SL-IDS-R
INSTALLATION DIAGRAMS
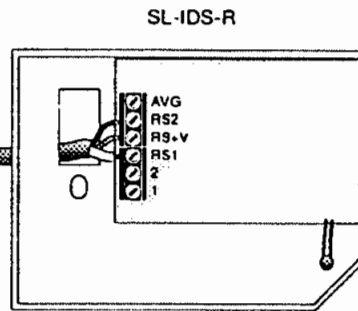
SL-IDS-R CAN BE USED WITH THE FOLLOWING SLIMLINE MODELS:

DSL-300	DSL-600	SHP-1
DSL-400	DSL-700	SHP-2
DSL-450	SHC-7	SMS-1

SLIMLINE THERMOSTAT

SINGLE SENSOR
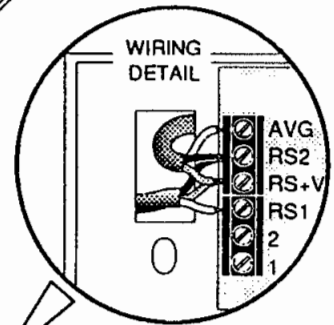
SL-IDS-R

AVG
RS2
RS+V
RS1
2
1

RS2
RS1
RS+V

WIRING
DETAIL

AVG
RS2
RS+V
RS1
2
1
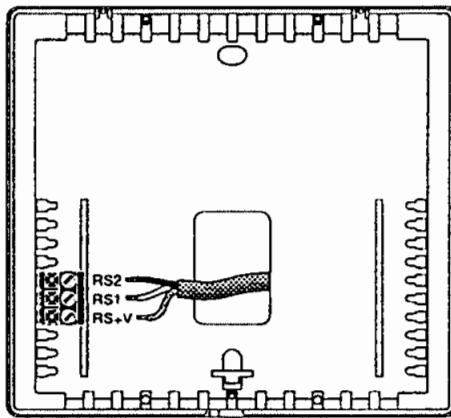
SLIMLINE THERMOSTAT

MULTIPLE SENSORS
(TEMPERATURE AVERAGING)

SL-IDS-R

SL-IDS-R

RS2
RS1
RS+V

AVG
RS2
RS+V
RS1
2
1

AVG
RS2
RS+V
RS1
2
1

TO OTHER
SENSORS

(MAXIMUM
6 TOTAL)
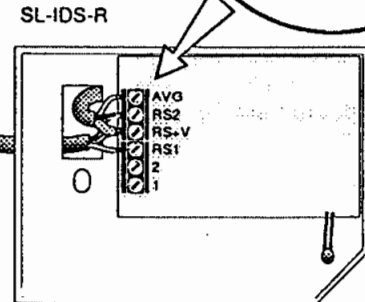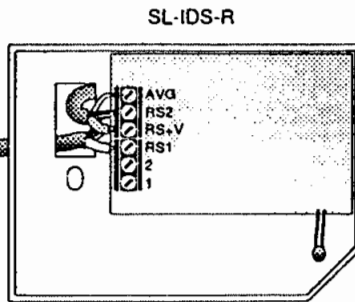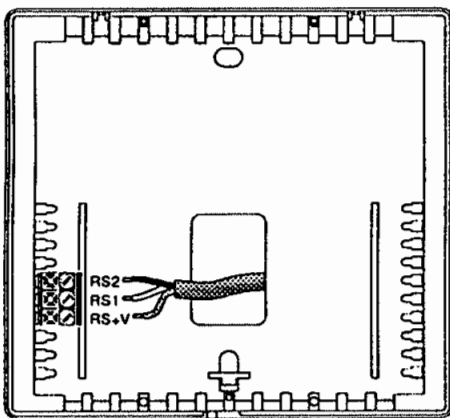
Installation Instructions
SL-IDS-R
Slimline Indoor Sensor for
Relay Thermostats

Introduction:

The Enerstat SL-IDS-R is designed to sense the air temperature at a remote location and send this information to any of the following models of Slimline thermostat:

DSL-300, DSL-400, DSL-450, DSL-600, DSL-700, SHC-7, SHP-1, SHP-2, SMS-1.
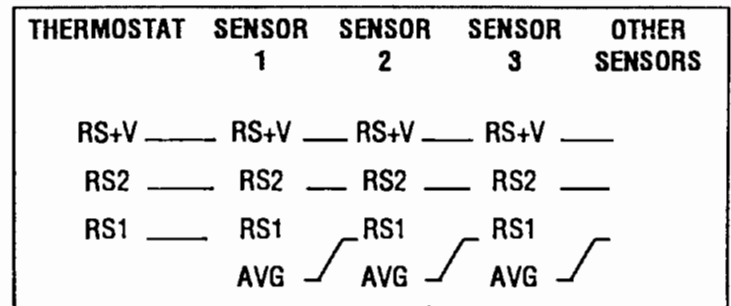
Single Sensor Installation:

1. Install the Slimline thermostat according to the instruction manual supplied with it. Check that the display shows the correct temperature.

2. Install three-wire cable from the Slimline thermostat to the remote sensor location. IMPORTANT: Do not connect these wires to the thermostat yet if the thermostat has power to it.

3. Open the sensor case by depressing the button on the bottom edge of the case until the latch releases. Remove the cover by pulling it out at the bottom.

4. Remove the board from the subbase by pulling back the latch that holds it at the center bottom.

5. Mount the subbase over the wires coming out of the wall using the two screws and anchors provided. Drill size for the wall anchors is 1/4 inch. The angled corner on the subbase should be in the bottom right.

6. Snap the board back into the subbase. Check to be sure that the latch holds the board properly. Check that the thermistor (sensor element) is positioned under the holes in the cover.

7. Strip 1/4 inch of insulation from the three wires at the Remote Sensor. Install the wires in the terminals labelled RS2, RS+V and RS1. Push any extra wire back into the wall cavity. Seal the hole in the wall around the cable to eliminate any draft that might affect the sensor.

8. Note the wire colour going to each terminal.

9. Connect the wires on the thermostat subbase to the terminals labelled RS2, RS1 and RS+V. Make sure that each terminal on the sensor is wired to the terminal with the same name on the thermostat.

10. Mount the thermostat on the subbase and check to be sure that it is showing the temperature.

11. Re-install the cover on the remote sensor by hooking it on the top and snapping the bottom into place.

Using Multiple Sensors for Temperature Averaging:

Any number from two to six sensors may be connected together to provide temperature averaging in a large area or several zones being controlled by the same system.

1. Wire the first sensor using the single sensor instructions.

2. IMPORTANT: Make sure that there is no power to the sensors by removing the thermostat from the subbase.

3. Connect wires to each additional sensor in the following manner.

THERMOSTAT	SENSOR 1	SENSOR 2	SENSOR 3	OTHER SENSORS
RS+V ____	RS+V ____	RS+V ____	RS+V ____	
RS2 ____	RS2 ____	RS2 ____	RS2 ____	
RS1 ____	RS1	RS1	RS1	
	AVG ⟋	AVG ⟋	AVG ⟋	

Troubleshooting:

Thermostat has no display: Check for mis-wiring between thermostat and sensor. Incorrect wiring can damage the thermostat, transformer or blow a fuse in the equipment.

Measure for voltage on thermostat terminal blocks.

Thermostat reads "AC": AC power has been disconnected.

Display shows temperature, but blowing on the thermostat sensor element modifies temperature reading: Sensor not connected properly. Display is showing local temperature. To check this, breathe on the wall near the bottom left corner of the thermostat. Temperature will go up for a few seconds.

Thermostat displays very high temperature:
Wires on thermistor (sensor element) in sensor are touching and shorted together. Separate them.