KMC CONTROLS

Installation Guide

Mounting

Location and Cover Removal

Install the sensor on an inside wall where it can sense the average room temperature and be away from direct sunlight, heat sources, windows, air vents, and air circulation obstructions (curtains, furniture, etc.). It can be mounted on a hollow wall or (with a universal backplate HMO-6036/6036W) to a 2 x 4 inch handy box.

The cover is held to the black, back panel by three, small, round pegs that fit in the holes of the cover. The bottom peg is on a tab and snaps into the center bottom hole.

1. With a small Phillips screwdriver or hex wrench, **press in and hold the tab button that snaps into the center hole on the bottom cover.**

2. Carefully pull or pry the back panel from the front cover.
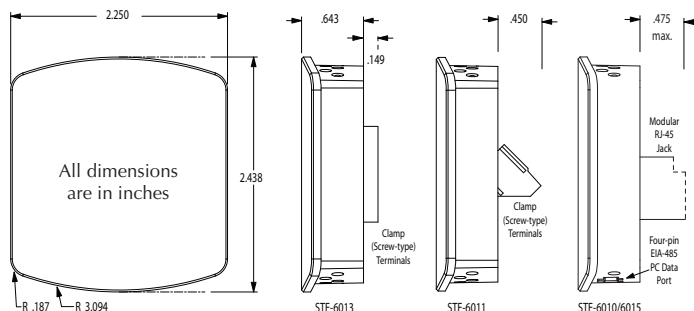
STE-6010/6013/6015 Only

Handy Box Installation (Recommended)

1. Mount a universal backplate HMO-6036 or HMO-6036W to the handy box using the two screws provided.

2. Remove the cover from the back panel.

3. Attach the back panel to the backplate using the two screws provided.

4. Attach the cable to the terminal block or jack according to the appropriate wiring diagram on the next page.

5. Replace the cover.

Hollow Wall Installation

1. Remove the cover from the back panel.

2. Using the back panel as a template, drill two holes for mounting screws (7/64 inches or 3 mm in diameter and 1.4 inches, 1-13/32 inches, or 35.6 mm apart) and cut a center hole (size needed is dependent on model) for the terminal block or jack.

3. Attach the back panel to the wall using two #6 self-threading screws. (Plastic anchors are recommended, and the size of the holes will then need adjusting.)

Dimensional drawings: 2.250, 2.438, All dimensions are in inches, R .187, R 3.094; .643, .149, Clamp (Screw-type) Terminals, STE-6013; .450, Clamp (Screw-type) Terminals, STE-6011; .475 max., Modular RJ-45 Jack, Four-pin EIA-485 PC Data Port, STE-6010/6015

4. Attach the cable to the terminal block or jack according to the appropriate wiring diagram on the next page.

5. Replace the cover.

STE-6011 Only

Handy Box Installation (Recommended)

1. Mount a universal backplate HMO-6036 to the handy box using the two screws provided.

2. Remove the cover from the back panel.

3. Attach wires according to the STE-6011 wiring diagram on the next page.

4. Attach the back panel to the backplate using two screws.

5. Check that leads to the thermistor are straight and the thermistor is completely extended.
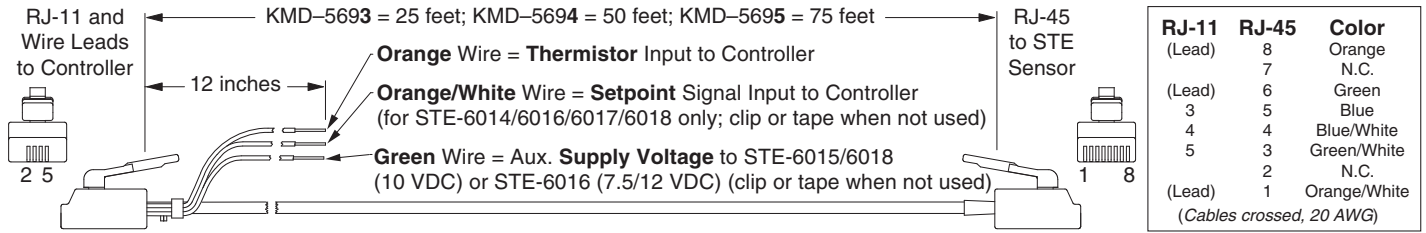
6. Replace the cover.

Hollow Wall Installation

1. Remove the cover from the back panel.

2. Use the back panel as a template to drill two holes for mounting screws (7/64 inches or 3 mm in diameter and 1.4 inches, 1-13/32 inches, or 35.6 mm apart) and to cut a center hole (7/8 inch or 20 mm) for the terminal block or jack.

3. Attach wires according to the STE-6011 wiring diagram on the next page.

4. Attach the back panel to the wall using two #6 self-threading screws. (Plastic anchors are recommended, and the size of the holes will then need adjusting.)

5. Check that leads to the thermistor are straight and the thermistor is completely extended.

6. Replace the cover.

Controller Connection

Connect wires as shown for the relevant model.

STE-6010/6011

STE-6013/6015

STE-6010/6015

RJ-11 and Wire Leads to Controller

12 inches

KMD–569**3** = 25 feet; KMD–569**4** = 50 feet; KMD–569**5** = 75 feet

Orange Wire = **Thermistor** Input to Controller

Orange/White Wire = **Setpoint** Signal Input to Controller
(for STE-6014/6016/6017/6018 only; clip or tape when not used)

Green Wire = Aux. **Supply Voltage** to STE-6015/6018
(10 VDC) or STE-6016 (7.5/12 VDC) (clip or tape when not used)

RJ-45 to STE Sensor

2 5

1 8

RJ-11 (Lead)	RJ-45	Color
(Lead)	8	Orange
	7	N.C.
(Lead)	6	Green
3	5	Blue
4	4	Blue/White
5	3	Green/White
	2	N.C.
(Lead)	1	Orange/White

(Cables crossed, 20 AWG)

Connecting an STE-6010/6015 to a KMC controller requires a special cable with (on the sensor end) an RJ-45 modular connector and (on the controller end) an RJ-11 modular connector with additional wires for KMC controller inputs. Purchasing **pre-assembled cables** from KMC is more **cost-effective** and **reliable** than creating custom cables in the field. Use one of the following cables:

- KMD-569**3** = 25 feet
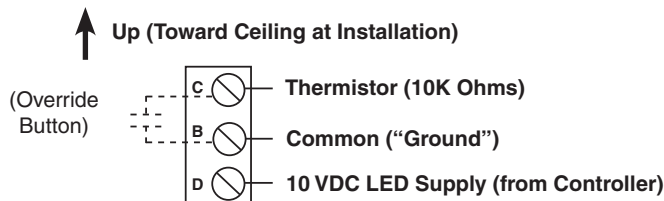- KMD-569**4** = 50 feet
- KMD-569**5** = 75 feet

The additional wire connections to the controller are:

- **Orange** is the **thermistor** signal to the controller's appropriate input

- **Green** is the optional **10 VDC supply voltage** from an output of a controller to the STE-6015 LED (for the STE-6010, clip or tape the unused wire)

- **Orange/white** should be clipped or taped back since a setpoint signal is not used with an STE-6010/6015

STE-6011

(Wires are interchangeable)

Thermistor (10K Ohms)

STE-6013

↑ **Up (Toward Ceiling at Installation)**

(Override Button)

C — **Thermistor (10K Ohms)**

B — **Common ("Ground")**

D — **10 VDC LED Supply (from Controller)**

Model Number	Interface Features		Cable Connections		
	Override Button	LED Status Indicator	Screw Clamp Terminals	RJ-45 Connector	EIA-485 Data Port
STE-6010-10				X	X
STE-6011-10			X		
STE-6013-10	X	X	X		
STE-6015-10	X	X		X	X

Maintenance

Careful installation will also ensure long-term reliability and performance. Remove dust as necessary from holes in top and bottom. Clean with a soft, damp cloth and mild soap.

More Information

For general product information, see the **STE-6000 Series Room Temperature Sensors/Transmitters Data Sheet** on the KMC Controls web site.

For mounting considerations, network connection, controller configuration, programming, troubleshooting, and other information, see the **STE-6010/6011/6013/6015 Application Guide**.

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