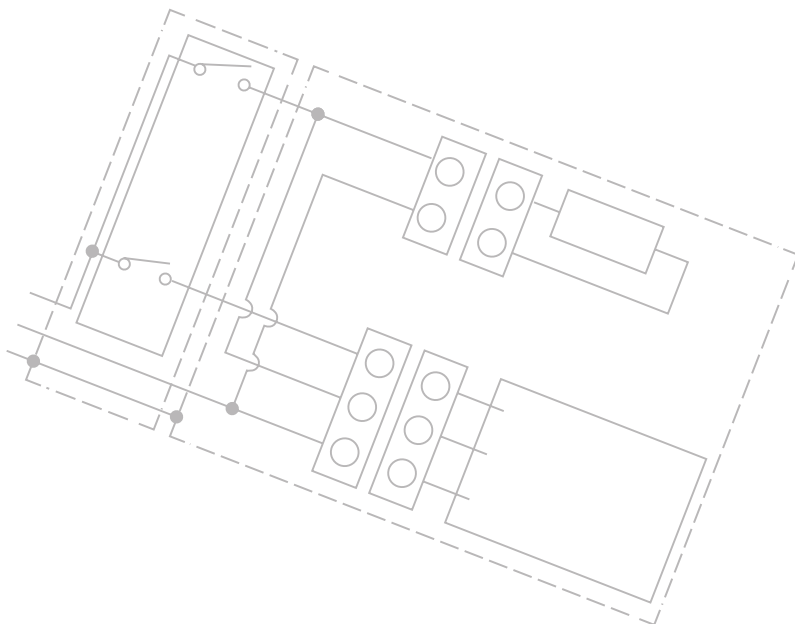


**MODEL: KCE-PA SERIES**

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## **CONNECT WIRING DIAGRAM**

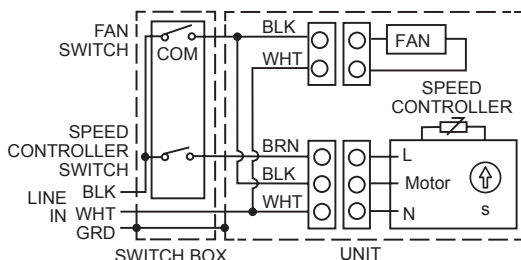
- SPEED CONTROLLER
- HUMIDITY CONTROLLER
- MOTION SENSOR



**READ AND SAVE THESE INSTRUCTIONS**  
Installer: Leave this manual with the homeowner.

## SPEED CONTROLLER MODEL: KCE-PA SERIES

### CONNECT WIRING DIAGRAM



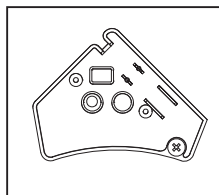
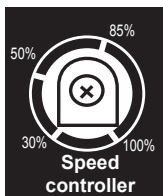
### OPERATION

Use a 2 function wall control. See "Connect Wiring" for details.

Set the motor speed according to diagram as you need. Fan runs on low speed when speed control switch is ON and boosts to high speed when fan switch is ON

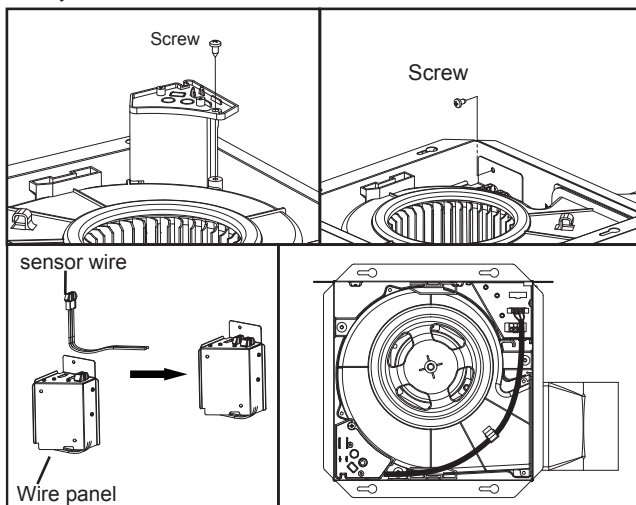
Max airflow is HVI Certified performance based on HVI Procedures 915,916, and 920.

Other airflow reference performance based on HVI Procedures 915, 916, and 920.



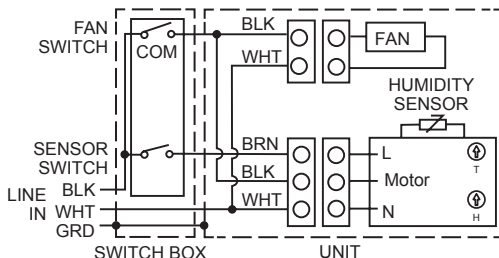
### ASSEMBLY INSTRUCTIONS

1. Remove the Grille Assembly from the fan.
2. Put power box in the place showed below, fixed it with screws.
3. Remove the wire panel, insert the sensor wire into wire panel, install wire panel back to the housing.
4. Insert the plug into the suitable wire panel. Connect electrical wiring refer to "CONNECT WIRING DIAGRAM". Fix the wire to blower.
5. Install Grille Assembly to the fan.



## HUMIDITY CONTROLLER MODEL: KCE-PA SERIES

### CONNECT WIRING DIAGRAM



### OPERATION

#### HUMIDITY SENSOR

The humidity-sensing fan uses a sophisticated humidity sensor that responds to: (a) rapid increases in humidity or (b) humidity above a user-adjustable setpoint (30%-80% relative humidity). The humidity sensor may occasionally turn the fan ON when environmental conditions change. If the fan continuously responds to changing environmental conditions, "H" (means "humidity") adjustment may be required. This figure is factory-set for about 80% (Ambient temperature of 25 C).

#### SENSITIVITY ADJUSTMENT

The "H" has been factory set for most shower applications. However, if the fan is in a tub area or is being used for dampness control, the "H" may need to be increased toward maximum "+". If the control is responding too often to changing environmental conditions, movement toward less "-" "H" may be required. To adjust the "H":

1. Disconnect power at service entrance.
2. Through the grille, locate the slot marked "H".
3. Carefully rotate the "H" adjustment toward "+" or "-".
4. Turn on power and check operation by turning on the shower or other humidity source until the fan turns on.
5. Repeat above steps if necessary.

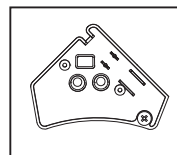
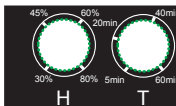
When the temperature changes, humidity sensor values will have deviation.

#### TIMER ADJUSTMENT

The humidity sensing fan has a "T" (means timer) that can be adjusted from 5 to 60 minutes (factory-set at about 20 minutes). This "T" controls the length of time that the fan remains ON after the sensor has stopped sensing a rise in humidity and the humidity level is below the user-adjustable set-point.

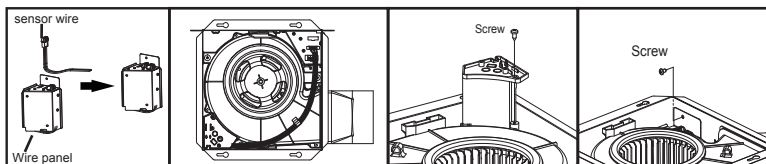
To adjust the "T":

1. Disconnect power at service entrance;
2. Through the grille, locate the slot marked "T";
3. Carefully rotate the "T" adjustment to desired setting (from 5 to 60 minutes).
4. Check operation by turning on a humidity source until the fan turns on.
5. Turn humidity source off and time the unit.
6. Repeat above steps if necessary.



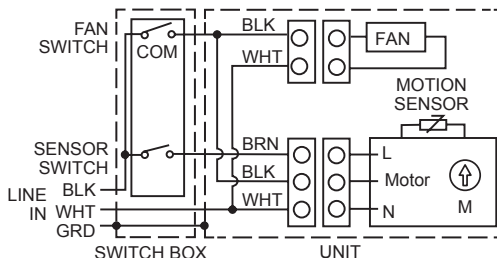
### ASSEMBLY INSTRUCTIONS

1. Remove the Grille Assembly from the fan.
2. Put power box in the place showed below, fixed it with screws.
3. Remove the wire panel, insert the sensor wire into wire panel, install wire panel back to the housing.
4. Insert the plug from the box into the suitable wire panel. Connect electrical wiring refer to "CONNECT WIRING DIAGRAM". Fix the wire to blower.
5. Install Grille Assembly to the fan.



**MOTION SENSOR  
MODEL: KCE-PA SERIES**

## CONNECT WIRING DIAGRAM



## OPERATION

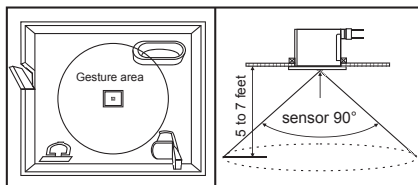
The fan and sensor can be operated separately.

Sensing distance will be impacted of the body's own situation (for example, the thinner people wearing the more remote sensing distance).

1. Turn ON the fan switch, the fan will run at the certified airflow rate.
2. Keep the fan switch OFF, turn on the sensor switch, the sensor system begins working, the fan doesn't work. When enter the gesture area fan will run at the certified airflow rate. When persons leave, the fan remains working until the delay time(3-30 min) has passed, and then the fan stop work.

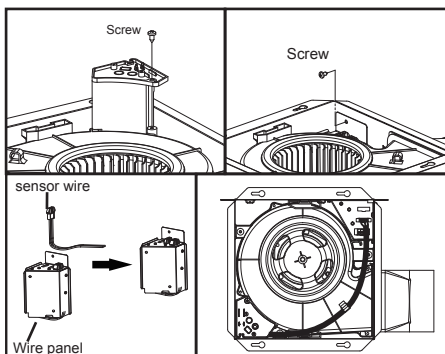
Installation distance: 5 to 7 feet.

Sensing range is within the cone angle of 90°.



## ASSEMBLY INSTRUCTIONS

1. Remove the Grille Assembly from the fan.
2. Put power box in the place showed below, fixed it with screws.
3. Remove the wire panel, insert the sensor wire into wire panel, install wire panel back to the housing.
4. Insert the plug from the box into the suitable wire panel. Connect electrical wiring refer to "CONNECT WIRING DIAGRAM". Fix the wire to blower.
5. Install Grille Assembly to the fan.

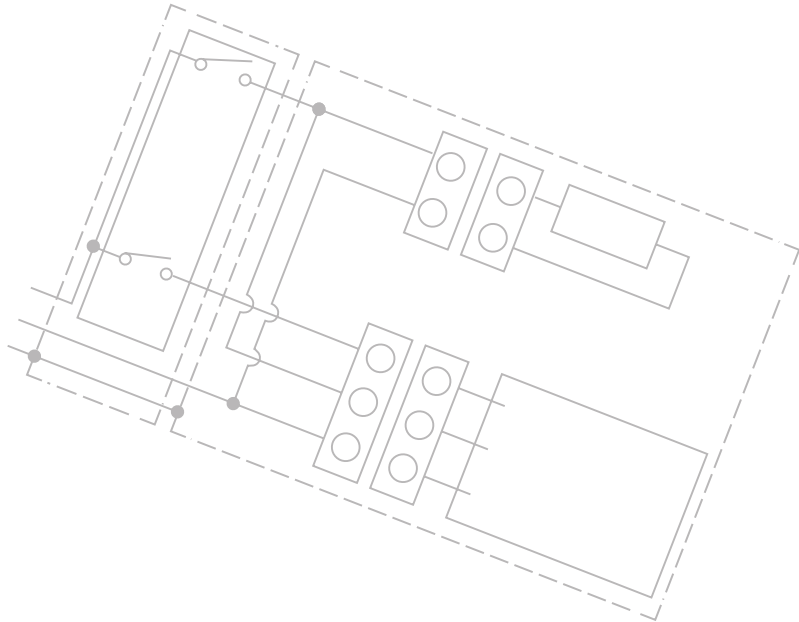


**MODEL: KCE-PD SERIES**

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## **CONNECT WIRING DIAGRAM**

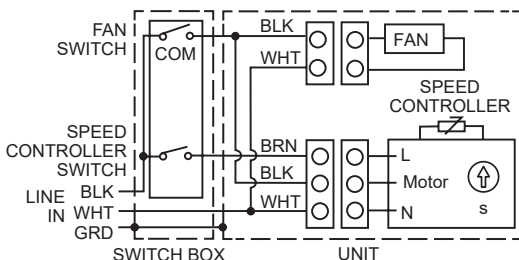
- SPEED CONTROLLER
- HUMIDITY CONTROLLER
- MOTION SENSOR



**READ AND SAVE THESE INSTRUCTIONS**  
Installer: Leave this manual with the homeowner.

## SPEED CONTROLLER MODEL: KCE-PD SERIES

### CONNECT WIRING DIAGRAM



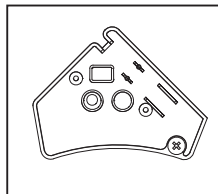
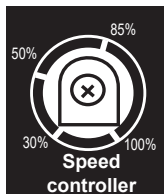
### OPERATION

Use a 2 function wall control. See “Connect Wiring” for details.

Set the motor speed according to diagram as you need. Fan runs on low speed when speed control switch is ON and boosts to high speed when fan switch is ON

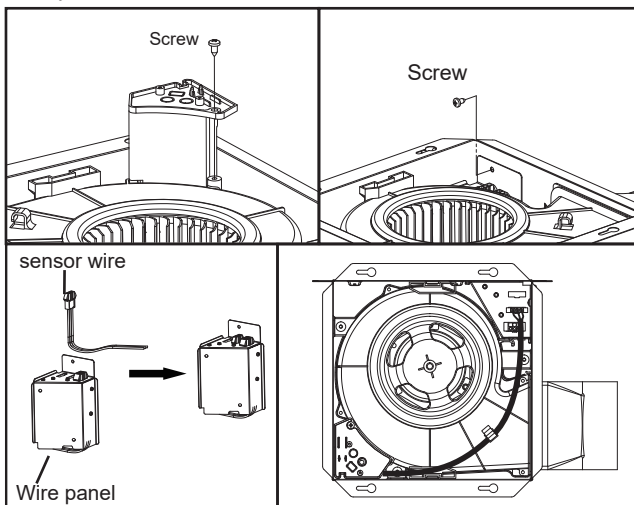
Max airflow is HVI Certified performance based on HVI Procedures 915,916, and 920.

Other airflow reference performance based on HVI Procedures 915, 916, and 920.



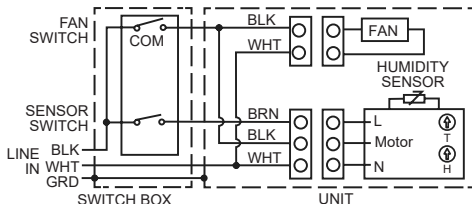
### ASSEMBLY INSTRUCTIONS

1. Remove the Grille Assembly from the fan.
2. Put power box in the place showed below, fixed it with screws.
3. Remove the wire panel, insert the sensor wire into wire panel, install wire panel back to the housing.
4. Insert the plug from the box into the suitable wire panel. Connect electrical wiring refer to “CONNECT WIRING DIAGRAM”. Fix the wire to blower.
5. Install Grille Assembly to the fan.



## HUMIDITY CONTROLLER MODEL: KCE-PD SERIES

### CONNECT WIRING DIAGRAM



### OPERATION

#### HUMIDITY SENSOR

The humidity-sensing fan uses a sophisticated humidity sensor that responds to: (a) rapid increases in humidity or (b) humidity above a user-adjustable setpoint (30%-80% relative humidity). The humidity sensor may occasionally turn the fan ON when environmental conditions change. If the fan continuously responds to changing environmental conditions, "H" (means "humidity") adjustment may be required. This figure is factory-set for about 80% (Ambient temperature of 25°C).

#### SENSITIVITY ADJUSTMENT

The "H" has been factory set for most shower applications. However, if the fan is in a tub area or is being used for dampness control, the "H" may need to be increased toward maximum. If the control is responding too often to changing environmental conditions, movement toward maximum may be required. To adjust the "H":

1. Disconnect power at service entrance.
2. Remove the grille, locate the slot marked "H".
3. Carefully rotate the "H" adjustment toward maximum or minimum.
4. Turn on power and check operation by turning on the shower or other humidity source until the fan turns on.
5. Repeat above steps if necessary, then reinstall the grille.

When the temperature changes, humidity sensor values will have deviation.

#### TIMER ADJUSTMENT

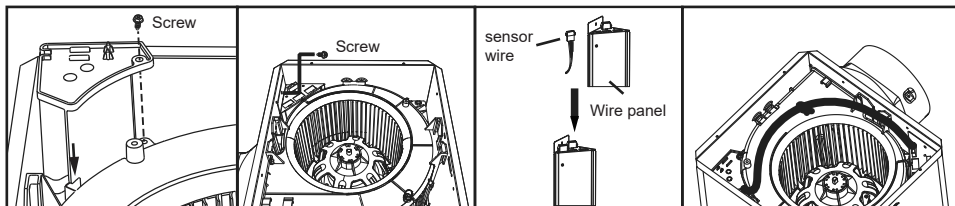
The humidity sensing fan has a "T" (means timer) that can be adjusted from 5 to 60 minutes (factory-set at about 20 minutes). This "T" controls the length of time that the fan remains ON after the sensor has stopped sensing a rise in humidity and the humidity level is below the user-adjustable set-point.

To adjust the "T":

1. Disconnect power at service entrance;
2. Remove the grille, locate the slot marked "T";
3. Carefully rotate the "T" adjustment to desired setting (from 5 to 60 minutes).
4. Check operation by turning on a humidity source until the fan turns on.
5. Turn humidity source off and time the unit.
6. Repeat above steps if necessary, then reinstall the grille.

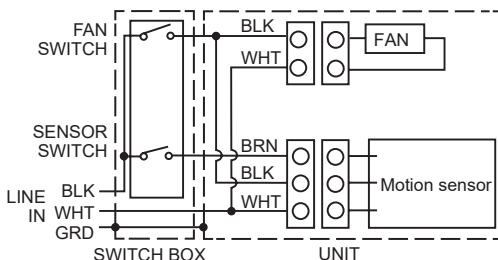
### ASSEMBLY INSTRUCTIONS

1. Remove the Grille Assembly from the fan.
2. Put power box in the place showed below, fixed it with screws.
3. Remove the wire panel, insert the sensor wire into wire panel, install wire panel back to the housing.
4. Insert the plug from the box into the suitable wire panel. Connect electrical wiring refer to "CONNECT WIRING DIAGRAM". Fix the wire to blower.
3. Install Grille Assembly to the fan.



**MOTION SENSOR  
MODEL: KCE-PD SERIES**

## CONNECT WIRING DIAGRAM



## OPERATION

The fan and sensor can be operated separately.

Sensing distance will be impacted of the body's own situation (for example, the thinner people wearing the more remote sensing distance).

1. Turn ON the fan switch, the fan will run at the certified airflow rate.
2. Keep the fan switch OFF, turn on the sensor switch, the sensor system begins working, the fan run at low speed per the low airflow knob setting. When enter the gesture area fan will run at the certified airflow rate. When persons leave, the fan remains working until the delay time(OFF, 3-30 min) has passed, and then the fan change back to low speed or stop.

Installation distance: 7 to 9 feet.

Sensing range is within the cone angle of 90°.

## ASSEMBLY INSTRUCTIONS

1. Remove the Grille Assembly from the fan.
2. Put power box in the place showed below, fixed it with screws(Fig 1).
3. Remove the wire panel, insert the sensor wire into wire panel, install wire panel back to the housing(Fig 2).
4. Insert the plug from the box into the suitable wire panel. Connect electrical wiring refer to "CONNECT WIRING DIAGRAM". Fix the wire to blower(Fig 3).
5. Install Grille Assembly to the fan(Fig 4).

