MODELS: SMT130, SMT130H, SMT130M, SMT150, SMT150D, SMT150LED

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.
6. Do not install the unit where ducts are configured. (Fig. A).
7. Provide suction parts with proper ventilation.
8. 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:

1. Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.
2. 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.
3. 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.
5. When cutting or drilling into the wall or ceiling, do not damage electrical wiring and other hidden utilities.
6. Ducted fans 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. 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).
9. NEVER place a switch where it can be reached from a tub or shower.
10. Not to be installed in a ceiling thermally insulated to a value greater than R50. (This is required for installation in Canada only).
11. Do not open/disassemble the LED light engine

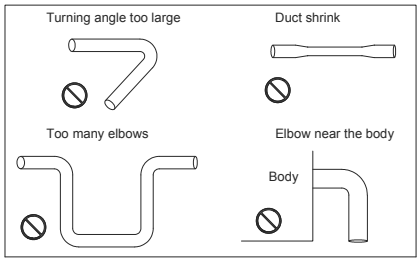


Fig. A

CAUTION

1. 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)
3. This product must properly connect to the grounding conductor of the supply circuit.
4. To reduce the risk of injury to persons, install the fan at least 8.2 feet (2.5m) above the floor.

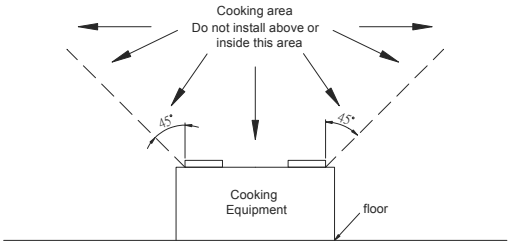


Fig. B

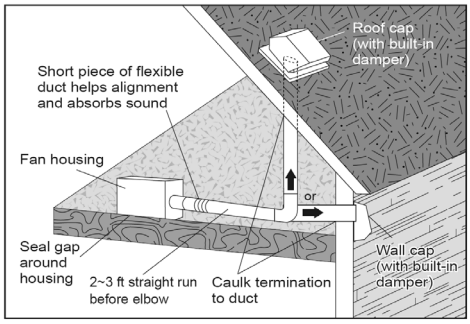
PREPARATION

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.

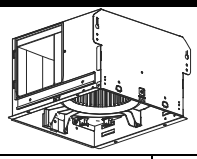
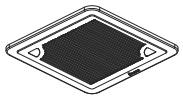
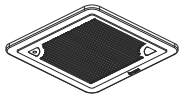
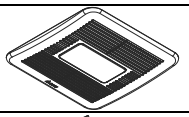
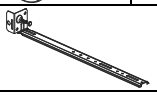
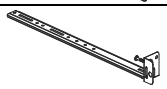
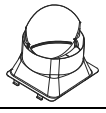
Note: Installations may vary depending on how the previous bath fan was installed. Supplies necessary for the installation of your bath fan are not all included. However, most are available at your local home improvement or hardware store.



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

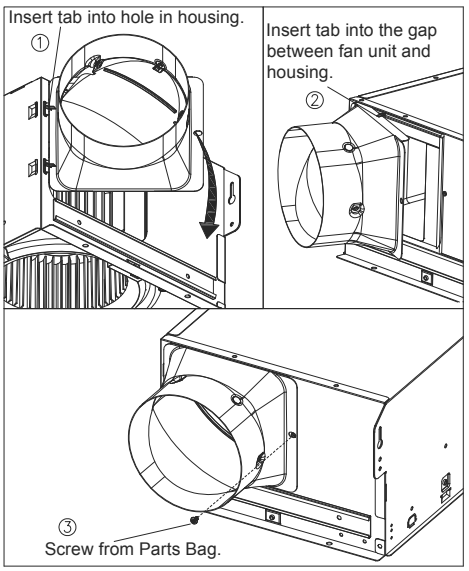
PACKAGE CONTENTS

PART NAME	APPEARANCE		QTY
Fan Body			1
Grille		SMT130, SMT130H, SMT150, SMT150D	1
		SMT130M	1
		SMT150LED	1
Suspension bracket Ⅰ 13"(318.5mm)			2
Suspension bracket Ⅱ 13"(318.5mm)			2
Tapping Screw (Ø4×25mm)			5
Machine Screw (#8-32x5/16")			5
Duct Connector (6")			1

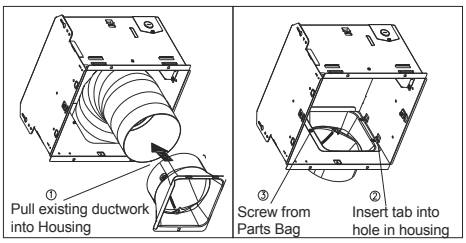
ASSEMBLY INSTRUCTION

BEFORE INSTALLATION-ATTACH DUCT CONNECTOR

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



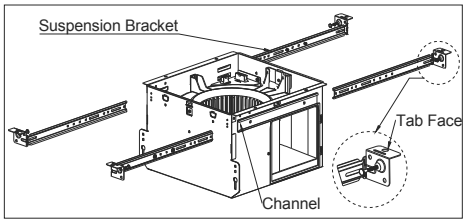
2. Remove the motor assembly, attach the duct connector from the housing can inside, and secure by using one screw (#8-32 x 5/16”). Insert and secure motor assembly.



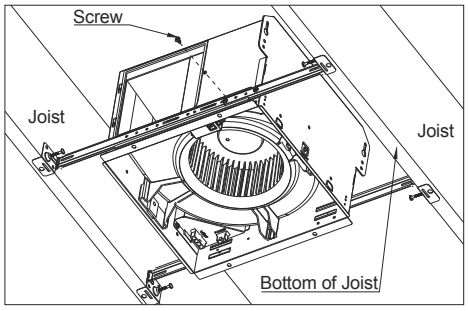
NOTE: REMOVE THE TAPE FROM THE DAMPER BEFORE INSTALLATION.

INSTALL THE HOUSING (I)-USING SUSPENSION BRACKET

1. Sliding suspension brackets are available to allow for positioning of the housing anywhere between joists up to a span of 24”.
2. Insert the suspension brackets into the channels on the housing. Make sure the tabs face up as shown.

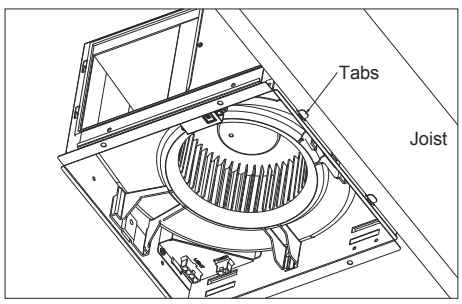


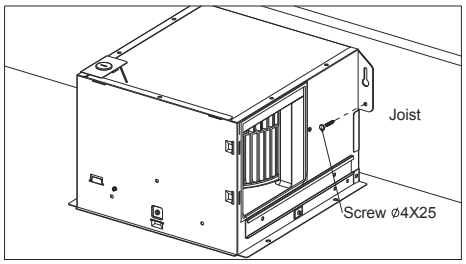
3. Extend the suspension brackets to fit the width of the joists. Hold the fan in place by wrapping the suspension bracket tabs around the bottom of the joist. Make sure the fan body is level and perpendicular to the joist.
4. Ensure that the distance between the ceiling and fan body is appropriate for mounting the grille.
5. Secure the suspension brackets to the joists with nails or by using the tapping screws (Ø4x25) through holes near nails.
6. Secure the suspension bracket to the fan body using the screws (#8-32 x 5/16").
7. Follow steps 2 to 6 of the installation instructions to complete the installation work



INSTALL THE HOUSING (II)-USING MOUNTING TABS

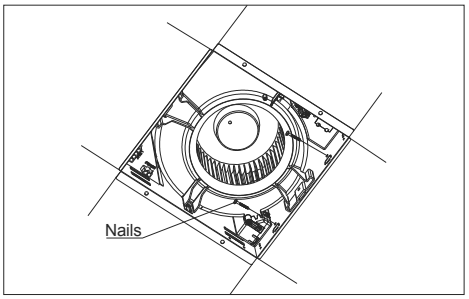
1. Slotted tabs are provided to locate housing flush with 1/2” ceiling material. Bend tabs outwards 90° (Use a screw driver if desired) and position housing so that tabs rest against bottom edge of the joists (or front of the stud). Nail the housing to the joist or stud using four screws to ensure a solid, quiet installation.





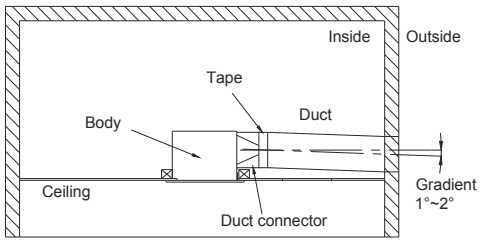
INSTALL THE HOUSING (III)-EXISTING CEILING INSTALLATION

1. Position the housing so that it is centered in the existing ceiling opening; make sure the housing is flush with the finished ceiling. Nail the housing in place and then drive the nails (not provided) through the housing where indicated by arrows.



DUCT CONNECTION

1. 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.



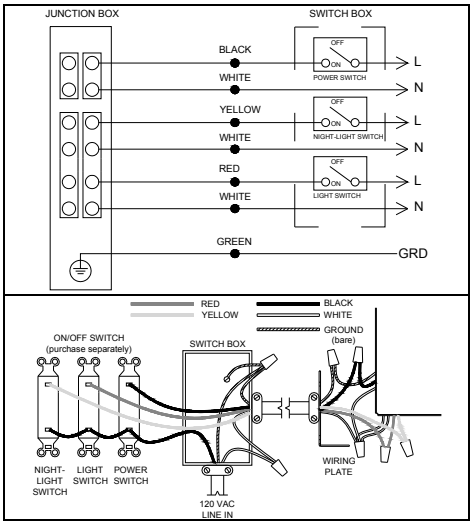
CONNECT WIRING

TURN OFF POWER SOURCE.
REVIEW ALL SAFETY PRECAUTION.

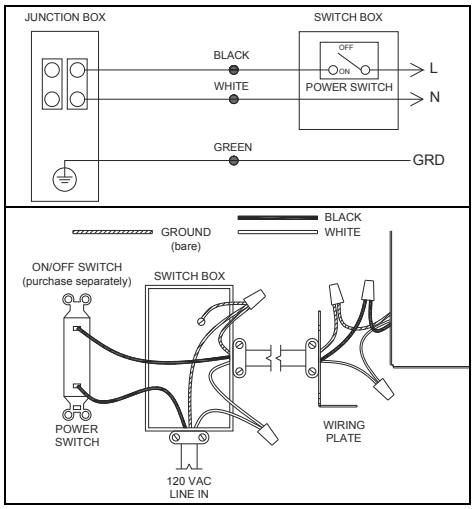
1. Follow all local electrical and safety codes, ANSI/NFPA70.
2. NEVER place a switch where it can be reached from a tub or shower.
3. Using wire nuts (not provided), connect the house power cable and LED cable to the ventilating fan wires.
4. 14 AWG (2.1 mm²) is the smallest conductor that shall be used for branch-circuit wiring.

CONVENTIONAL WIRING DIAGRAM

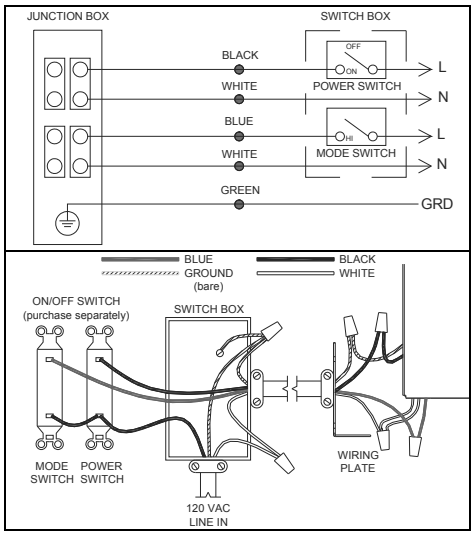
LED Light Model: SMT150LED



Motion Model: SMT130M
Single Speed Models: SMT130, SMT150



Humidity Model: SMT130H
Dual Speed Model: SMT150D

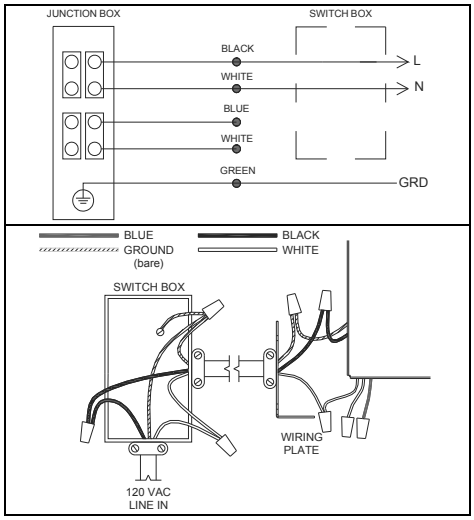


OTHER WIRING OPTION

See OPERATION section for detail description of “mode”.

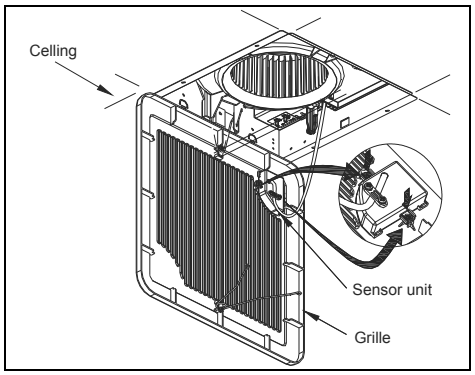
Humidity Model: SMT130H

Hardwire power and leave mode not wired, fan runs 24 hours at “Humidity control mode”.

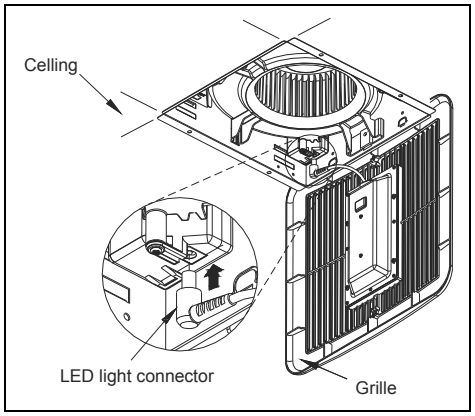


GRILLE INSTALLATION

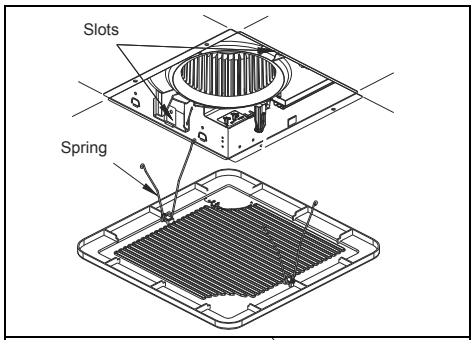
1. Insert the motion sensor unit into the grille. (only SMT130M)

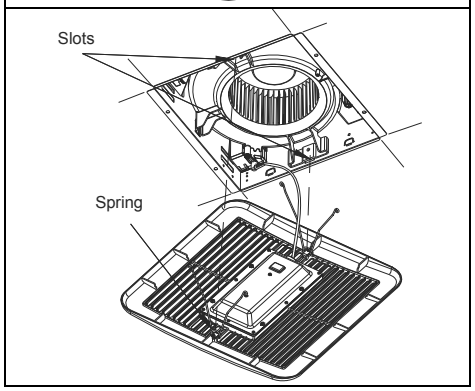


2. Insert the LED light connector into the LED socket. (only SMT150LED)

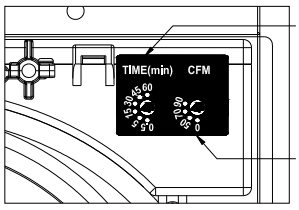


3. With the power on, check for abnormal vibrations or sounds
4. Insert the mounting springs into the slots and mount the grille to the body.

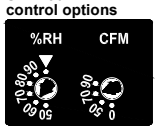




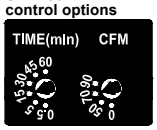
OPERATION



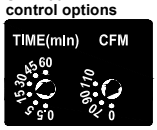
SMT130H control options



SMT130M control options



SMT150D control options



Single Models: SMT130, SMT150, SMT150LED

1. Single speed control mode: Turn the POWER switch on to operate at single speed mode - the LED indicator will be green.
2. Turn the POWER switch on/off to operate the fan / LED light / LED night light.

Humidity Model: SMT130H

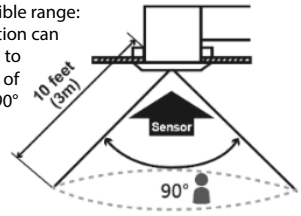
1. Humidity control mode: Turn the POWER switch on to operate at humidity control mode - the LED indicator will be blue. When the ambient humidity is higher than the user-adjustable set-point, the fan will run at full speed. When the ambient humidity is lower than the set-point, the fan will continue to run at the full speed until a 10-minute time delay has elapsed, and then will automatically change to the user-adjustable low speed airflow.
2. Full speed mode: Turn the MODE switch on to operate at full speed mode - the LED indicator will be amber.

Factory setting: low speed airflow 70CFM, humidity 60%RH.
Note: Humidity tolerance is about ±10%.

Motion Model: SMT130M

1. Motion control mode: Turn the POWER switch on to operate at motion control mode. When motion is detected, the fan will run at full speed mode and the LED indicator will be amber. When motion is not detected, the fan will continue to run at the full speed until the user-adjustable time delay has elapsed, and then will automatically change to the user-adjustable low speed airflow - the LED indicator will be green.

Motion sensor detectible range: The distance that motion can be detected is limited to 10 feet (3m). The field of view of the sensor is 90° (Room temperature is 77°F / 25°C).



Factory setting: low speed airflow 70CFM, time delay 15 minutes.

Dual Speed Model: SMT150D

1. Low speed control mode: Turn the POWER switch on (MODE switch is off) to operate at the user- adjustable low speed airflow - the LED will be green.
2. Full speed control mode: Turn the POWER switch & MODE switch on to operate at full speed mode - the LED indicator will be amber. When the user turns the MODE switch off, the fan will continue to run at the full speed until the user-adjustable time delay has elapsed, and then will automatically change to the user-adjustable low speed airflow - the LED indicator will be green.

Factory setting: low speed airflow 70CFM, time delay 15 minutes.

CARE AND MAINTENANCE

DISCONNECT THE POWER SOURCE BEFORE WORKING ON THE UNIT.
ROUTINE MAINTENANCE MUST BE DONE EVERY YEAR.

CAUTION:

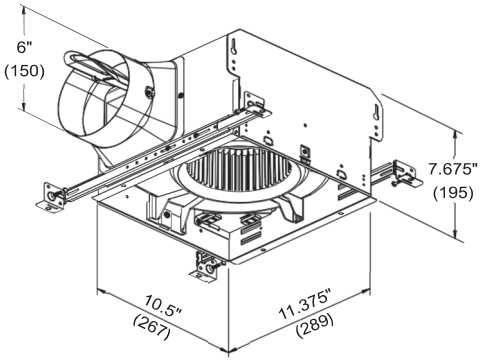
1. Never use gasoline, benzene, thinner or any other such chemicals to clean the ventilating fan.
2. Do not allow water to enter the motor.
3. Do not soak resin parts in water over 140°F (60°C).

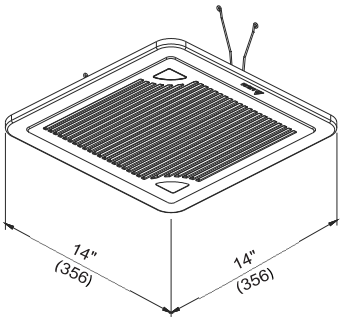
CLEANING:

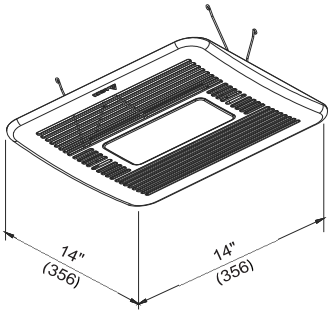
1. Pull down the springs (and power connects of the LED light engine if SMT150LED) to remove the grille.
2. Wash and clean the grille. CAUTION: Do not let water into the LED light engine. (Use non-abrasive kitchen detergent and wipe dry with a new cloth.)
3. Using a cloth dampened with non-abrasive kitchen detergent, remove any dirt from the ventilating fan. Wipe dry with a clean cloth.
4. Replace the grille.

DIMENSIONS

Unit: Inch (mm)







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

TROUBLE SHOOTING

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
The fan is not turning on	1. Power off 2. Faulty switch 3. Faulty wire connection	1. Make sure power supply is on. 2. Test or replace switch. 3. Check wire in switch box.
The fan seems louder than it should	1. CFM too great 2. Damper not working properly or damaged 3. Bend in duct too close to fan discharge 4. Fan discharge reduced to fit smaller duct 5. Fan body not securely attached	1. Be sure the CFM rating on the fan matches the size of your room. 2. Check damper to ensure it is opening and closing properly. If the damper has become damaged, please call Customer Service. 3. Be sure you do not have any sharp bends in duct closer than 18 in. to the fan discharge. 4. Use recommended size ducting to reduce fan noise. 5. Be sure the fan is securely attached to your ceiling joists.
The fan is not clearing the room	1. Insufficient intake airflow within room 2. Insufficient CFM	1. 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. Be sure the CFM rating on the fan matches the requirements for your room size.
The light is not turning ON	1. Power off 2. Faulty switch 3. Faulty wire connection	1. Make sure power supply is on. 2. Test or replace switch. 3. Check wire in switch box.
The fan keeps running even though the house humidity level is lower than user-adjustable set-point.	1. Our sensor tolerance is +/- 10% RH 2. Outdoor humidity is back drafting to the fan	1. Continue to let the fan run since it is good to keep venting the house and the electric bill is minimal (approximately less than $10 per year). 2. Turn the fan off when not in use.

SPECIFICATIONS

Model No.	Voltage (V)	Frequency (Hz)	Power @ 0.1SP (W)	Air Flow @ 0.1SP (CFM)	Max Current (amps)	Weight (lb.)	Note
SMT130	120	60	11.6	130	0.44	10.4	Single Speed
SMT130H							Humidity Sensor
SMT130M							Motion Sensor
SMT150			16.9	150	0.47		Single speed
SMT150D							Dual Speed
SMT150LED			17.6		0.62	11.0	Single Speed 13 Watts, 850 Lumens, 3000K

Note: Specifications subject to change without notice.

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