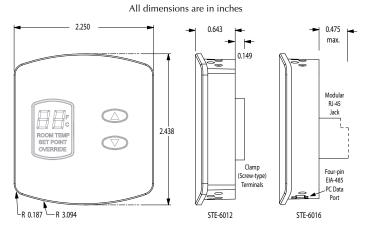


# **Room Temperature Transmitters (with LCD Display)**

STE-6012/6016

# **Installation Guide**

# Mounting



Model Number	Connections		
	Screw Clamp Terminals	RJ-45 Connector	EIA-485 Data Port
STE-6012	X		
STE-6016		Х	Х

#### **Location and Cover Removal**

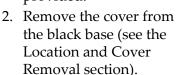
Install the sensor on an inside wall where it can sense the average room temperature and be away from direct sunlight, heat sources, windows, air vents, and air circulation obstructions (curtains, furniture, etc.). It can be mounted on a hollow wall or (with a universal backplate HMO-6036/HMO-6036W)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

The cover is held to the black base 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 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.

## **Handy Box Installation (Recommended)**

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





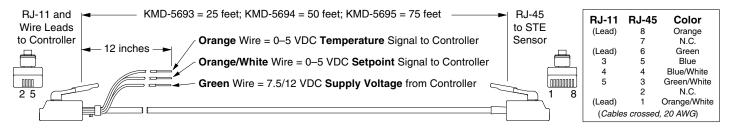
- 3. With the plastic tab button on the bottom, attach the base to the universal backplate using the two screws provided.
- 4. Connect the wiring (see the Wiring section).
- 5. Reinstall the cover.

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

# Wiring

#### **STE-6016**



NOTE: The room sensor ports in KMC Conquest controllers do not support the voltage outputs required by modular STE-6016 sensors. STE-6012 sensors can, however, be connected to the terminals on BAC-59xx/9xxx controllers.

Connecting the STE-6016 to a legacy (before KMC Conquest) controller 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-569**5** = 75 feet

The three additional wire connections to the controller are:

- Orange is the 0–5 VDC temperature (scaled voltage from thermistor) signal to the controller's appropriate input
- **Orange/white** is the 0–5 VDC **setpoint** signal to the controller's appropriate input
- Green is the supply voltage of 7.5 VDC (unoccupied/setback mode) or 12 VDC (occupied/normal mode) from an output of the controller

NOTE: In the STE-6012/6016, pressing the ▼ Down button momentarily sends 0 VDC to the controller (via C terminal or orange wire)

## STE-6012

Up (Toward Ceiling at Installation)

7.5 VDC (Unoccupied/Setback) or
12 VDC (Occupied/Normal) Supply (from Controller)

Common ("Ground")

Copyright (12 VDC Temperature Signal and (during a Button Press)

SENSORON (0 VDC on ▼) or SENSOROFF (> 5 VDC on ▲)

A (0-5 VDC Setpoint Signal)

for a SENSORON signal; pressing the Land Up button sends greater than 5 VDC for a SENSOROFF signal. When in occupied/normal mode, pressing the Down or Up button raises or lowers the setpoint voltage. When in unoccupied/setback mode, pressing either button also selects override mode.

## 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, trouble-shooting, and other information, see the STE-6012/6016 Application Guide.

# **Important Notices I**

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