

This installation sheet applies to SimplyVAV digital wall sensors connected to SimplyVAV controllers. For additional information on the SimplyVAV products, browse to the [KMC Controls website](#) for videos and other resources.

### Choosing a sensor location

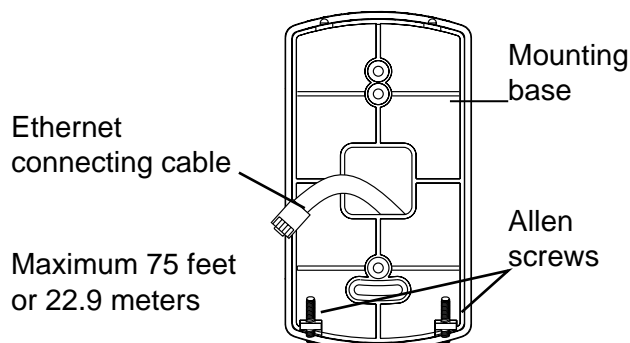
Install the sensor on an inside wall where it can sense the average room temperature. Avoid locations with direct sunlight, heat sources, windows, air vents, and air circulation obstructions such as curtains or furniture.

For models with motion sensing, see the topic on the following page, *Planning for motion sensing*.

### Rough-in preparation

Complete rough-in wiring at each sensor location prior to sensor installation. This includes the following items.

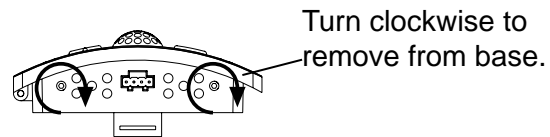
- ◆ If required, install an appropriate backplate.
- ◆ Route an Ethernet connecting cable from the sensor to the controller location.
- ◆ Maximum cable length is 75 feet (22.9 meters). Plenum-rated preassembled cables are recommended.



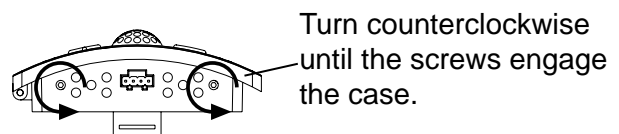
### Mount the sensors

To install the sensor on a mounting base, do the following:

1. Turn the Allen screws in the base of the sensor clockwise until they clear the case. Swing the sensor away from the mounting base to remove it.



2. Route the Ethernet cable through the mounting base.
3. Fasten the mounting base directly to a 2 x 4 inch outlet box or a backplate with the Allen screws toward the floor.
4. Insert the Ethernet cable coming from the base into the sensor.
5. Place the top of the sensor over the top of the mounting base and swing it down over the Allen screw brackets. Be careful not to pinch any wiring.
6. Turn the Allen screws counterclockwise until they back out of the mounting base and engage the case of the sensor.



### Operation

The sensor will become operational as soon as it is connected to an operational controller. See the following pages to change room setpoints or configure a SimplyVAV controller with the sensor.

### Maintenance

Remove dust as necessary from holes in top and bottom. Clean the display with soft, damp cloth and mild soap.

**\*NOTE:** The home display shows time after a BACnet time synchronization command is initiated using hardware or software (e.g. a BAC-5051E router, KMC Connect, KMC TotalControl, KMC Commander, etc.).

## Planning for motion sensing

For motion sensing models only—Mount the sensor on a wall that will have an unobstructed view of the typical traffic in the coverage area. When choosing a location, do not install the sensor in the following areas.

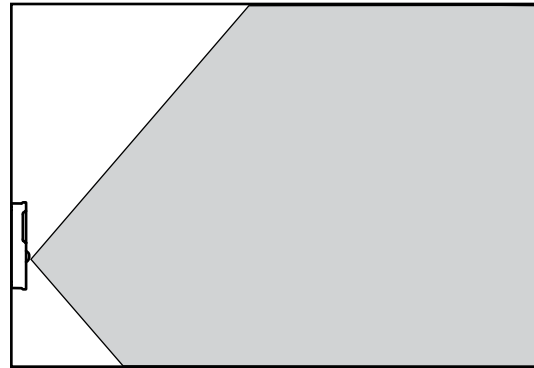
- ◆ Behind curtains or other obstructions
- ◆ In locations that will expose it to direct sunlight or heat sources
- ◆ Near a heating or cooling inlet or outlet.

The effective detection range is approximately 10 meters or 33 feet. Factors that may reduce the range may include the following items.

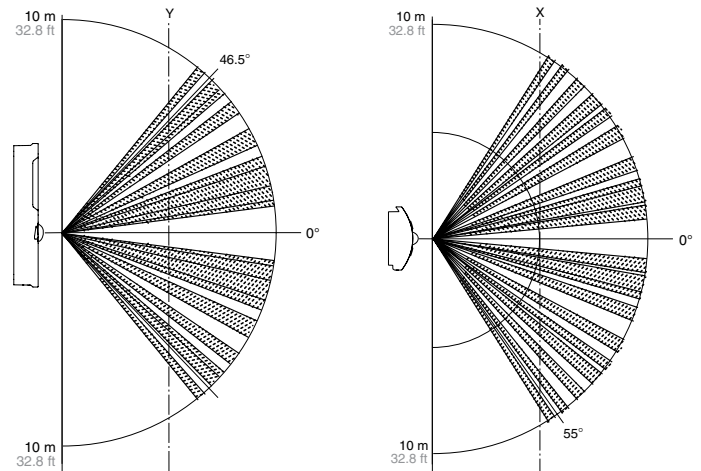
- ◆ The difference between the surface temperature of the object and the background temperature of the room is too small.
- ◆ Object movement in a direct line toward the sensor.
- ◆ Very slow or very fast object movement.
- ◆ Obstructions in the shaded area of the diagram  
*Typical motion sensing coverage.*

False detections may be triggered by any of the following conditions.

- ◆ The temperature inside the detection range suddenly changes because of the entry of cold or warm air from an air-conditioning or heating unit.
- ◆ The sensor being directly exposed to sunlight, an incandescent light, or other source of far-infrared rays.
- ◆ Small animal movement.



Typical motion sensing coverage



Side view

Top view

Motion sensor vertical and horizontal patterns

## Changing room setpoints

Room setpoints are changed using the buttons and display on the front of the sensor.

1. Press any button to begin changing setpoints.
2. If required, enter Password 1. New installations do not have a password.
3. When the display advances to the cooling setpoint, press the up  $\Delta$  or down  $\nabla$  button to change the cooling setpoint.
4. Press the setpoint  $\odot$  button to save the cooling setpoint and advance to the heating setpoint.
5. When the display advances to the heating setpoint, press the up  $\Delta$  or down  $\nabla$  button to change the heating setpoint.
6. Press the setpoint  $\odot$  button to save the heating setpoint and return to the temperature display.

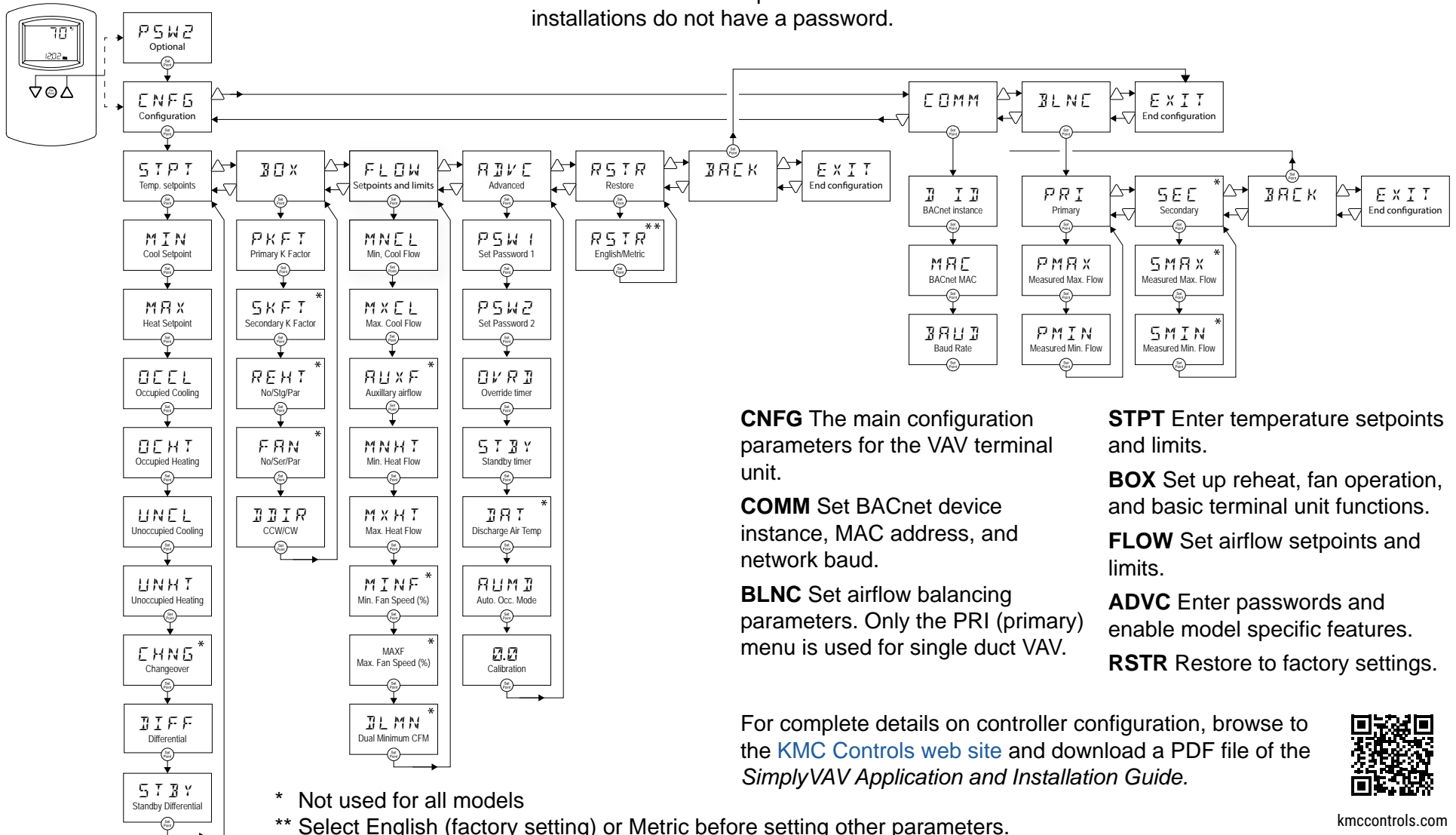


Cooling and heating setpoint configuration displays

Use an STE-8001 or STE-8201 sensor to configure the SimplyVAV controller. If another type of sensor is installed as the room sensor, temporarily connect an STE-8001 as a service tool.

To get started:

1. Press the up  $\Delta$  and down  $\nabla$  buttons simultaneously to start configuration or balancing.
2. Enter Password 2 if required. New installations do not have a password.
3. Press the up  $\Delta$  and down  $\nabla$  buttons to move between functions or change values.
4. Press the setpoint  $\odot$  button to choose a selection or save a value.



**CNFG** The main configuration parameters for the VAV terminal unit.

**COMM** Set BACnet device instance, MAC address, and network baud.

**BLNC** Set airflow balancing parameters. Only the PRI (primary) menu is used for single duct VAV.

**STPT** Enter temperature setpoints and limits.

**BOX** Set up reheat, fan operation, and basic terminal unit functions.

**FLOW** Set airflow setpoints and limits.

**ADVC** Enter passwords and enable model specific features.

**RSTR** Restore to factory settings.

For complete details on controller configuration, browse to the [KMC Controls web site](http://www.kmccontrols.com) and download a PDF file of the *SimplyVAV Application and Installation Guide*.

