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 an HMO-6036/6036W universal backplate) to a 2 x 4 inch electrical (handy) box.

The cover is held to the black base by three 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 plastic tab button that snaps into the center hole on the bottom of the cover. Do not use excessive force and deform or break the tab.**
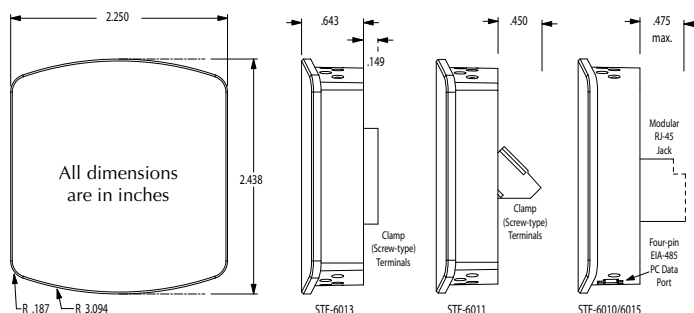2. Carefully pull the cover from the black base.

STE-6010/6013/6015 Only

Handy Box Installation (Recommended)

1. Mount an HMO-6036 or HMO-6036W universal backplate to the handy box using the two screws provided.
2. Remove the cover from the black base (see the Location and Cover Removal section).
3. With the plastic tab button on the bottom, attach the base to the universal backplate using the two screws provided.
4. Connect the wiring (see the Wiring section).
5. Reinstall the cover.

Hollow Wall Installation

1. Remove the cover from the black base (see the Location and Cover Removal section).
2. Using the base 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 base to the wall using two #6 self-threading screws. (Plastic anchors are recom-

mended, and the size of the holes will then need adjusting.)
4. Connect the wiring (see the Wiring section).
5. Reinstall the cover.

STE-6011 Only

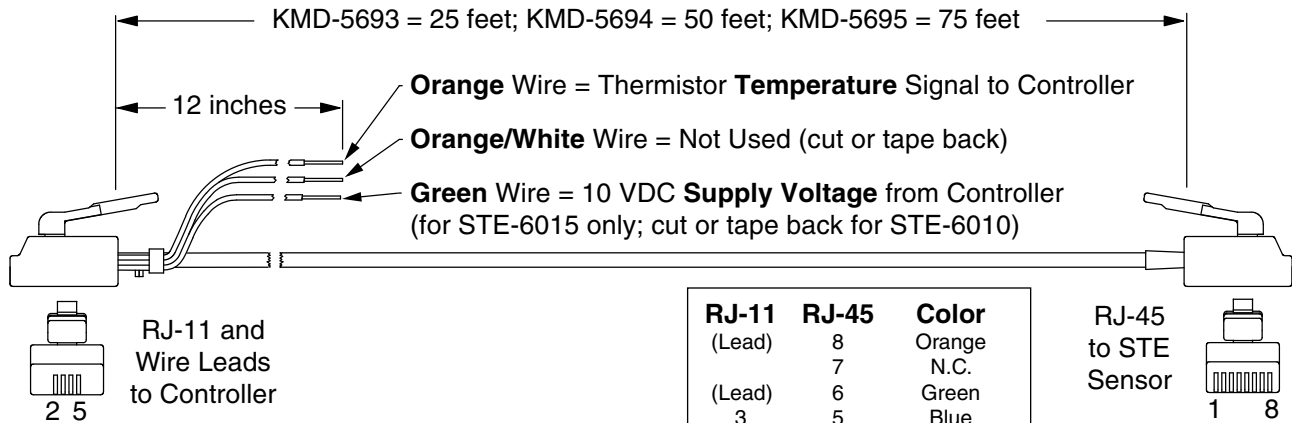**Handy Box Installation (Recommended)**

1. Mount a universal backplate HMO-6036/6036W to the handy box using the two screws provided.
2. Remove the cover from the black base (see the Location and Cover Removal section).
3. Connect the wiring (see the Wiring section).
4. Attach the base to the backplate using two screws.
5. **Check that leads to the thermistor are straight and the thermistor is completely extended.**
6. Reinstall the cover.

Hollow Wall Installation

1. Remove the cover from the black base (see the Location and Cover Removal section).
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. Connect the wiring (see the Wiring section).
4. Attach the black base 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. Reinstall the cover.

Controller Connection

STE-6010/6015 Modular Connectors

KMD-5693 = 25 feet; KMD-5694 = 50 feet; KMD-5695 = 75 feet

12 inches

Orange Wire = Thermistor **Temperature** Signal to Controller

Orange/White Wire = Not Used (cut or tape back)

Green Wire = 10 VDC **Supply Voltage** from Controller
(for STE-6015 only; cut or tape back for STE-6010)

RJ-11 and
Wire Leads
to Controller

2 5

RJ-45
to STE
Sensor

1   8

RJ-11	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)		

STE-6010/6015 Wiring
to KMC Legacy Controller

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

STE-6010/6011   STE-6013/6015

- **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

NOTE: Pressing the push button (on the STE-6013/6015) momentarily shunts the thermistor for a SENSORON signal (via the C terminal or orange wire).

KMC Legacy BACnet and KMDigital Controllers

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

- **KMD-5693** = 25 feet

- **KMD-5694** = 50 feet

- **KMD-5695** = 75 feet

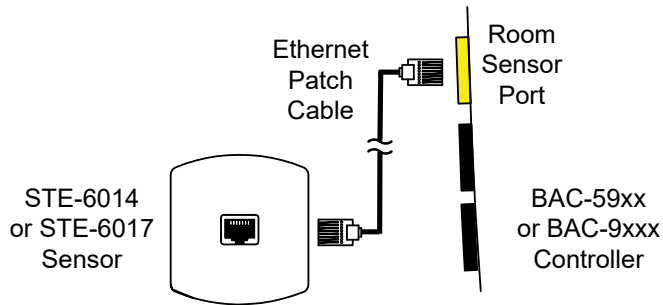The additional wire connections to the controller are:

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

KMC Conquest BAC-59xx and BAC-9xxx

For **STE-6010** (but not STE-6015) sensors, use **HSO-9001**, **HSO-9011**, **HSO-9012**, or other standard Ethernet patch cables to connect the sensors' modular ports to the **BAC-59xx/9xxx** controllers' sensor ports.

NOTE: The sensor ports in KMC Conquest controllers do not support the 10 VDC output to the LED indicator in STE-6015 sensors.

See the Analog STE-6000 Series Thermistor Sensors section in the **KMC Conquest Controller Application Guide** for configuration information.

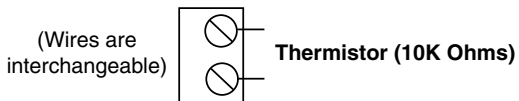Ethernet Patch Cable — Room Sensor Port — STE-6014 or STE-6017 Sensor — BAC-59xx or BAC-9xxx Controller

For **STE-6011** (but not STE-6013) sensors, an **HPO-9005** adapter and Ethernet patch cable can be used to connect the sensors' terminals to the BAC-59xx/9xxx controllers' sensor ports.
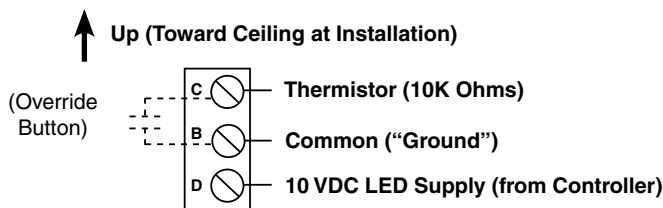
NOTE: The sensor ports in KMC Conquest controllers do not support the 10 VDC output to the LED indicator in STE-6013 sensors.

See the **KMC HPO-9005 Room Sensor Adapter Installation Guide** for installation and configuration information.

STE-6011 Terminals

(Wires are interchangeable)   **Thermistor (10K Ohms)**

STE-6013 Terminals

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

(Override Button)

C — **Thermistor (10K Ohms)**
B — **Common ("Ground")**
D — **10 VDC LED Supply (from Controller)**

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**.

Important Notices

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