

Panasonic T810L1420A Whisper Thin DC LED with Humidity **Sensor Installation Guide**

Home » Panasonic » Panasonic T810L1420A Whisper Thin DC LED with Humidity Sensor Installation Guide 🖺







READ AND SAVE THESE INSTRUCTIONS

Thank you for purchasing this Panasonic product. Please read these instructions carefully before attempting to install, operate or service the Panasonic product. Please carefully read the "GENERAL SAFETY INFORMATION", Failure to comply with instructions could result in personal injury or property damage. Please explain to users how to operate and maintain the product after installation and this manual should be presented to users. Please retain this manual for future references.

See page 12 for "Panasonic Warranty Sheet".

Contents

- 1 GENERAL SAFETY INFORMATION
- **2 GENERAL SAFETY INFORMATION (CONTINUED)**
- **3 DESCRIPTION**
- 4 DESCRIPTION (CONTINUED)
- **5 SUPPLIED ACCESORIES**
- **6 DIMENSIONS**
- **7 WIRING DIAGRAM**
- **8 FEATURES**
- 9 INSTALLATION I (JOIST MOUNTING)
- 10 INSTALLATION (JOIST MOUNTING)

(CONYINUED

- 11 MAINTENANCE (CLEANING)
- 12 PRACTICAL GUIDE TO INSTALLATION
- 13 SPECIFICATIONS
- 14 PRODUCT SERVICE
- 15 LIMITS AND EXCLUSIONS
- 16 Accessory Purchases
- 17 Documents / Resources
- **18 Related Posts**

GENERAL SAFETY INFORMATION

For Your Safety

To reduce the risk of injury, loss of life, electric shock, fire, malfunction, and damage to equipment or property, always observe the following safety precautions.

Explanation of symbol word panels

The following symbol word panels are used to classify and describe the level of hazard, injury, and property damage caused when the denotation is disregarded and improper use is performed



WARNING Denotes a potential hazard that could result in serious injury or death,



CAUTION Denotes a hazard that could result in minor injury.



NOTICE Denotes a hazard that could result in property damage. Blower ASSY condenser % property ge.

The following symbols are used to classify and describe the type of instructions to be observed.

This operate symbol this unit is used safely, to alert users to a specific operating procedure that must be followed in order operate symbol this unit is used safely.



This symbol used to alert users to a specific operating procedure that must not be performed.



This symbol is used to alert users not to disassemble the equipment.

This symbol is used to alert users to make sure of grounding when using the equipment with the grounding terminal.

GENERAL SAFETY INFORMATION (CONTINUED)



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 any questions, contact the manufacturer.

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 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.

Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent back darting. 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 the local code authorities.

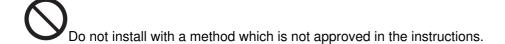
- When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
- Ducted exhaust fans must always be vented to the outdoors.

If this unit is to be installed over a tub or shower, it must be marked as appropriate for the application and connected to a GFCI (Ground Fault Circuit Interrupter) – protected branch circuit.

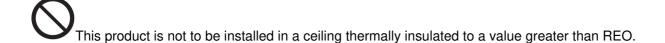
- These models are UL listed for tub and shower enclosures.
- Do not disassemble the unit for reconstruction. It may cause fire or electric shock.

U	If this product is no longer to be used, it must be removed from the ceiling to prevent it from falling

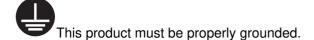
The ceiling joist or wall stud must be able to withstand a static load of at least five times the weight of the product.



Do not use this fan with any solid-state speed control device. Solid state controls may cause harmonic lamp. Night light feature consumes around 0.1 to 0.4 W. | n— N opt Control of : ban distortion which can cause a humming noise in the motor.



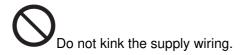
To reduce the risk of fire, electric shock o injury to persons, do not use replacement parts that have not been To commended by the manufacturer (69, parts mads at home using a 3D pretend.



A CAUTION

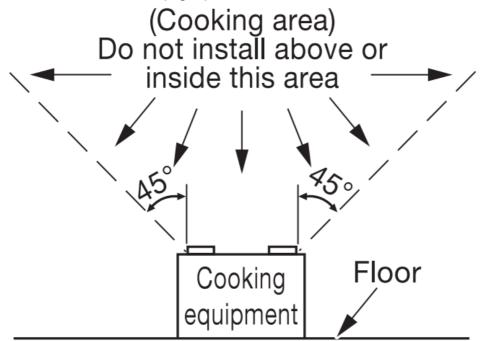
Do not install this ventilating fan in a location where the interior room temperature may exceed 104 °F (40 °C).

- Make sure that the electric service supply voltage is AC 120 V 60 Hz.
- Follow all local electrical and safety codes, as well as the National Electrical Code (NEC) and the Occupational Safety and Health Administration (OSHA).
- Always disconnect the power source before working on or near the fan, motor or junction box.
- Protect the supply wiring from sharp edges, oil, grease, hot surfaces, chemicals or other objects.



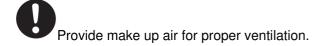
For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.

Do not install fan above or inside a 45-degree angle projected outwards from the cooking equipment element closest to the fan. (Fig. A)



The special-purpose or dedicated parts, such as mounting fixtures, must be used f such parts are provided.

NOTICE



Do not connect multiple units in parallel. If two or more units are connected to one switch in parallel, the units may not function

Do not install the unit where ducts are configured as shown in below:

Excessive bending



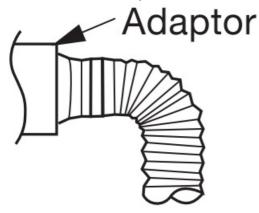
Successive bending



Squeezed duct



Bend close to duct adaptor



DESCRIPTION

These products are listed by UL under UL file No. E78414.

These products use a sirocco fan driven by a DC motor powered by an integral transformer. The motor is designed to have a long operating life, high dynamic response, higher speed ranges and saving eneray. The grille covering the fan body is a spring-loaded, quick removal type. A damper for preventing air counter flow is provided. The blower uses a high-capacity sirocco fan developed to reduce the noise level. The lighting unit is an energy-saving LED lighting device that uses one 10 W LED lamp and produces almost the same illumination as a standard 40 W incandescent lamp. Night light feature consumes around 0.1 to 0.4 W.

FCC Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 158 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 n a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning

this product on and off, the user is encouraged to try to correct the interference by one of the following measures:

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

Warning: This equipment must be installed by a qualified person in accordance with the provided installation instructions; and all applicable codes and standards. Also, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

SDoC Responsible Party:

Panasonic Corporation of North America Damper Two Riverfront Plaza, Newark, NJ 07102

Customer Call Center: 1.866-292-7299

DESCRIPTION (CONTINUED)

This device complies with Part 158 of the FCC Rules. Operation s 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. Type IC-Inherently Protected.

This Panasonic ventilating fan model is equipped with a humidity sensor that tums the fan on automatically when humidity increases rapidly, or when humidity rises above a 30% – 80% relative humidity set-point.

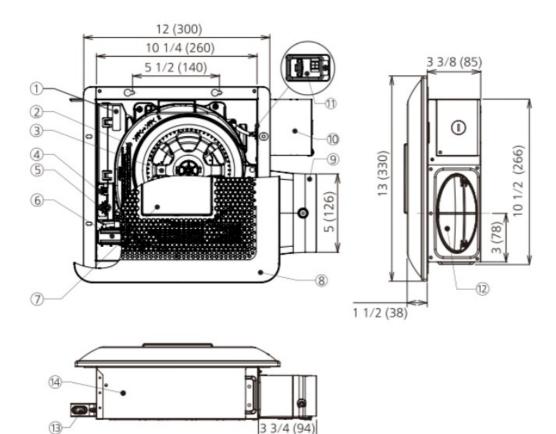
UNPACKING

- Unpack and carefully remove the unit from carton.
- Refer to the Supplied Accessories list to verify that all parts are present.

SUPPLIED ACCESORIES

Partname	Appearance	Quantity		
Grille		1		
Installation instructions/ Warranty s heet		1		
Long screw (ST42X30)	(1) IIIIII	5 (1 for spare)		

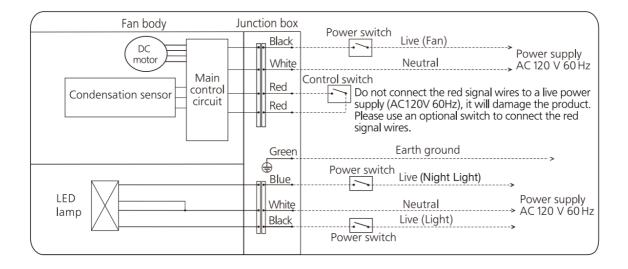
DIMENSIONS



NO: Part name

- 1. PCB box
- 2. Blower assy
- 3. Blade
- 4. pickax Flow™ switch
- 5. Induction humidity setting switch
- 6. Condensation sensor.
- 7. LED lamp
- 8. Adaptor
- 9. Junction box
- 10. Connector connector plate
- 11. Damper
- 12. Suspension Fanbod
- 13. Fan body

WIRING DIAGRAM



FEATURES

These products employ innovative, state-of-the-art technologies that provide a number of customizable unique features that lead to improved indoor ir quality. Please read this manual first in order to realize the benefits of this customizable, modular fan.

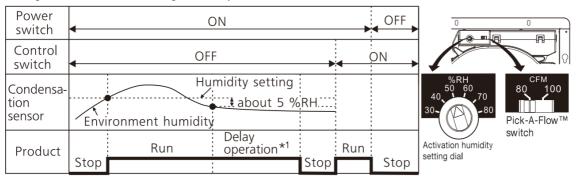
'Outstanding Energy Savings:

These products are built using DG motor technology. The DG motor is 30% ~ 70% more energy efficient than the minimum ENERGY STAR requirements.

- Pick-A-Flow ™ Feature:
- This product comes with Pick-A-Flow™ speed options.
- The Pick-A-Flow[™] switch on the face of the product allows the option to choose 80 or 100 CFM. This product can run continously or intermittently, depending upon the needs of the owner.

Air volume option (CFM)	Factory setting	
80	100	80 CFM

The airflow can be set with the Pick-A-Flow™ switch, and humidity triggers can be set by adjusting the humidity setting dial. See the following visual operation chart



"1 The product will continue to run for about 20 minutes after the sensor detects. that the humidity is \sim 5 % RH lower than the humidity setting before stopping.

Note:

- 1. The power switch should be left on at al times.
- 2. The product will also run when the humidity rises rapidy but does not reach the humidity trigger setting, and then stop after the time delay
- 3. The activation humidity settings on the dial are contiguous form 30% RH 80% RH.
- 4. The humidity detected by the sensor may diffr rom the value on your hygrometer.
- 5. The product may cycle on and off if the humidity is constantly near the trigger point. This can be addressed by raising the humidity trigger sefting on the dial.
- 6. The fan will run for 20 minutes when power switch s first turned on, regardless of the humidity sensor settings.

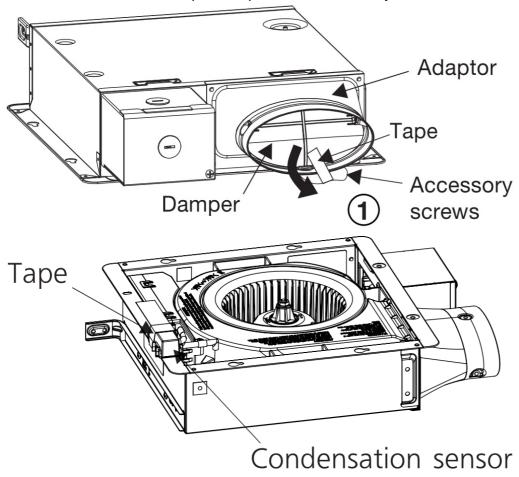
 After 20 TEIOLH420 2 3 4 minutes, the fan will retur to sensor mode.

INSTALLATION I (JOIST MOUNTING)

Open knock-out hole

Before installation, please remove the tape which protects the damper during Shipping and accessory screws from the adaptor and the tape which fixes condensation sensor.

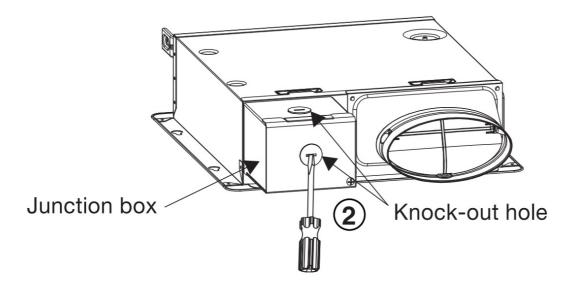
Afterwards, check that the damper can open and close smoothly.



Open one knock-out hole on junction box

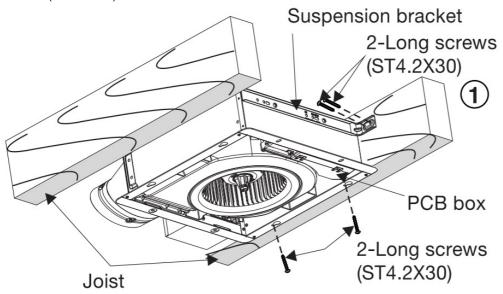
Note

There are two knock-out holes, please open one which is convenient for wiring.



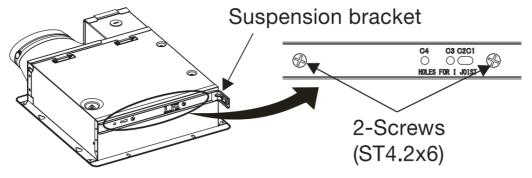
Install circular exhaust duct

Fix the flange of frame to joist by 2 long screws (ST4.2X30), and fix the suspension bracket to joist by 2 long screws (ST4.2X30).

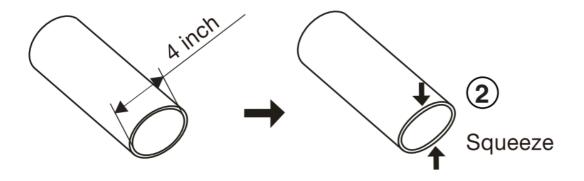




The screws for fixing suspension bracket should not be replaced by other screws, otherwise the cord in the PCB box may be damaged and cause a fire.



A 4 inch circular duct s needed to connect to the relevant part of adaptor. Squeeze a circular exhaust duct to fit the adaptor, then slip it onto adaptor and Secure it with clamps, or fies and seal it with mastic or approved fol tape.

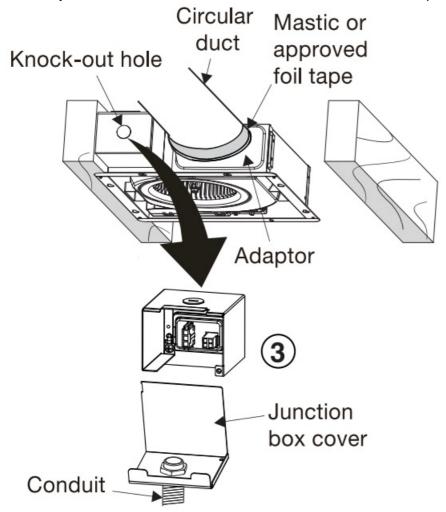


Note

If using 3 inch round duct, please purchase the 26 gauge steel Panasonic 4'' Oval -3'' Round reducer from our representative.

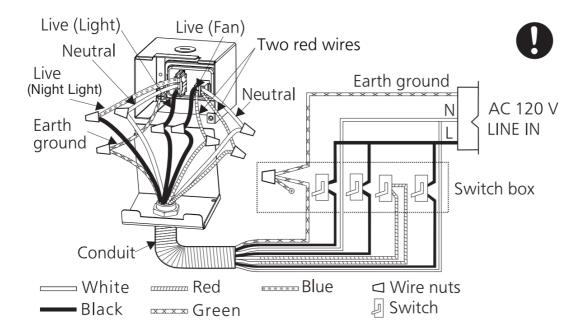
INSTALLATION (JOIST MOUNTING) (CONYINUED

Remove junction box cover and secure conduit or stress relief to the opened knock-out hole.



Connect wires

Refer to wiring diagram (Page 5), follow all the local electrical safety codes as well as the National Electrical Gode (NEC). Using UL approved wire nuts, connect house power wires to ventilating fan wires.





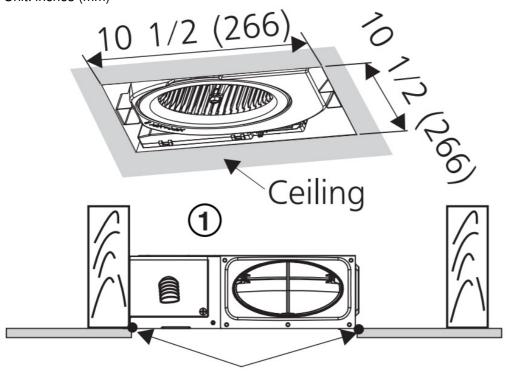
Mount junction box cover carefully so that lead wires are not pinched.

Finish ceiling work

Finish ceiling work. Ceiling hole should be aligned with the inside edge of the flange.

Ater finishing the ceiling job, fill gap between flange and ceiling with caulk or other sealant to prevent air leakage.

Unit: inches (mm)

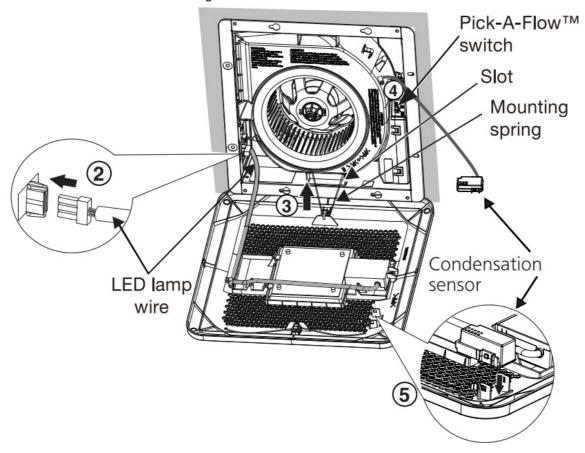


Connect he LED lamp wire to fan booy

Insert one mounting spring into slot. (If not, the grille may not be installed.)

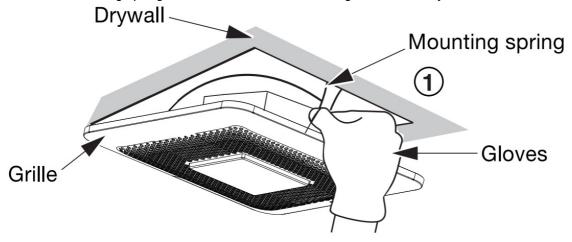
Adjust Pick -A- Flow TM switch (Refer to explanation under FEATURES) (Page 5)

Fix the condensation sensor into grille.



Install grille

Insert the mounting springs into the as shown to mount grille to fan body

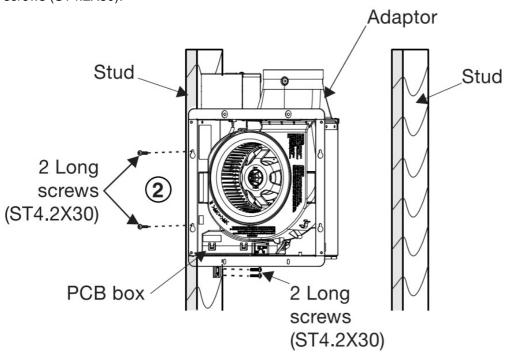


INSTALLATION II (WALL MOUNTING)

Wall mounting installation

Before installation, please refer to step of INSTALLATIONS (Page 6)

Fix the flange of frame to stud by 2 long screws (ST4.2X30), and fix the suspension bracket to stud by 2 y 2 long screws (ST4.2X30).

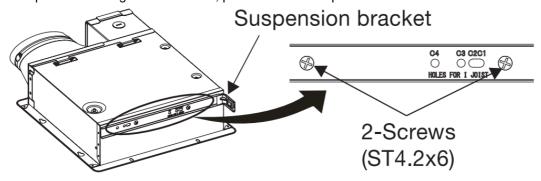




The adaptor of product must be cleaning work. installed upward.

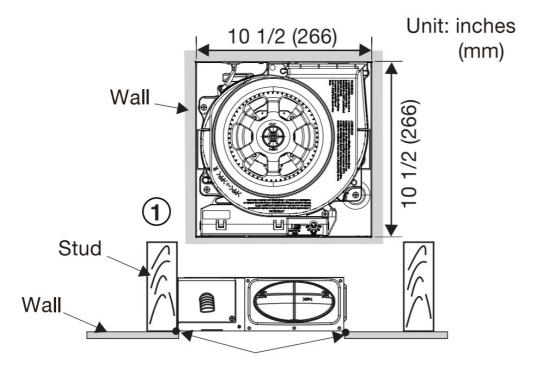
The screws for fixing suspension bracket should not be replaced by other screws, otherwise the cord in PCB box may be damaged and cause a fire.

Complete the wiring and duct work, please refer to step "n – 2.and 3 of INSTALLATI ON I. (Pages 6,7)



Finish the wall work

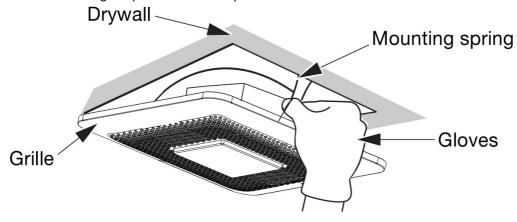
Finish the wall work. Wall hole should be aligned with the Inside edge of the flange.



After finishing the wall job, gap between flange and wall with caulk or other sealant to prevent and air leakage.

Install grille

Installation the grille place rater to stop 4 and 5 of INSTRUCTION



MAINTENANCE (CLEANING)



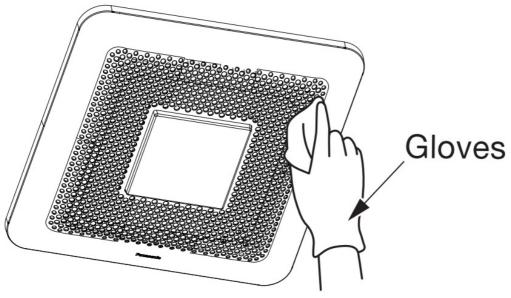
Disconnect power supply before working on unit



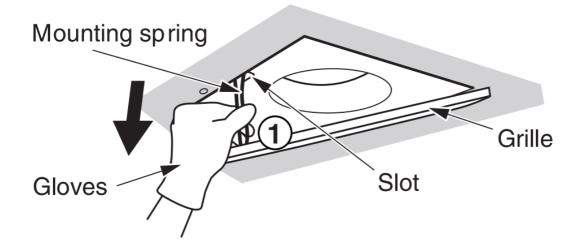
Routine maintenance must be done every year. Please wear gloves during the 0 The adaptor of product must be cleaning work.

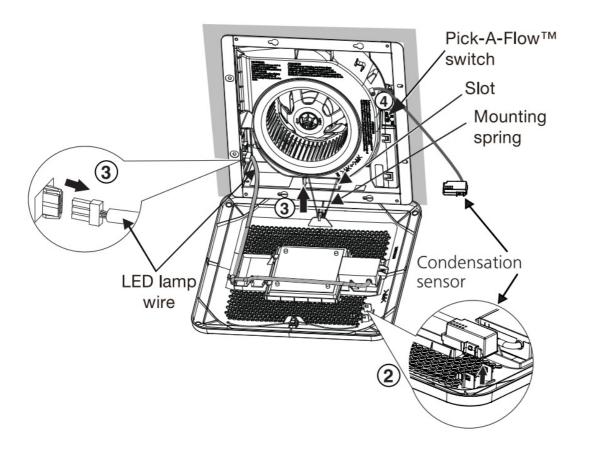
Do not immerse motor, LED lamp or condensation sensor in water not be replaced by other screws, otherwise the when cleaning. Do not soak resin parts in water over 140 °F (60 °C).

Never use gasoline, benzene, thinner or any other such chemicals for cleaning the product



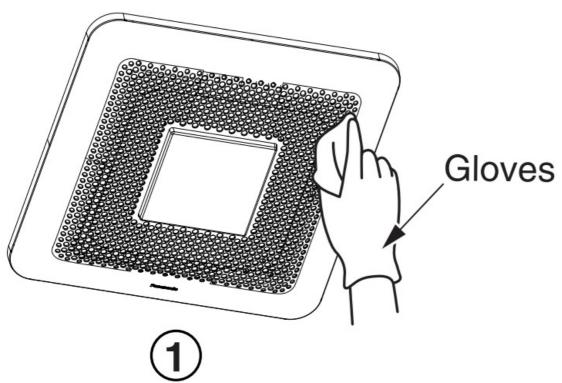
Remove grille

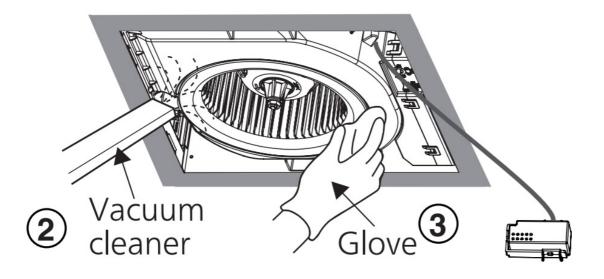




- 1. Remove grille by pulling down one mounting spring.
- 2. Remove condensation sensor
- 3. Disconnect the wire from the receptacle, then pull down the other mounting spring.

Maintenance of unit



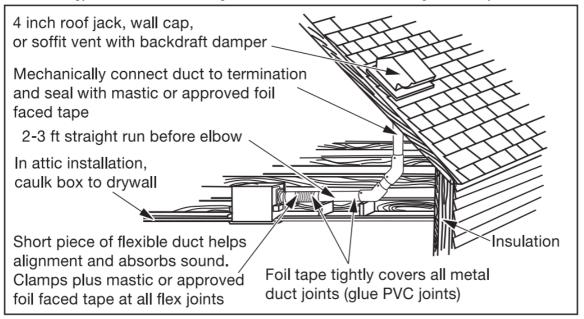


NOTE: The grille should be dry after cleaning.

- 1. Clean grille. (Don't put into water. Use non-abrasive kitchen detergent, wipe dry with a clean cloth).
- 2. Remove dust and dirt from fan body using a vacuum cleaner.
- 3. Finish ceiling work. Ceiling hole should be aligned N cloth. Reinstall grille after finishing

PRACTICAL GUIDE TO INSTALLATION

Properly perly insulate late the the area around d the the fan fan t to minimize building heat loss and gain. Loose fill or batt insulation can be placed directly over the fan housing in the attic. Our fans and fan/light combination units do NOT create excessive heat that is a common problem with recessed light fixtures or some competitor's fan/light combination. Our efficient, cool-running motors and our LED lighting unit do not create enough ambient heat to be subjected to these limitations. 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.



SPECIFICATIONS

Model No.	Air directi on	Voltag e (V)	Freque ncy (Hz)	Duct diamete r (inches)	Air volu me (CFM)	Noise (sones)	Speed (rpm)	Power MO	Weight lb. 8(0
RG-T810LH A	Exhau st	120	60	4	80	0.5	8817.9 (3. 6)	8.9	
					100	1.1	993	13.2	

HVI Gertified performance based on HVI Procedures 915, 916, and 920, at 0.1" WG.

PRODUCT SERVICE

warning Concerning Removal of Govers. The unit should be serviced by qualified technicians only. Your product 9 is designed and manufactured to ensure a minimum of maintenance. Should your unit require service or parts, :g Adaptor call Panasonic Call Genter at 1-866-292-7299 (USA)

Panasonic Corporation of North America 2 Riverfront Plaza Newark, NJ 07102

Panasonic Ventilating Fan Limited Warranty

Panasonic Corporation of North America (*the Warrantor) will, at its sole discretion, replace this product with new parts or exchange this product, free of charge, in the USA, in the event of defects in material or workmanship in accordance to the following

ALL Parts: For period of 3 years (36 months) **DG Motor:** For period of 6 years (72 months)

LED Light Unit: For a period of 5 years (80 months)

Service in the USA, can be obtained during the warranty period by contacting the seling Distributor or Panasonic Customer Call Center at 1-866-292-7299, toll free.

"This warranty does not cover labor charges for removal and installation of parts. This warranty is extended only to the original purchaser of a new product, which was not sold "as is", who purchased the product sither directly from the Warrantor or from the

Warrantor's authorized resellers (including authorized retail and Internet-based sellers), unless otherwise prohibited by law, 'This warranty only applies to products purchased in the United States

To claim warranty proof of purchase date will be required, in addition to fan model and serial number as shown in the photos below.

Example of Name Plate Indicates: Model No. Indicates: Serial No. Panasonic Model No. RG-T**** AC 120 V 60 Hz O.39 A (Fan) 0.1 A (Light) Lot No. Ventilating AC 120 V 60 Hz O.1" SP ** ** ** ** Panasonic Corporation of North America Assembled in Mexico

"This warranty only covers failures due to defects in materials or workmanship that occur during normal use and does not cover shipping damages, whether visible or concealed, normal wear or cosmetic damage. The warranty does not cover failures that are caused by products and peripherals not supplied by the Warrantor, or failures which result from accident, misuse, abuse, negligence, mishandling, misapplication, alteration, modification, faulty installation, improper setups or adjustments, improper or lack of maintenance, alterations or modifications, power line surge, improper line voltage, lightning damage, or damage thatis attributable to acts of God.

LIMITS AND EXCLUSIONS

There are no express warranties except as listed above. THE WARRANTOR SHALL NOT BE LIABLE FOR INCIDENTAL CONSEQUENTIAL, OR PUNITIVE DAMAGES, INCLUDING, WITHOUT LIMITATION, LOSS OF GOODWILL PROFITS OR REVENUE, LOSS OF USE OF THIS PRODUCT OR ANY ASSOCIATED EQUIPMENT, COST OF SUBSTITUTE PRODUCT, DOWNTIME COST, OR CLAIMS OF ANY PARTY DEALING WITH BUYER FOR SUCH DAMAGES, RESULTING FROM THE USE OF THIS PRODUCT OR ARISING FROM BREACH OF WARRANTY OR CONTRACT, NEGLIGENCE OR ANY OTHER LEGAL THEORY, EXCEPT AS EXPRESSLY PROVIDED ABOVE. THERE IS NO WARRANTY OR ANY OTHER KIND, EXPRESS OR IMPLIED, THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF.

Some states do not allow the exclusion o limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions o imitation may not apply to you,

'This warranty gives you specific legal rights and you may also have other rights which vary from state to state. If a problem with this product develops during or after the warranty period, you may contact your Distributor or

Panasonic Customer Call Center. If the problem is not handled to your satisfaction, then write to Panasonic Corporation of North America at the address indicated above.

Customer Support

Obain Product Information and Operating Assistance by visiting our website at:

us.panasonic.com/ventanss or, send your request by E-mail to 'ventfans@us.panasonic.com

You may also contact us directly for technical and warranty support at 1-886-292-7299 Please follow the voice prompt for consumers (Monday-Friday, 9 am – 6 pm, EST)

Accessory Purchases

Purchase Parts and Accessories for all Panasonic Ventiltion Products by visiting our website at:

www.buypanasnicparts.com

You may also contact us directly at 1-866-292-7299 Please follow the voice prompt for consumers (Monday-Friday , 9 am - 6 pm, EST)

Panasonic Consumer Electronics Company Customer Service Group 2 Riverfront Plaza, Newark, NJ 07102



Documents / Resources



Panasonic T810L1420A Whisper Thin DC LED with Humidity Sensor [pdf] Installation Guid

T810L1420A, T810L1420A Whisper Thin DC LED with Humidity Sensor, Whisper Thin DC LED with Humidity Sensor, Thin DC LED with Humidity Sensor, LED with Humidity Sensor, Humidity Sensor, Sensor

Manuals+,