



### Installation and Operating Instructions

#### **VENTILATION FAN**

# READ AND SAVE THESE INSTRUCTIONS GENERAL SAFETY INFORMATION

- 1. Make sure that the electric service supply voltage is AC
- 120V, 60Hz.2. Follow all local electrical and safety codes, as well as the National Electrical Code (NEC) and the
- Occupational Safety and Health Act (OSH Act).

  3. Always disconnect the power source before working
- on or near the ventilating fan, motor or junction box.

  4. Protect the power cord from sharp edges, oil, grease, hot surfaces, chemicals or other objects.
- 5. Do not kink the power cord.
- Do not install the unit where ducts are configured. (Fig. A).
- Provide suction parts with proper ventilation.
- This unit is UL Listed for use over a bathtub or shower when installed in a GFCI protected branch circuit.

#### 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 unit, switch power off at the service panel and lock the service disconnecting means to prevent the 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 a qualified person(s) 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 backdrafting. 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 of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) and local code authorities.
- When cutting or drilling into the wall or ceiling, do not damage electrical wiring and other hidden utilities.
- Ducted fans must always be vented to the outdoors.If this unit is to be installed over a tub or shower it
- 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.
- Do not use this unit with any other solid-state control device. Solid-state control device may cause harmonic distortion, which can cause a motor humming noise. (Avertissement: ne convient pas à des régulateurs de vitesse à semi-conducteurs).
- NEVER place a switch where it can be reached from a tub or shower.
- Not to be installed in a ceiling thermally insulated to a value greater than R40. (This is required for installation in Canada only).
- 11. Do not open/disassemble the LED light engine

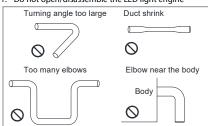
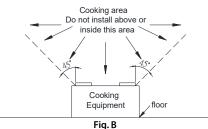


Fig. A

## **CAUTION**

- For General Ventilating Use Only. Do Not Use To Exhaust Hazardous Or Explosive Materials And Vapors.
- 2. Not for use in cooking areas. (Fig. B)
- This product must properly connect to the grounding conductor of the supply circuit.
- To reduce the risk of injury to persons, install the fan at least 8.2 feet (2.5m) above the floor.



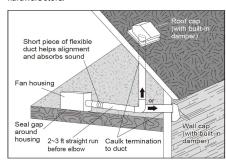
## **PREPARATION**

Tools Required for Assembly (not included): Hammer, Flathead Screwdriver, Wire Nuts, Nails, Duct Tape, Phillips Head Screwdriver, and Utility Knife. Helpful Tools (not included): Electric Drill, Drill Bits.

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

- Carefully remove unit from carton.
- Check area above installation location to be sure that wiring can run to the planned location and that duct work can be run. Make sure 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.
- You may need the help of a second person to install this fan: one person on the attic side and one on the room side.

Note: Installations 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.



Proper insulation around the fan to minimize building heat loss and gain. 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.

- Locate unit above (GFCI-protected circuit required) or within 5 feet of the shower head.
- Locate unit away from heating or cooling sources which can affect humidity levels.
- Do not locate near window. Unit may respond to the outdoor humidity level.
- Unit must be installed in ceiling to properly sense moisture.
   Locate unit only on flat ceilings up to 12 feet high for
- proper sensing.

  O Use a roof cap or wall cap that has a built-in damper to
- reduce backdrafts.

  o External timer can be used in conjunction with single-speed mode only, please contact Delta Breez customer service and consult with a licensed electrician for compatibility.
- External dimmer can be used in conjunction with LED light model, please contact Delta Breez customer service and consult with a licensed electrician for compatibility.



Page 1.

## **PACKAGE CONTENTS**

	PART NAME	APPEARANCE		
	Fan Body		1	
	Grille	SMT150-200	1	
		SMT150-200LED	1	
	Hanger Bar		4	
	Tapping Screw (Ø4×25mm)	Ommune	8	
	Machine Screw (#8-32x5/16")	97	5	
	Duct Connector (6")		1	

## **ASSEMBLY INSTRUCTION**

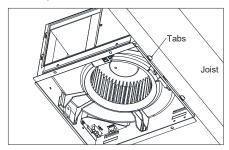
## BEFORE INSTALLATION

- Turn off power source and review all safety precautions.
- Remove the tape on the duct connector.

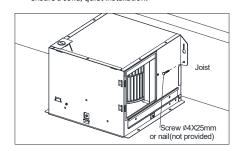
#### **NEW CONSTRUCTION**

INSTALLATION I - MOUNT HOUSING WITH FLANGE

 Slotted tabs are provided to locate housing flush with 1/2" ceiling material. Bend tabs outwards 90° and position housing so that tabs rest against bottom edge of the joists (or front of the stud).

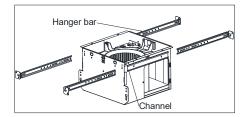


 Secure the housing to the joist or stud using four tapping screws (Ø4x25 mm) or nails (not provided) to ensure a solid, quiet installation.

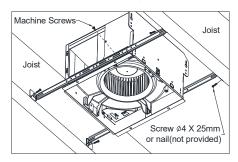


#### INSTALLATION II - USING HANGER BAR

 Sliding hanger bars are available to allow for positioning of the housing anywhere between joists up to a span of 24".

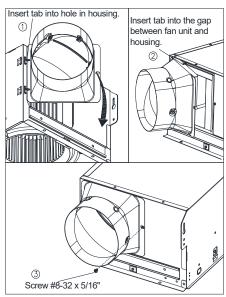


- Extend the hanger bars to fit the width of the joists. Make sure the fan body is level and perpendicular to the joist.
- 3. Ensure that the distance between the ceiling and fan body is appropriate for mounting the grille.
- body is appropriate for mounting the grille.
  4. Secure the hanger bars to the joists with tapping screws (Ø4x25 mm) or nails (not provided).
- 5. Secure the hanger bars to the fan body using the machine screws (#8-32 x 5/16").



### ATTACH DUCT CONNECTOR AND CONNECT WIRING

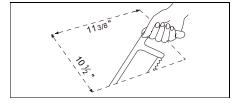
 Attach the duct connector from outside and secure by using machine screw (#8-32 x 5/16").



Using wire nuts (not provided) connect house wires to fan wires as shown in "CONNECT WIRING".

## EXISTING CONSTRUCTION - ACCESSIBLE FROM ABOVE (Attic Access)

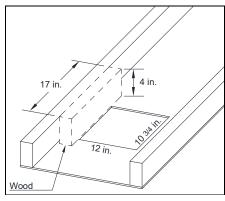
- 1. Removing existing fan.
- Measure the existing ceiling opening or cut a new opening to ensure it is large enough to accommodate the new fan (10 1/2 in. x 11 3/8 in. suggested).



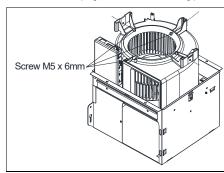
You can mount housing with flange or using hanger bar, and attach duct connector and connect wiring.

## EXISTING CONSTRUCTION - ACCESSIBLE FROM BELOW (Room inside installation)

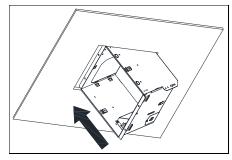
- 1. Removing existing fan.
- 2. Measure the existing ceiling opening or cut a new opening to ensure it is large enough to accommodate the new fan (10 3/4 in. x 12 in. suggested). A piece of wood (not provided) may be necessary that is screwed in from indoor through the ceiling board or wall. Suggested size is H 4 in. x L 17 in. Position the screws far enough from the edge of the ceiling board that it does not crumble and give way.

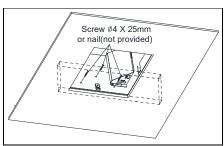


Remove the fan body by release three machine screws (M5 x 6mm), unplug all connector from wiring panel.

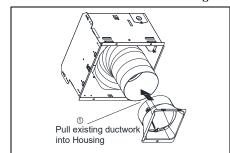


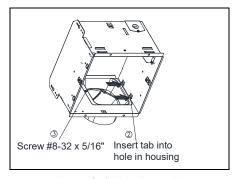
 Using wire nuts (not provided) connect house wires to fan wires as shown in "CONNECT WIRING". Insert the housing into the existing ceiling opening and secure housing by using three tapping screws (Ø4x25) or nails (not provided).



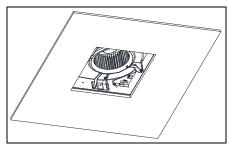


 Do the duct work as below picture and fix the duct connector to the housing by using machine screw (#8-32 x 5/16").



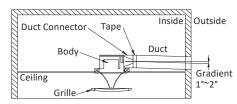


Insert and secure fan body by three machine screws (M5 x 6mm).



## **DUCT CONNECTION**

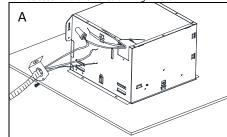
- Insert the 6" duct (not provided) into the duct connector and tape all ductwork connections to make them secure and airtight.
- 2. Install the duct with a gradient 1°~2° to the outside.



## **CONNECT WIRING**

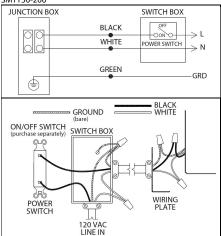
TURN OFF POWER SOURCE. REVIEW ALL SAFETY PRECAUTION.

- Follow all local electrical and safety codes, ANSI/NEPA70
- NEVER place a switch where it can be reached from a tub or shower.
- Using wire nuts (not provided), connect the house power cable and LED cable to the ventilating fan wires. Connect wires are shown in wiring diagrams A.
- 4. 14 AWG (2.1 mm<sup>2</sup>) is the smallest conductor that shall be used for branch-circuit wiring.

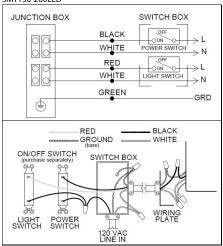


#### WIRING DIAGRAM

SMT150-200



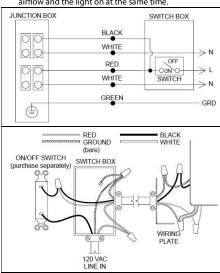
#### SMT150-200LED



#### OTHER WIRING OPTION

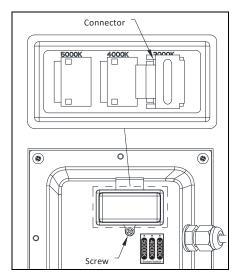
SMT150-200LED: Combine power & light to one switch.

Switch ON: Fan runs at user adjustable full speed airflow and the light on at the same time



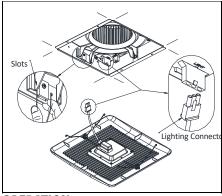
## **GRILLE INSTALLATION**

Using a screwdriver to remove the screw on the back of grille, and insert the connector to choose the color temperature you want for your LED. You can choose 3000K warm white, 4000K cool white and 5000K daylight white, lock the connector cover by screw after choosing.



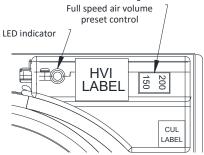
- Insert the LED light connector into the LED socket.
- When the power on, check for abnormal vibrations or

Insert the mounting springs into the slots and mount the grille to the body.



## **OPERATION**

Turn the POWER switch on to operate at user adjustable full speed airflow - the LED indicator will be green.



## **CARE AND MAINTENANCE**

DISCONNECT THE POWER SOURCE BEFORE WORKING ON THE UNIT.

ROUTINE MAINTENANCE MUST BE DONE EVERY YEAR.

## **CAUTION:**

- Never use gasoline, benzene, thinner or any other such chemicals to clean the ventilating fan.
- Do not allow water to enter the motor.
- Do not soak resin parts in water over 140°F (60°C).

#### CLEANING:

- Pull down the springs (and power connects of the LED light engine if SMT150-200LED) to remove the grille.
- Wash and clean the grille. CAUTION: Do not let water into the LED light engine. (Use non-abrasive kitchen detergent and wipe dry with a new cloth.)
- Using a cloth dampened with non-abrasive kitchen detergent, remove any dirt from the ventilating fan. Wipe dry with a clean cloth.
- Replace the grille.

#### WARRANTY

### **DELTA ELECTRONICS THREE YEAR LIMITED WARRANTY**

Delta Electronics Inc. ("Delta Electronics") warrants to the original consumer purchaser in the USA and Canada that the Breez ventilation fan products will be free from defects in material or workmanship. This warranty is limited to three (3) years from the original date of purchase.

#### Limitations and Exclusions

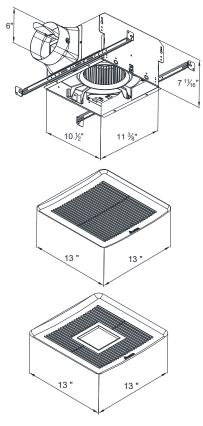
- 1. During the warranty period, a replacement for any defective product will be supplied free of charge for installation by the consumer. The warranty provided herein does not cover charges for labor or other costs incurred in the troubleshooting, repair, removal, and installation service.
- 2. All returns of defective parts or products must include the product model number, and must be made through an authorized Delta Electronics distributor. Authorized returns must be shipped prepaid. Repaired or replacement products will be shipped by Delta Electronics F.O.B. shipping point.
- 3. Delta Electronics shall not be liable for any indirect, incidental, consequential, punitive, or special damages arising out of or in connection with products use or performance, regardless of the form of action whether in contract, tort (including negligence), strict product liability or otherwise.
- 4. The warranty does not cover if user does not comply with manufacturer's installation manual.
- 5. To qualify for warranty service, you must notify Delta Electronics at the address or telephone number below.
- 6. Delta Electronics shall have no liability to the original owner-user with respect to any defect caused by abuse, misuse, neglect, improper transportation or storage, improper testing, improper installation, improper operation, improper use, improper maintenance, improper repair, improper alteration, improper modification, tampering or accident of products or parts thereof, or unusual deterioration or degradation of products or parts thereof due to a physical environment beyond the requirements of products' specifications.

Address: 46101 Fremont Boulevard, Fremont, CA 94538 US Toll Free Number:

1-888-979-9889 - Technical Support 1-877-685-4384 - Customer Sales Support www.deltabreez.com

## **DIMENSIONS**

Unit: Inch (mm)





## **SPECIFICATIONS**

Model No.	Voltage (V)	Frequency (Hz)	Power @ 0.1SP (W)	Air Flow @ 0.1SP (CFM)	Weight (lb.)	Note
SMT150-200		24		10.4	Single Speed	
	120 6	60		200	10.7	Single Speed
SMT150-200LED		00	25			13 Watts, 850 Lumens,
						3000K, 4000K, 5000K

Note: Specifications subject to change without notice.

## **TROUBLE SHOOTING**

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION			
The fan is not turning on	1. Power off	1. Make sure power supply is on.			
	2. Faulty switch	2. Test or replace switch.			
	3. Faulty wire connection	3. Check wire in switch box.			
The fan seems louder than it should	1. CFM too great	Be sure the CFM rating on the fan matches the size of your room.			
	Damper not working properly or damaged	Check damper to ensure it is opening and closing properly. If the damper has become damaged, please call Customer Service.			
	Bend in duct too close to fan     discharge	3. Be sure you do not have any sharp bends in duct closer than 18 in. to the fan discharge.			
	Fan discharge reduced to fit smaller duct	Use recommended size ducting to reduce fan noise.			
	5. Fan body not securely attached	5. Be sure the fan is securely attached to your ceiling joists.			
The fan is not clearing the room	I. Insufficient intake airflow within 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 in from.			
	2. Insufficient CFM	2. Be sure the CFM rating on the fan matches the requirements for your room size.			
The light is not turning ON	1. Power off	1. Make sure power supply is on.			
	2. Faulty switch	2. Test or replace switch.			
	3. Faulty wire connection	3. Check wire in switch box.			

