To reduce the risk of Fire, Electric Shock or Injury To Persons, Do Not Use Replacement Parts That Have Not Been Recommended By The Manufacturer (e.g. Parts Made At Home Using A 3D Printer).

■ Safety Information



CAUTION: For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.



CAUTION: Not for use in cooking areas.



CAUTION: To reduce the risk of injury to persons, install the fan at least 7 feet (2.1m) above the floor.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Please note that changes or modifications of this product is not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum 20cm distance between the radiator and your body. Use only the supplied antenna.

■ Product Specification

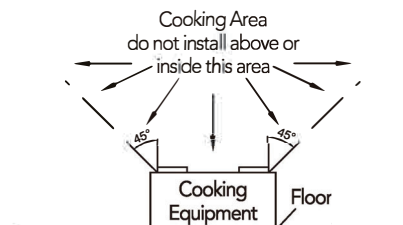
SPECIFICATIONS									
Airflow	Main Light	Night Light	Volatge	DuctDiameter	Sound Output	Power consumption		Weight	Ceiling Opening Dimension Requirements
						Fan	Light		
110 CFM	1200lm	100lm	120V 60Hz	4in	2.0 Sone	30W	20W	10.8lbs	7.36in x 7.68in

■ Planning Your Installation

When installing the ventilation fan in a new construction site, install the main body of the FAN and duct work during the rough-in construction of the building. The Grille should be installed after the finished ceiling is in place.

When installing in existing construction, use the provided cutout TEMPLATE for the ceiling. Grille edge should overlap finished ceiling.

Not for use in cooking area-see diagram below.



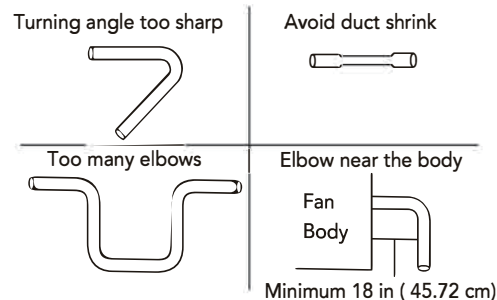
■ Planning Your Installation (continued)

Do not install ventilation fan in areas where the duct work will require configurations shown.



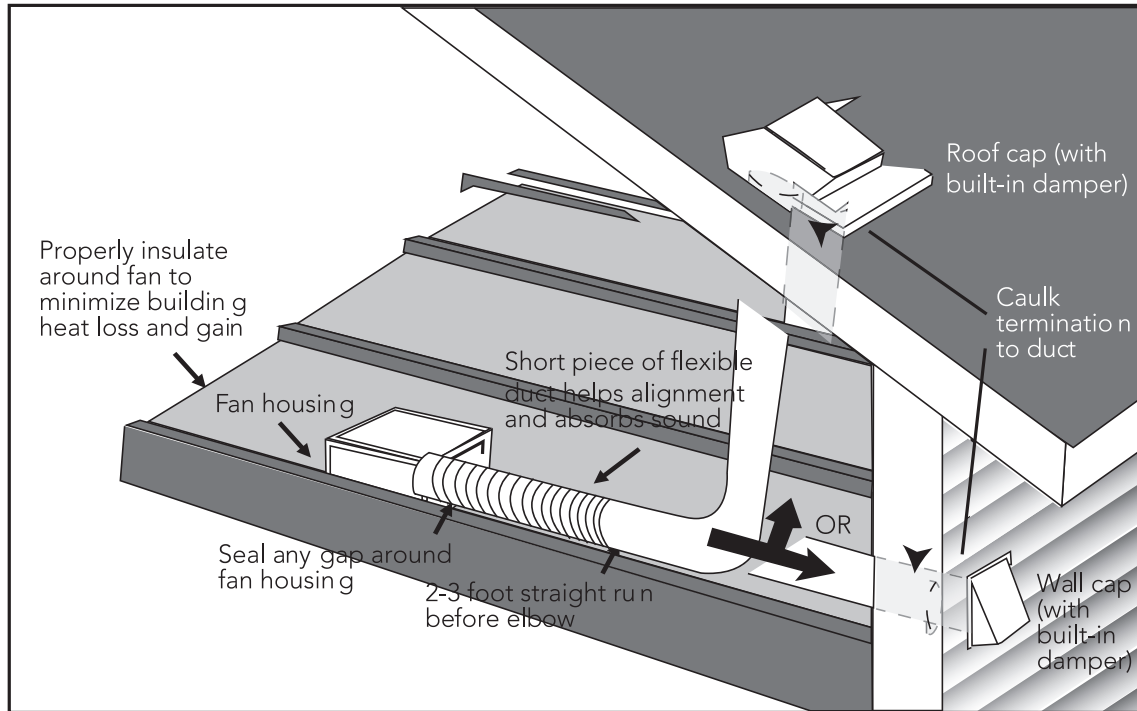
NOTE: If installing in existing construction, you may need to have access to space above and below the installation location.

There are multiple installation configurations possible for this ventilation fan. Not all configurations are shown. If your installation requires a variation other than those shown, consult with a licensed contractor to determine the best installation for your project. If you are replacing an existing fan, ensure that the new FAN will adequately cover the existing opening.



■ Typical Installation

The ducting from this fan to the outside of the building has a strong effect on the air flow, noise and energy use of the fan. Use the shortest, straightest duct routing possible for best performance, and avoid installing the fan with smaller ducts than recommended. Insulation around the ducts can reduce energy loss and inhibit mold growth. Fans installed with existing ducts may not achieve their rated air flow.



NOTE: When installing ventilation ducts and air vents, ensure that the air vents are not directly exposed to rain, and install appropriate protective measures around the air vents, such as rain cover or waterproof cover, to reduce the possibility of rainwater directly entering the ventilation ducts.

■ Warranty

LIMITED LIFETIME WARRANTY

WHAT IS COVERED

If this product fails due to a defect in materials or workmanship at any time during the first 3 years of ownership, the manufacturer will replace it free of charge, postage-paid at their option. This warranty does not cover products that have been abused, altered, damaged, misused, cut or worn. This warranty does not cover use in commercial applications. Use only manufacturer supplied genuine warranty repair replacement parts to repair this fan. Use of non-genuine repair parts will void your warranty. The manufacturer DISCLAIMS all other implied or express warranties including all warranties of merchant ability and/or fitness for a particular purpose. As some states do not allow exclusions or limitations on an implied warranty, the above exclusions and limitations may not apply. This warranty gives you specific legal rights, and you may have other rights that vary from state to state. This warranty is limited to the replacement of defective parts only. Labor charges and/or damage incurred during installation, repair, replacement as well as incidental and consequential damages connected with the above are excluded. Any damage to this product as a result of neglect, misuse, accident, improper installation or use other than the purpose SHALL VOID THIS WARRANTY. Shipping costs for return product as part of a claim on the warranty must be paid for by the customer. Contact the Customer Service Team at www.iorein.com.

■ Pre-installation

PLANNING INSTALLATION

Before beginning assembly of the product, make sure all parts are present. Compare parts with the package contents list and hardware contents. If any part is missing or damaged, do not attempt to assemble the product.

**WARNING:** Turn off electricity at breaker box before beginning installation.

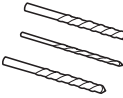
Carefully remove the unit from the carton.
Check area above installation location to be sure that wiring can run to the planned location and that duct work can be run and the area is sufficient for proper ventilation.
Inspect duct work and wiring before proceeding with installation.
Before installation, provide inspection and future maintenance access at a location that will not interfere with installation work.

**NOTE:** Installation may vary depending on how the previous bath fan was installed. Supplies necessary for the installation of your bath fan are not all included. However, most are available at your local home improvement or hardware store.

■ TOOLS REQUIRED (not included)



Claw hammer



Drill bits



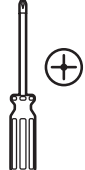
Flathead screwdriver



Duct tape



Pliers



Phillips head screwdriver



Utility knife



Electric drill



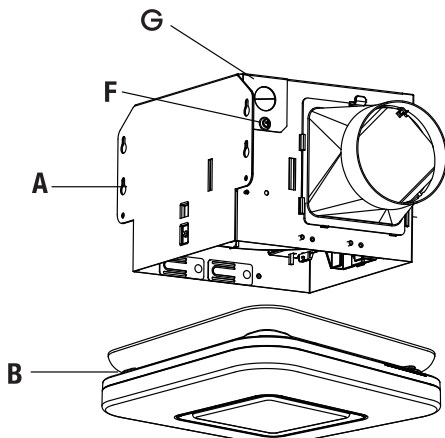
Goggles



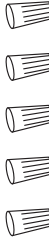
Gloves

■ Pre-installation (continued)

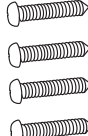
PACKAGE CONTENTS



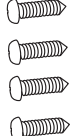
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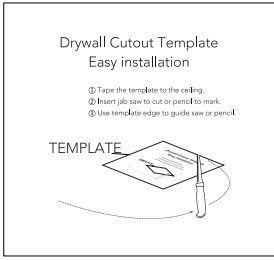
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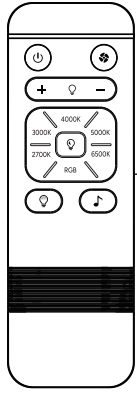
E



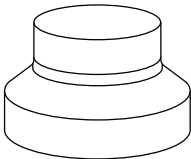
H



I



J



Part	Description	Quantity
A	Fan housing	1
B	Grille with light	1
C	Wire nut	5
D	Joist screw ST4*20	4
E	Joist screw ST4*10	4
F	Short screw	1
G	Wire cover	1
H	Drywall cover board	1
I	Remote control	1
J	4 to 3 Inch Duct Reducer	1

■ Installation - New Construction

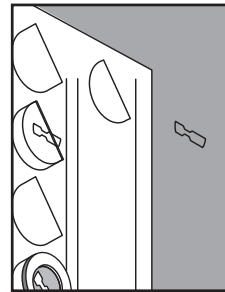
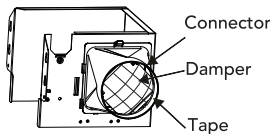


CAUTION: Make sure power is switched off at service panel before starting installation.
 ▫ Wear gloves during installing to help protect your hands from injury.



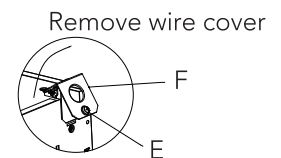
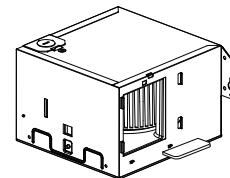
NOTE: Ceiling mount only.

IMPORTANT: Please remove the tape, which protects the damper during shipping and installation, from the duct adaptor as shown below.



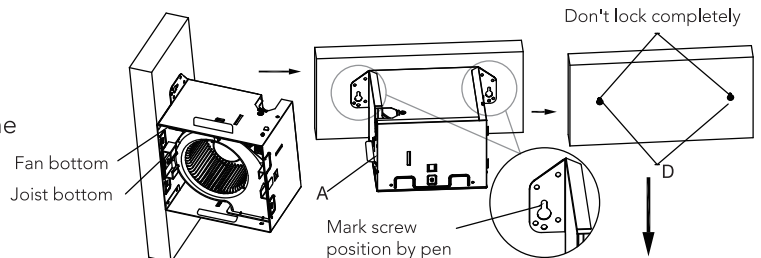
1 Remove the wire cover

- Loosen the short screw (E) and remove the wire cover (F).

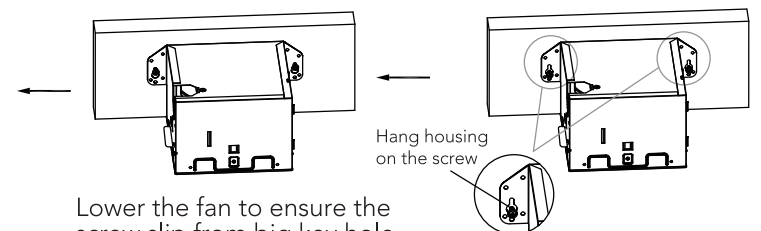
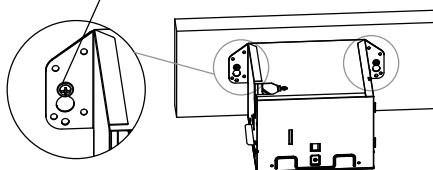


2 Mount the housing to the joist

- Place the fan housing next to a ceiling joist or wall stud. The fan housing should be level and perpendicular to the joist or stud. Secure fan housing (A) through mounting keyholes on bracket with 2 screws (D).



Tighten the screw



Lower the fan to ensure the screw slip from big key hole to small key hole

■ Installation - New Construction(continued)

3 Connect the wire

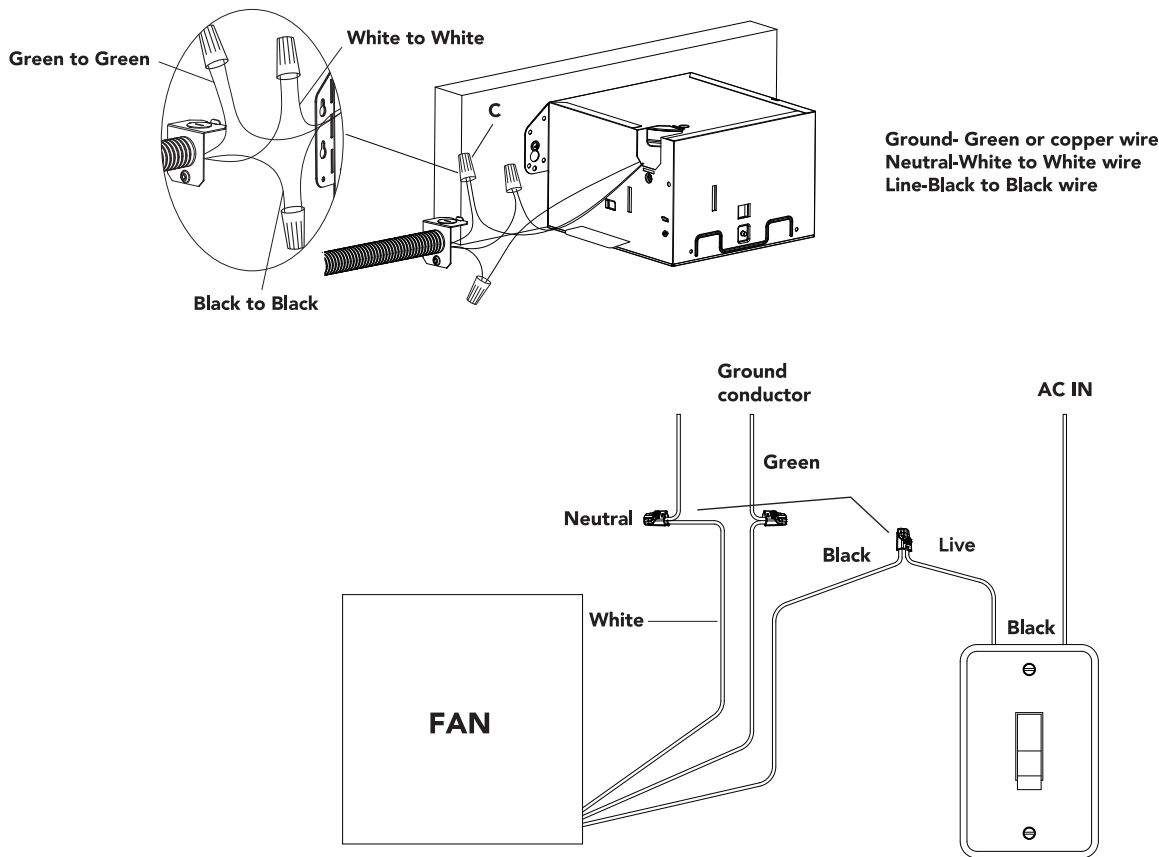
- Pull the house wires through the knockout of wire cover (F). Using the quick connectors to connect 120 V AC house wiring from the wall switch to the fan as shown in the wiring diagram on page 4.
- Carefully push the connected wires back into the wiring compartment of the fan housing (A). Reattach the wire cover (F) and attach it firmly with short screw (E).



NOTE: Attach the 1/2" ROMEX connector or 1/2 "Flexible Metal Conduit connector (supplied by others) to wiring compartment cover and lock in place with 1/2 lock nut included with connector.



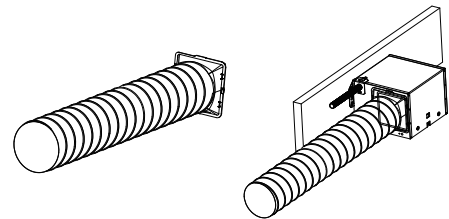
CAUTION: If the electrical wires do not match the colors listed, you must determine what each house wire represents before connecting. You may need to consult an electrical contractor to determine safely.



■ Installation - New Construction (continued)

4 Connect the duct

- Connect a 4 in. circular duct (not supplied) and vent to the duct connector. Secure it with duct tape (not supplied) or a clamp (not supplied) to make the connection secure and air tight.
- Insert the duct connector back to the fan housing (A) follow the guide slot from up to down. And it will be in place with a "click" sound. Please secure it tightly.



5 Finish the ceiling work

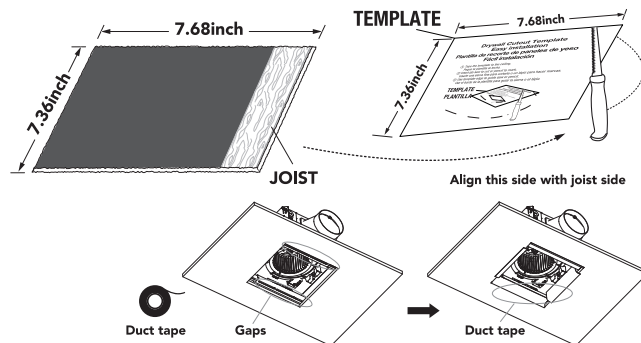
- After electrical and construction inspection is completed, the dry wall ceiling can be installed.
- Cut the ceiling hole with the cut-hole template (I) or the size 7.68*7.36inch (195*187mm). Ceiling hole should be aligned with the inside edge of fan housing.
- Important: Cover and seal up all gaps with duct tape.



NOTE: MAKE SURE ONE EDGE OF THE OPENING IS FLUSH WITH THE JOIST FOR INSTALLATION.

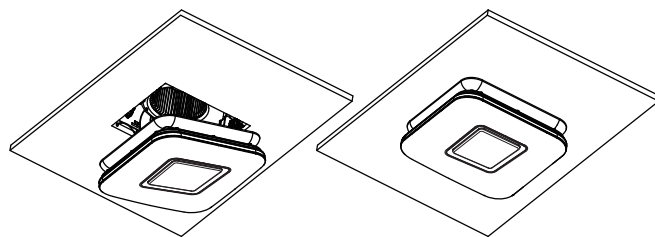


NOTE: That it is common practice in heating and ventilation systems using sheet metal ductwork and fittings or flexible duct work tubing to use duct tape or aluminum tape to ensure air tight seals and improve efficiency.



6 Install the grille with light

- Attach the grille by squeezing one spring together and inserting the springs into the spring guides in the fan housing (A) firstly.
- Connect LED wire to fan housing by terminal.
- Then insert another spring and push the grille (B) up against the ceiling.
- Check that the installation is secure and safe from falling objects.



■ Installation - Existing Construction

1 Remove the existing fan

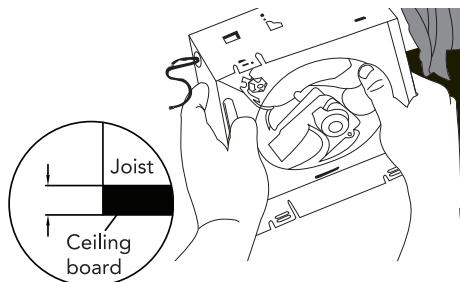
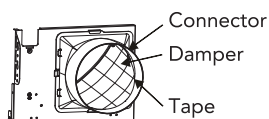


NOTE: Make sure power is switched off at service panel before starting installation.

Wear gloves during installing to help protect your hands from injury.

- Remove the old fan from the ceiling.

IMPORTANT: Please remove the tape, which protects the damper during shipping and installation, from the duct connector as below.

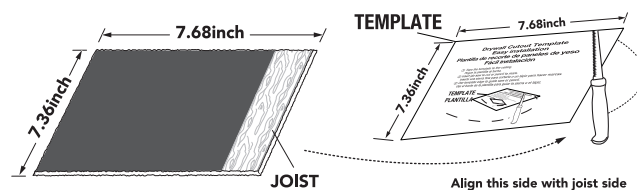


2 Ceiling cut out

- Measure the opening to ensure it is large enough to accommodate the new fan body (A) (7.68 in. x 7.36 in.).
- If this fan is not replacing an old fan, be sure to cut a 7.68 in. x 7.36 in. opening for the fan body (A).

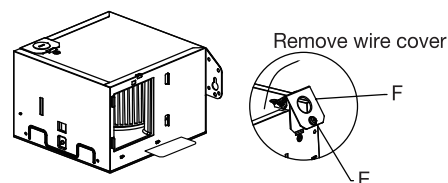


NOTE: ▫ Wear safety goggles to prevent getting dust, falling insulation or other debris into your eyes, nose and mouth.
▫ Carefully cut open the ceiling hole without cutting into electrical or gas or water lines that may not be visible.



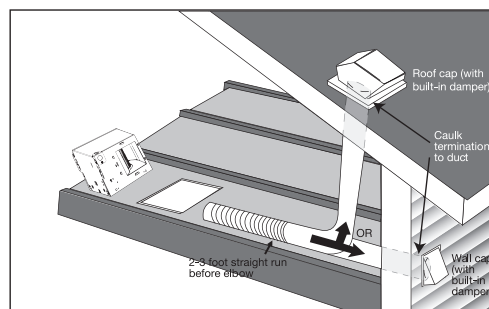
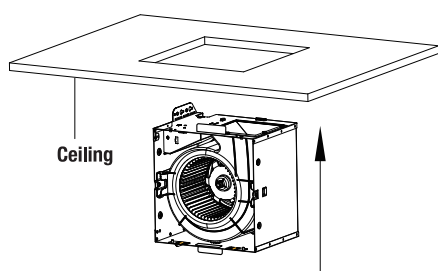
3 Remove the wire cover

- Loosen the short screw (E) and remove the wire cover (F).



4 Place the fan housing

- Place the fan housing (A) inside the ceiling through the hole. And then place on the side. Shown as in picture.

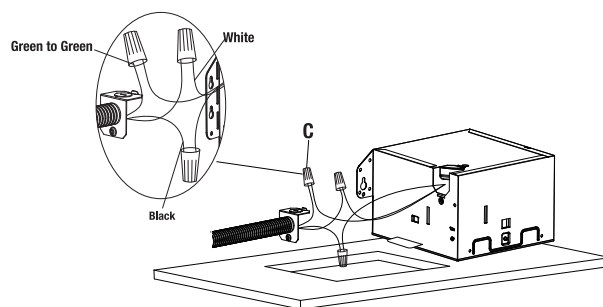


■ Installation - Existing Construction

5 Connect the duct

- Pull the house wires through the knockout of wire cover (F). Using the quick connectors to connect 120 V AC house wiring from the wall switch to the fan as shown in the wiring diagram on page 4.
- Carefully push the connected wires back into the wiring compartment of the fan housing (A). Reattach the wire cover (F) and attach it firmly with short screw (E).

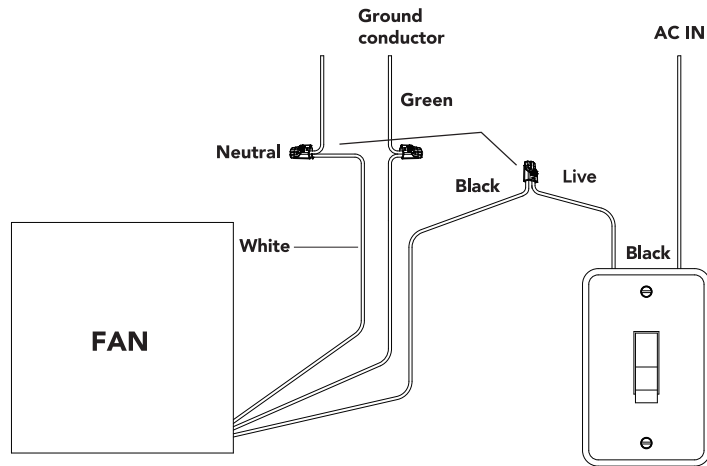
NOTE: Attach the 1/2" ROMEX connector or 1/2" Flexible Metal Conduit connector (supplied by others) to wiring compartment cover and lock in place with 1/2 lock nut included with connector.



Ground- Green or copper wire
Neutral- White to White wire
Line- Black to Black wire



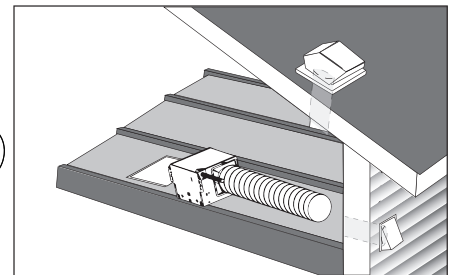
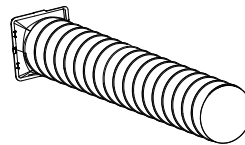
CAUTION: If the electrical wires do not match the colors listed, you must determine what each house wire represents before connecting. You may need to consult an electrical contractor to determine safely.



■ Installation - Existing Construction (continued)

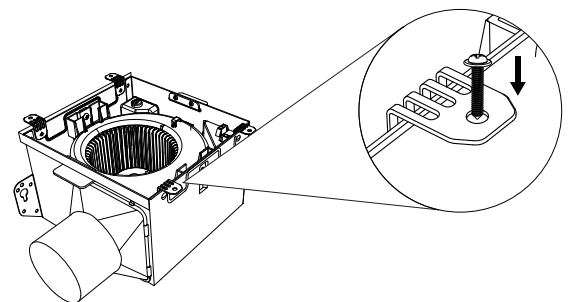
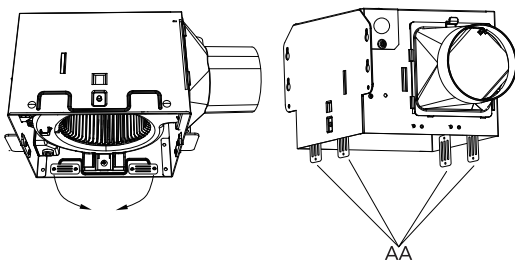
6 Connect the duct

- Connect a 4 in. circular duct (not supplied) and vent to the duct connector. Secure it with duct tape (not supplied) or a clamp (not supplied) to make the connection secure and air tight. Insert the duct connector back to the fan housing (A) follow the guide slot from up to down. And it will be in place with a "click" sound. Please secure it tightly.



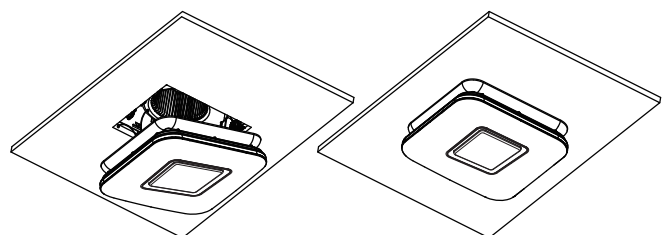
7 Install the fan housing on the dry wall ceiling

- (1). Rotate and pull the 4 tabs (AA) of the fan housing to the vertical position.
- (2). Then bend the tabs (AA) outward on both sides, fix the fan to dry wall ceiling with screws.

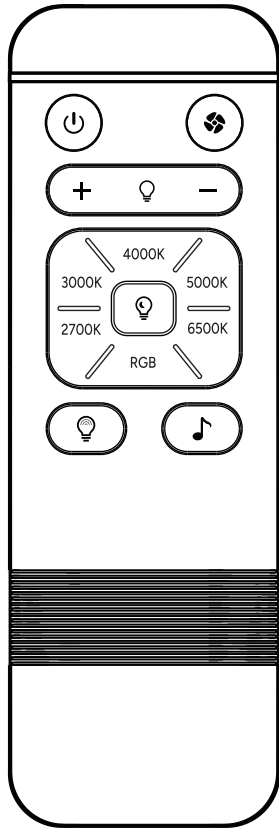


8 Install the grille with light

- Attach the grille by squeezing one spring together and inserting the springs into the spring guides in the fan housing (A) firstly.
- Connect LED wire to fan housing by terminal.
- Then insert another spring and push the grille (B) up against the ceiling.
- Check that the installation is secure and safe from falling objects.



■ Remote Operation

ICON	Button Name	Action	Notes
	All ON/OFF	Short press to turn the Fan and light on/off	Long press for 5 seconds to reset fan default setting
	Fan ON/OFF	Short press to turn the fan on/off	
	Increase the brightness	Short press to adjust Brightness up	
	Reduce the brightness	Short press to adjust Brightness down	
	Light ON/OFF	Short press to turn light on/off	
2700K	2700K color temperature	Short press to adjust color temperature to 2700K	
3000K	3000K color temperature	Short press to adjust color temperature to 3000K	
4000K	4000K color temperature	Short press to adjust color temperature to 4000K	
5000K	5000K color temperature	Short press to adjust color temperature to 5000K	
6500K	6500K color temperature	Short press to adjust color temperature to 6500K	
	Night light	Short press to turn the night light on/off	
	Select LED color	Short press to select RGB colors	There are 7 color to choose from: Red, Orange, Yellow, Green, Cyan, Blue, Purple
	Select LED RGBTW color	Short press to select RGB colors	There are 7 RGBTW color Presets to choose
	Music Sync	Short press to open the music sync mode	

NOTE: Please make sure the time exceed 1s when switching between different keys of the remote control. If the time is less than 0.5s, the receiver of the remote control may not be able to obtain a signal to respond because the receiving time is too short.

NOTE: Press and hold the RGBTW and Music buttons at the same time to pair the remote control and fan, to cancel the pairing, you need to power off and power on again and then press and hold the RGB and Music buttons at the same time. When successful, the main light will Breathing once with 2700K light.

NOTE: Press and hold the fan power button above 5 seconds to reset factory default setting.

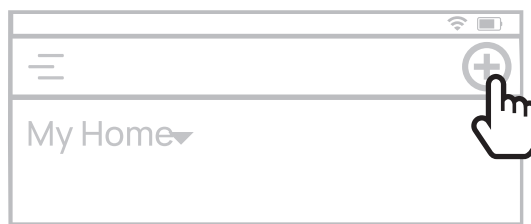
■ Connecting with Aidot

1. Get the AiDot app by searching "AiDot" on the App Store, Google Play, or simply scan the QR code below.



Google, Google Home and Google Play are trademarks of Google LLC.

2. Sign in or create a new account.
3. Ensure Bluetooth and location services are enabled on your mobile device.
4. Tap '+' within the AiDot app and then select your bath fan from the list of devices shown.

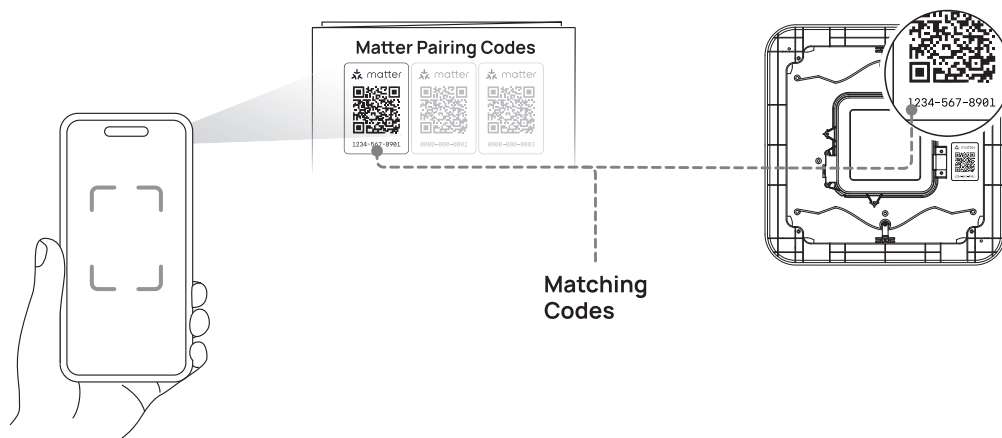


5. Follow the remaining instructions in the AiDot app.

■ Connecting with Matter

To connect your bath fan to a Matter smart home ecosystem, a Matter Controller (hub) and the corresponding app are required. For example, to connect to Apple Home, a device such as a HomePod and the Home app are both necessary. Before you start ensure your Wi-Fi network is 2.4 GHz, and that your mobile device and Matter Controller are connected to the Wi-Fi network you will connect your bath fan to.

1. Ensure your Wi-Fi network is 2.4 GHz.
2. Ensure your mobile device and Matter Controller are connected to the Wi-Fi network you will connect your bath fan to.
3. Ensure Bluetooth is enabled on your mobile device.
4. Open the smart home app you want to connect your bath fan to.
5. Within that smart home app, locate and select the option to add a device.
6. Enter your bath fan's Matter pairing code manually or by scanning its QR code, both located on your bath fan and in the next section of this instruction manual.



One code will appear for each bath fan in the pack. Take care to scan the correct code when adding each bath fan. You can match the code on your bath fan to the one in this instruction manual as shown in the diagram.

7. Follow any remaining instructions in the smart home app.

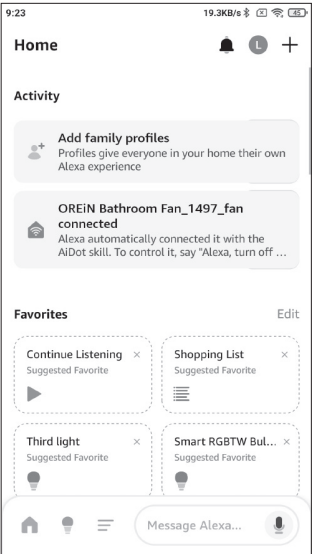
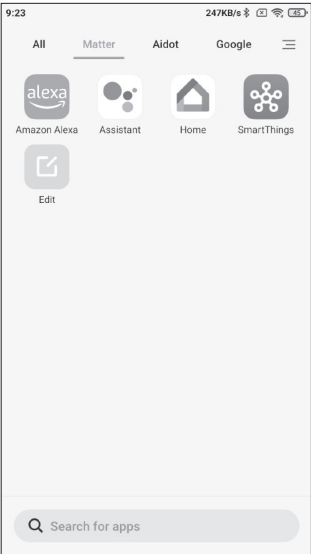
■ Matter Pairing Codes

Location:	Location:	Location:
Location:	Location:	Location:

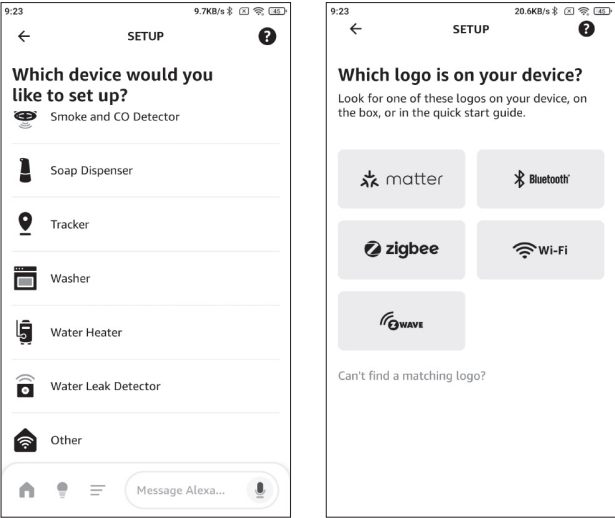
Space has been provided to document the installed location of each bath fan.

■ Connecting with Alexa

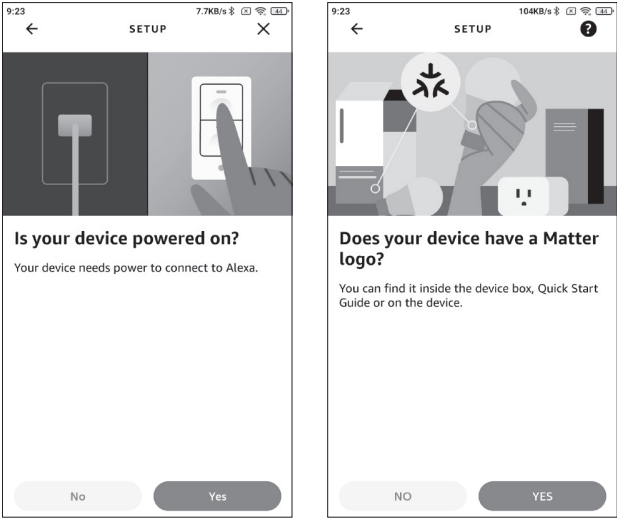
1. Your device must be within 30 feet of your Echo during setup. After you turn on the power, you can prepare for network pairing.
2. Open the Alexa app.
3. Click + to add a device.



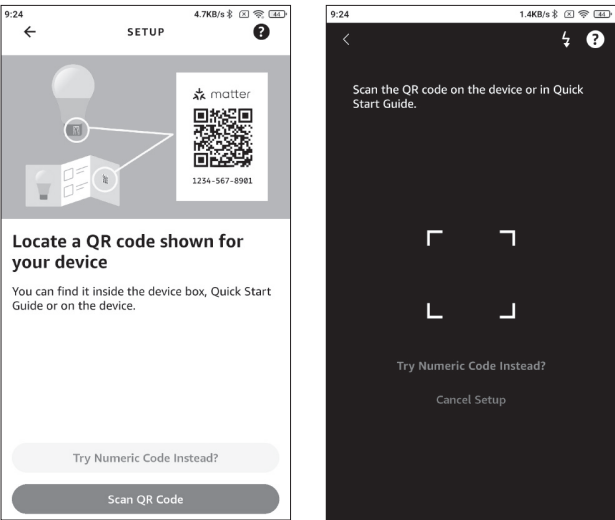
4. Scroll down to find the other options and choose the “matter” logo.



5. Follow the prompts to confirm that the device has a matter logo and is powered on.



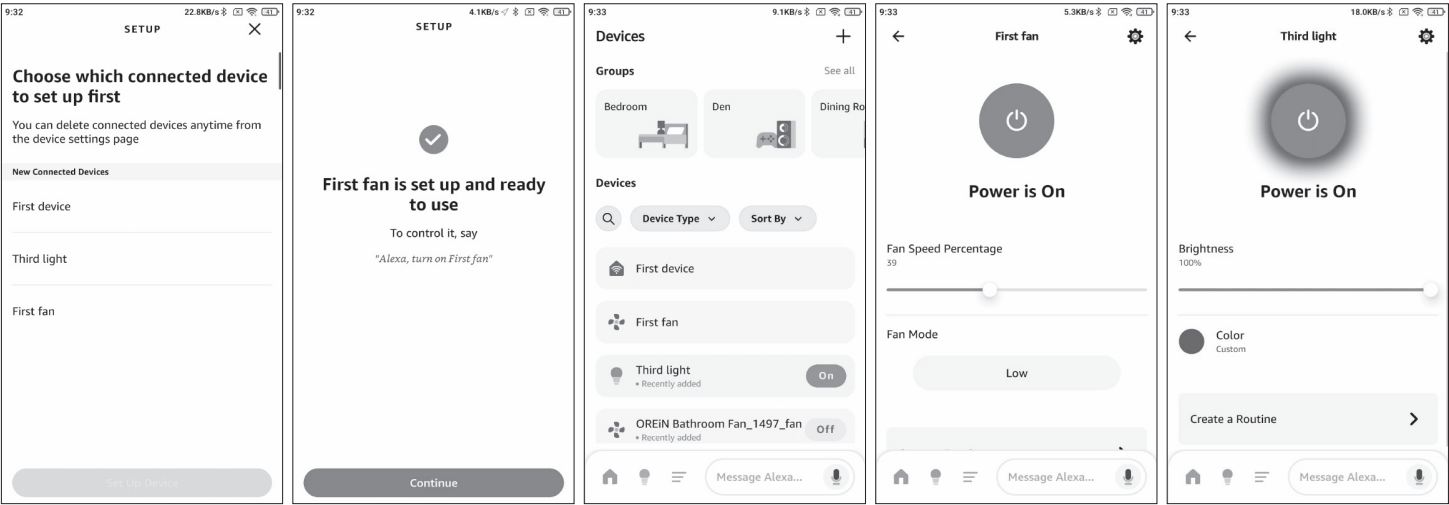
6. Scanning the Matter QR code to pair.



7. Waiting for the pairing.



8. Add the bath fan to room, then control it with voice or app as needed.



■ Care and Maintenance



WARNING: Disconnect power supply before servicing.

- See SAFETY INFORMATION before proceeding. Routine maintenance should be done at least once a year.
- Never use solvents, thinner or harsh chemicals for cleaning the fan.
- Do not allow water to enter the motor.
- Do not immerse metal parts in water.

■ Troubleshooting

Problem	Possible Cause	Solution
The fan seems louder than it should.	The CFM is too great.	Be sure the CFM rating on the fan matches the square footage of your room.
	The damper is damaged or not working properly.	Check the damper to ensure it is opening and closing properly. If the damper has become damaged, please call Customer Service.
	The bend in the duct is too close to the fan discharge.	Be sure you do not have any sharp bends in the duct closer than 18 in. to the fan discharge.
	The fan discharge is reduced to fit a smaller duct.	Use the recommended size ducting to reduce fan noise.
	The fan body is not attached securely.	Be sure the fan is securely attached to the ceiling joists.
The fan is not clearing the room.	There is insufficient airflow intake in the room.	Be sure a door or window is slightly ajar or opened to allow airflow. The fan is not able to draw air out of the room without enough airflow to draw from.
	There is insufficient CFM.	Be sure the CFM rating on the fan matches the requirements for your room size.
		 NOTE: Using a tissue is not the correct method for determining if the fan is operating properly. If the fan clears steam from the room within approximately 15 minutes of completing your shower, then the fan is operating properly.
	The gap between the Housing and the ceiling is not sealed.	Please seal the gap with tape to prevent air leakage.
	The finger latch is not open.	Remove the tape on the finger latch and check whether the finger latch can open and close normally. If not, contact customer service.
Abnormal sound	Foreign objects hit the wind wheel.	Tap the grill to remove the foreign object.
	The finger latch falls off.	Check the duct connector and re-fasten it.
	The duct connector and duct are not sealed.	Please seal the duct connector and duct with tape.
The light doesn't work	Loose wiring	Please re-connect grill and housing by terminal.
		Make sure Power input connection is good condition.
	Terminal is broken	Please contact with customer service to exchange new ones.

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