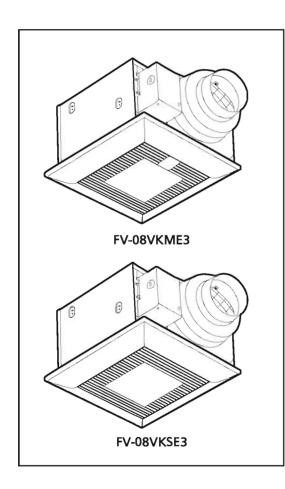
# **Panasonic**®

# INSTALLATION INSTRUCTIONS Ventilating Fan

### Model No. FV-08VKME3 FV-08VKSE3



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#### **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. 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 booklet should be presented to users.

Please retain this booklet for future reference.

#### **GENERAL SAFETY INFORMATION**

#### For Your Safety

To reduce the risk of injury, loss of life, electric shock, fire, malfunction, and damage to equipment or pro 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.



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



Denotes a hazard that could result in minor injury.

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



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



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

# **MARNING**

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 switch 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 drafting. Follow the heating equipment manufacturer's guideline and safety standards such as those published by the National Fire Protection Association (NFPA), and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) and the local code authorities.
- When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
- Ducted fans must always be vented to the outdoors.
- 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.
- These models are UL listed for tub and shower enclosures.

#### **GENERAL SAFETY INFORMATION CONTINUED**

# **<b>⚠WARNING**

O not use this fan with any solid-state speed control device.

Canada only: Not to be installed in a ceiling thermally insulated to a value greater than R40.

O not disassemble the unit for reconstruction.

A statement to the effect that when the product is to no longer be used, it must not be left in place but removed, to prevent it from possibly falling.

Ceiling joist must be subjected to static load more than five times the weight of the product.

Oo not install with a method which is not approved in the instrucions.

This product must be properly grounded.

# **A**CAUTION

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

Make sure that the electric service supply voltage is AC 120V, 60 Hz.

Follow all local electrical and safety codes, as well as the National Electrical Code (NEC) and the Occupation Safety and Health Act (OSHA).

Always disconnect the power source before working on or near the fan, motor, light fixture or junction box.

Protect the supply wiring from sharp edges, oil, grease, hot surfaces, chemicals or other objects.

Do not kink the supply wiring.

Provide make up air for proper ventilation.

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

Do not install the unit where ducts are configured as shown in Fig.A.

Not for use in cooking area. (Fig.B)

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



inside this area

Cooking

Fig. B

#### PLEASE READ PRIOR TO INSTALLING THIS FAN

The WhisperGreen line of ventilating fans employs state of the art technology providing a number of unique features that lead to improved indoor air quality. These features need to be fully understood prior to installation to full realize the benefits fans offer.

Spot and Continuous Ventilation: These fans are designed to run continuously ensuring a healthy environment at low CFM levels 24 hours a day. By utilizing Customvent variable speed control the fans are built to run continuously at a pre-set lower level (0,30,40,50,60,70 CFM). The setting is dependent on the size of the room and the individual wishes of the homeowner. It is crucial that the installer pre-set the lower setting during the installation. Please refer to the chart below and the switch indication on page 7.

CustomVent Variable Speed Control (Lower Setting).
ASHRAE 62.2-2007

	I	1		
(sq.feet)	Two Bedrooms	Three Bedrooms	Four Bedrooms	Five Bedrooms
< 1, 000	33	40	48	55
1,500	38	45	53	60
2,000	43	50	58	65
2,500	48	55	63	70
3,000	53	60	68	75
3,500	58	65	73	80
4,000	63	70	78	85
4,500	68	75	83	90
5,000	73	80	88	95
5,500	78	85	93	100
6,000	83	90	98	105
6,500	88	95	103	110
7,000	93	100	108	_

These fans are also built to take care of the homeowner's spot ventilation needs when the room is occupied. This models kick-up to a maximum level of 80 CFM either when the switch is turned on (available with FV-08VKSE3) or activated by the **SmartAction Motion Sensor**(available with FV-08VKME3).

A High / Low Delay Timer, located inside the fan unit, is utilized to return the fan back to the pre-set Continuous ventilation mode. The installer needs to consult with the homeowner for the desired setting on the timer (0.5 - 60 minutes) and make the adjustments during the installation.

Optimum Ventilation Performance: Generally duct length, elbows and other factors increase static pressure hindering the performance of most ventilation fans. This fan utilize SmartFlow microchip technology that monitors the static pressure in the system and speeds up or slows down the rpm of the fan depending on the amount of resistance. This allows the fan to perform as rated, whether facing 0.1,0.2 or even 0.25 inches water gauge. The bottom line is that it makes for easier installation. The installer no longer has to worry about compromising the fan's performance.

Outstanding Energy Savings: These fans are the very first to be built using DC motor technology. The new DC motor is 30% - 70% more energy efficient than the minimum ENERGY STAR requirements.

#### **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 long operating life, high dynamic response, higher speed ranges with saving energy. The grille covering the fan body is a spring-loaded, quick remove type.

A damper for preventing air counter flow is provided.

The blower uses a high-capacity sirocco fan developed to reduce the noise level.

Model of FV-08VKME3 is equipped with a motion sensor that shifts the fan to high flow automatically when motion is detected. It is user-adjustable to operate 0.5~60 minutes after motion is no longer detected.

The lighting unit is an energy-saving LED lighting device that only consumes 11.5W and produces almost the same illumination as standard 60W incandescent lamp.

FCC 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 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 in accordance with installation instructions. Also, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. 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.

DoC Responsible Party: Panasonic Corporation of North America

One Panasonic Way, Secaucus, New Jersey 07094

Customer Call Support: 1-866-292-7292

#### UNPACKING

Unpack and carefully remove the unit from carton.

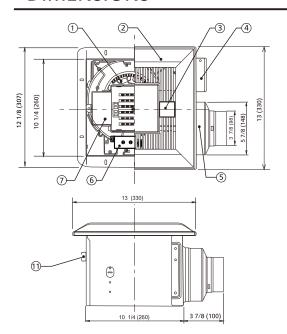
Refer to the Supplied Accessories list to verify that all parts are present.

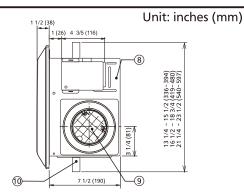
#### **SUPPLIED ACCESSORIES**

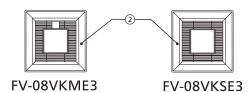
Part name	Appearance	Quantity
	For Model FV-08VKME3	
Grille	For Model FV-08VKSE3	<b>I</b>
Suspension bracket I		1
Suspension bracket II	A	1
Suspension bracket III		1
Suspension bracket IV		1

Part name	Appearance	Quantity
Screw I (ST4.2X6)	<b>6</b>	2
Screw II (ST4.2X14)	(C) (TIP)	1
Long screw (ST4.2X20)	© DIMENTED	6
Installation instructions		2
Warranty sheet		1

## **DIMENSIONS**



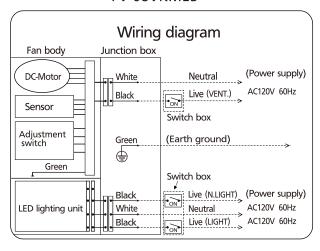




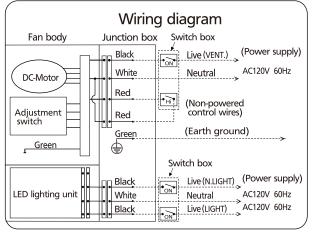
No.	Part name	No.	Part name
1	Blade	6	Switch unit
2	Grille	7	LED lighting unit
	Sensor unit	8	Fan body
3	(FV-08VKME3 only)	9	Damper
4	Junction box	10	Suspension bracket
(5)	Adaptor	11	Bracket cover

### **WIRING DIAGRAM**

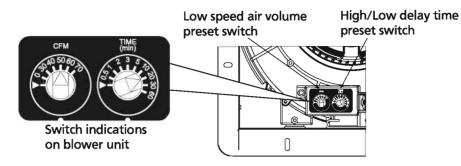
#### FV-08VKME3



#### FV-08VKSE3



### **SWITCH INDICATION**



Low speed air volume preset switch positions

Air volume [CFM]	0	30	40	50	60	70	
---------------------	---	----	----	----	----	----	--

Factory setting: 50 CFM.

Position "0": Fan stop.
Position "▶": use for factory test only.

High/Low delay time preset switch positions

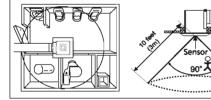
Delay Time [min]	•	0.5	1	2	3	5	10	20	30	60	
---------------------	---	-----	---	---	---	---	----	----	----	----	--

Factory setting: 20 minutes.

Position "▶": use for factory test only.

#### **OPERATION**

#### Sensor detectible range (FV-08VKME3 only)



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 25°C)

#### ■ Motion

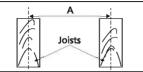
- The low speed is determined by Low speed air volume preset switch.
- The delay time is determined by High/Low delay time preset switch.
- The unit maintains the higher speed for an adjustable duration of 0.5 to 60 minutes, after motion is no longer detected.

ME3	Human active	INSIDE	Ro & !		SE3	Human active	
FV-08VK	Fan active	At low speed	When motion is detected, fan runs at the high speed.	Remains running at high speed until the delay time has passed.	FV-08VK	Fan active	At lo

SE3	Human active		名别	
FV-08VKSE3	Fan active	At low speed	When manual wall switch is on, fan runs at the high speed.	When manual wall switch is off, Fan remains running at the high speed until the delay time has passed.

# INSTALLATION I (JOIST MOUNTING - I)

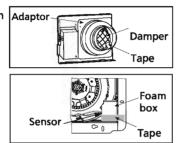
Joist situation: Spacing A is 16 inches (406 mm) to 24 inches (609 mm) on center joists



 If the spacing A is 16 inches (406 mm) to 24 inches (609 mm) on center joists, please follow the installation step as below.

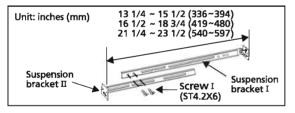
#### **IMPORTANT:**

- Remove the tape from damper and adaptor before installation.
  As shown at right:
- Before installing the sensor, peel off the tape and take off the foam box as shown right:

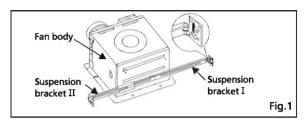


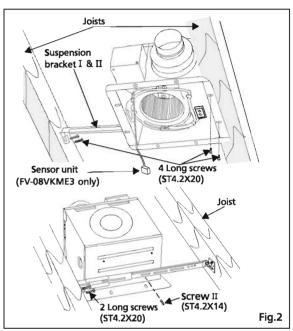
2. Insert the suspension bracket I and II into the fan body. (Select the suspension bracket connection holes as shown below) (Fig.1)

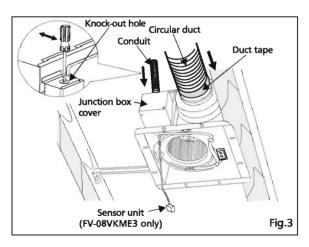
#### Suspension bracket connect method: Suspension bracket I and II connect with screw I as shown below:



- 3.Install the suspension bracket and the flange of frame to joists by using long screws(ST4.2X20) and secure it to fan body by using screw II (ST4.2X14).(Fig.2)
- 4.Install a circular duct and secure it with clamps, or wire ties and seal it with mastic or approved duct tape. 4 inches circular duct or 6 inches circular duct is needed to connect to relevant part of common adaptor.(Fig.3)
- Remove junction box cover and secure conduit or stress relief to junction box knock-out hole. (Fig.3)







# INSTALLATION I (JOIST MOUNTING - I) CONTINUED

6. Refer to wiring diagram. (Wiring detail please refer to the wiring diagram on page 6.) Follow all the local electrical safety codes as well as the National Electrical Code (NEC). Using UL approved wire nuts, connect house power wires to ventilating fan wires. (Fig.4-1, Fig.4-2)



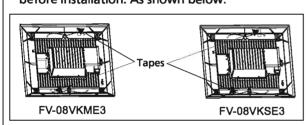


Mount junction box cover carefully so that lead wires are not pinched.

7. Finish ceiling work. Ceiling hole should be aligned with the inside edge of the flange. (Fig.5)

#### **IMPORTANT:**

Remove the tapes from louver and springs before installation. As shown below:



8. Insert the grille mounting spring on the wiring side into the slot and insert the plug connector I into the housing of the lighting unit. (Fig.6)

# $oldsymbol{\Lambda}\mathsf{CAUTION}$

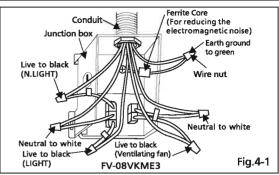


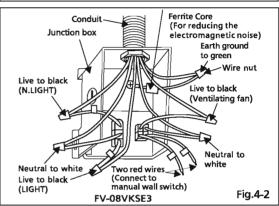
Before turn on the light, make sure the connector at the correct position. If not, the lighting can't work.

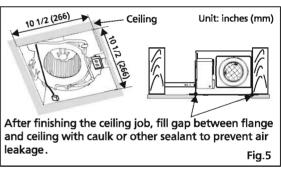


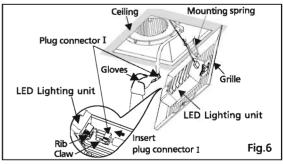
The claw of connector must latch the rib completely. (Fig.6)

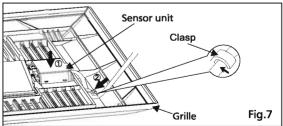
 Insert the sensor unit into slot of the grille.
 Fix the sensor lead wire into the clasp (1 position).(FV-08VKME3)(Fig.7)











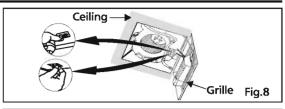
# INSTALLATION I (JOIST MOUNTING - I) CONTINUED

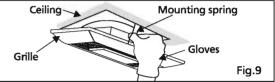
- Adjust High/Low delay time preset switch and Low speed air volume preset switch. (Fig. 8) Refer to switch indication on page 7.
- 11. Insert the other mounting spring into the slot as shown and mount grille to fan body. (Fig.9)





Mount grille carefully so that lead wire of sensor unit and lighting unit is not pinched.

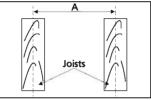




### INSTALLATION II (SUSPENSION BRACKETS MOUNTING)

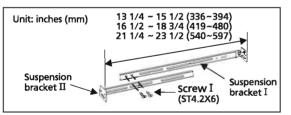
#### Joist situation:

Spacing A is 16 inches (406 mm) to 24 inches (609 mm) on center joists

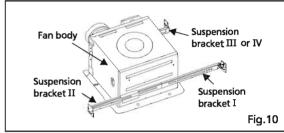


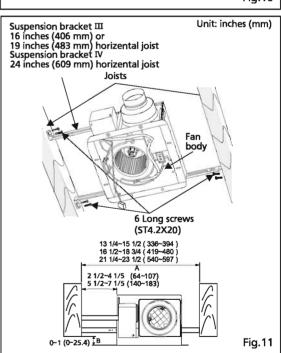
- If the spacing A is 16 inches (406 mm) to 24 inches (609 mm) on center joists, please follow the installation step as below.
- 2. Insert the suspension bracket I and II into the fan body and suspension bracket III or IV into the adaptor. (Select the suspension bracket connection holes as shown below) (Fig.10, Fig.11)

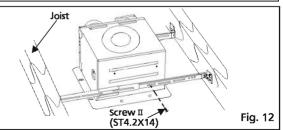
Suspension bracket connect method: Suspension bracket I and II connect with screw I as shown below:



- Install the suspension bracket to joists by using long screws (ST4.2X20)(Fig.11) and secure it to the fan body by using screw II (ST4.2X14). (Fig.12)
- 4. Follow steps 4 to 11 of installation I (page 8, page 9, page 10) to complete the installation work.



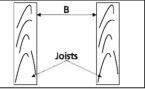




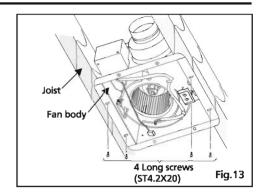
### INSTALLATION III (JOIST MOUNTING - II)

#### Joist situation:

Spacing B is 10 1/2 inches (266 mm) to 11 1/2 inches (292 mm) inches on joists



- 1. If the spacing B is 10 1/2 inches (266 mm) to 11 1/2 inches (292 mm) on joists, please follow the installation step as below.
- 2. Secure 4 long screws (ST 4.2X20) at flange of frame. (Fig. 13)
- 3. Follow steps 4 to 11 of installation I (page 8, page 9, page 10) to complete the installation work.



#### **MAINTENANCE**

# $\Lambda$

# **WARNING**



Disconnect power source before working on unit.

# $\triangle$ CAUTION



Routine maintenance must be done every year.

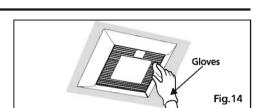


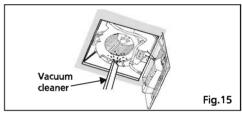
Never use gasoline, benzene, thinner or any other such chemicals for cleaning the ventilating fan.

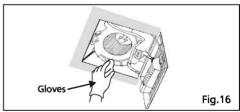


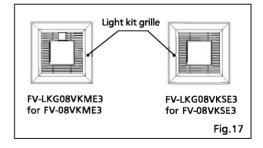
Do not immerse motor in water when cleaning. Do not soak resin parts in water over 140°F (60°C).

- 1. Clean grille. (Don't put into hot water. Use non-abrasive kitchen detergent, wipe dry with clean cloth)(Fig.14)
- 2. The grille should be dry after cleaning.
- 3. Remove dust and dirt from fan body using a vacuum cleaner. (Fig.15)
- 4. Using a cloth dampened with kitchen detergent, remove any dirt from fan body. Wipe dry with clean cloth. (Fig.16)
- 5. Replace grille.
- 6. When replacing the light kit grille, please purchase new light kit grille from our representative. (Model number of light kit grille is FV-LKG08VKME3 for FV-08VKME3 and FV-LKG08VKSE3 for FV-08VKSE3) (Fig.17).



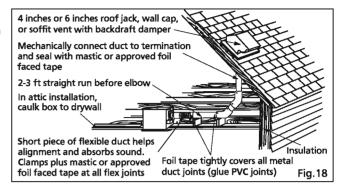






#### PRACTICAL GUIDE TO INSTALLATION

Properly insulate the area around the fan to minimize building heat loss and gain. (Fig.18) 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.



#### **SPECIFICATIONS**

#### Specifications

	Air Voltage	Air Voltage Frequency	Dust Noise	Noise	Power consumption (W)			Spood	Air volume	Weight							
Model No.	direction	(V)	Frequency Duct ( (Hz) diameter (			. ,	· • • • • • • • • • • • • • • • • • • •				1		LED light			at 0.1"WG	lb.(kg)
		(*)	(*,	(inches)	(001100)		LIGHT	N.LIGHT	,	(CFM)	(Kg)						
FV-08VKME3 FV-08VKSE3	Exhaust	120	60	4 or 6	<0.3	8	11.5	0.8	869	80	11.2(5.1)						

HVI Certified performance based on HVI Procedures 915,916, and 920.

#### ■ Reference specifications

Model No.	Air direction		Frequency (Hz)	Duct diameter (inches)	Noise (sones)	Power consumption (W)	Speed (rpm)	Air volume at 0.1"WG (CFM)	Weight lb.(kg)		
							<0.3	6.5	828	70	
					<0.3	5.6	798	60			
FV-08VKME3	Exhaust	120	60	4 or 6	<0.3	4.8	776	50	11.2(5.1)		
FV-08VKSE3		'	••		<0.3	4.2	765	40	1112(311)		
					<0.3	3.8	756	30			
					_	0.5 (*)	_	0			

Reference performance based on HVI Procedures 915, 916, and 920. [(\*) Standby wattage.]

#### PRODUCT SERVICE

Warning Concerning Removal of Covers.

The unit should be serviced by qualified technicians only.

Your product is designed and manufactured to ensure a minimum of maintenance.

Should your unit require service or parts, call Panasonic Call Center at 1-866-292-7292 (USA) or 1-800-669-5165 (Canada).

#### Panasonic Corporation of North America

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