



**Telkonet**

**SmartEnergy**

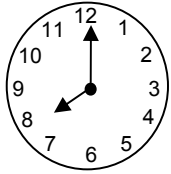
**SS5200 Thermostat**  
*Installation &  
Maintenance  
Guidebook*  
*Document - 6.30.115*

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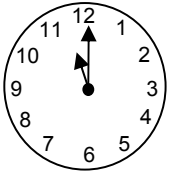
# In This Training Guide

1. What is a SmartSystem?
2. How Does it Work?
3. Answering Common Guest Questions
4. Installing a New Sensor
5. Installing a New Thermostat
6. Linking the Sensor to the Thermostat
7. Troubleshooting
8. Product Returns

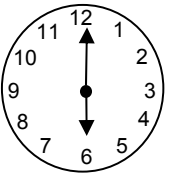
# What is a “SmartSystem”?



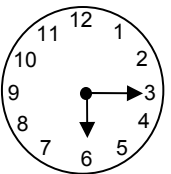
Guest exits room and leaves thermostat set, for example, to 72°.



Thermostat turns down while the room is empty to save energy, temperature drifts off of the set point.



Guest returns to room, air conditioner turns on to return the room temperature to guest's setting.



Thermostat returns the room to the guest's setting within about 15 minutes.

# How Does it Work?

Two units working together:  
People sensor on the ceiling



Thermostat on the wall

# What Happens While a Guest is in the Room?

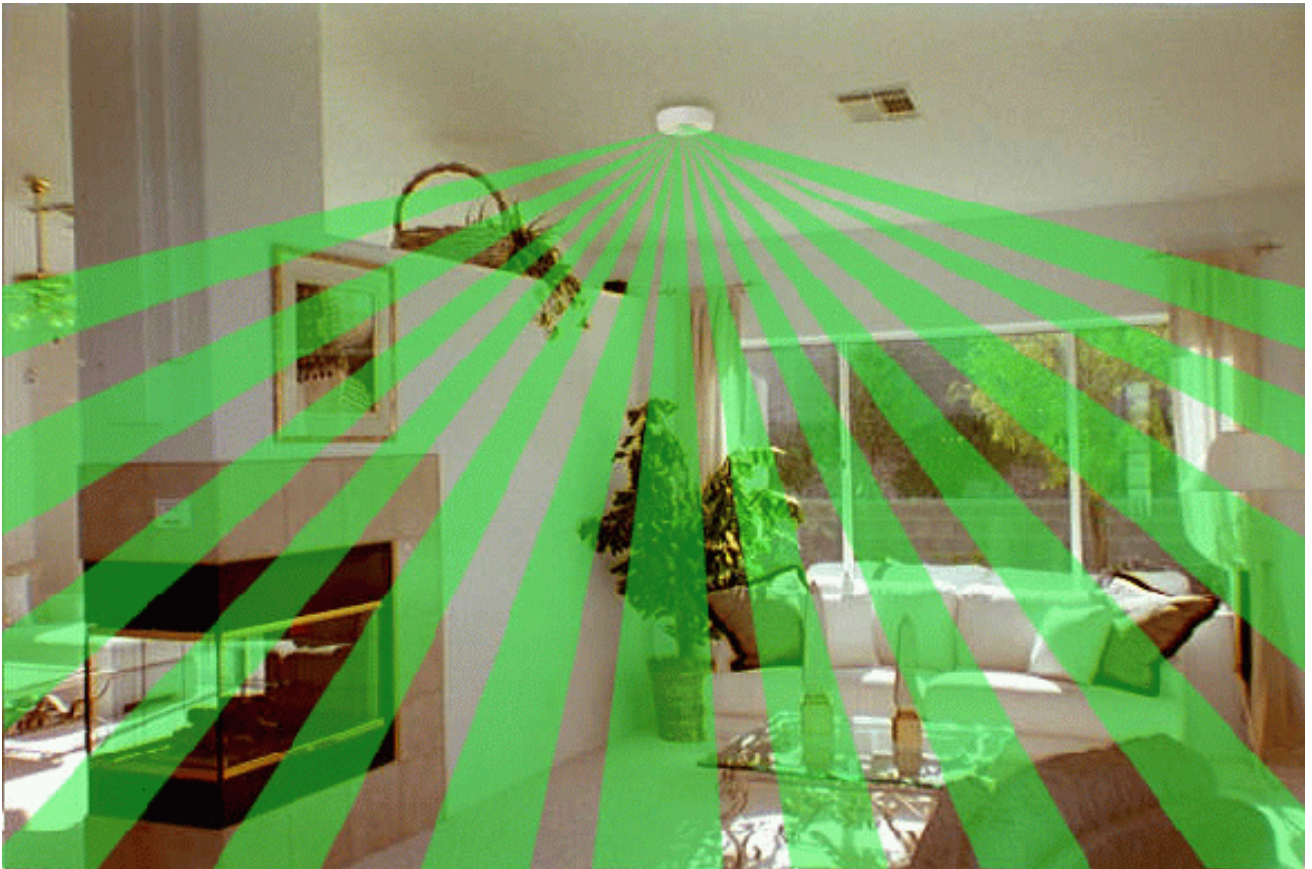


Guest has full control of the thermostat while in the room.

SmartSystems save energy in empty rooms.

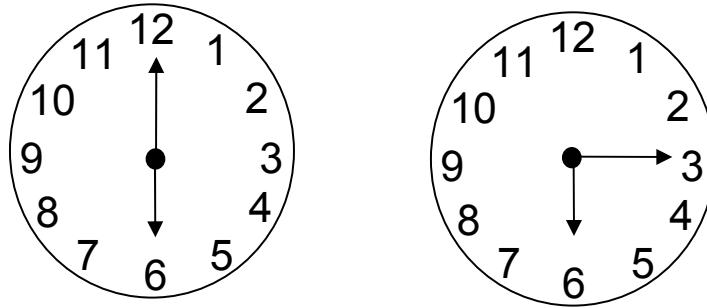


# How Does the Sensor Know When the Room is Empty?



Sensor detects motion and body heat.  
The sensor transmits the room status wirelessly.

# If You Walk Into a Room That Feels Too Warm or Too Cool...

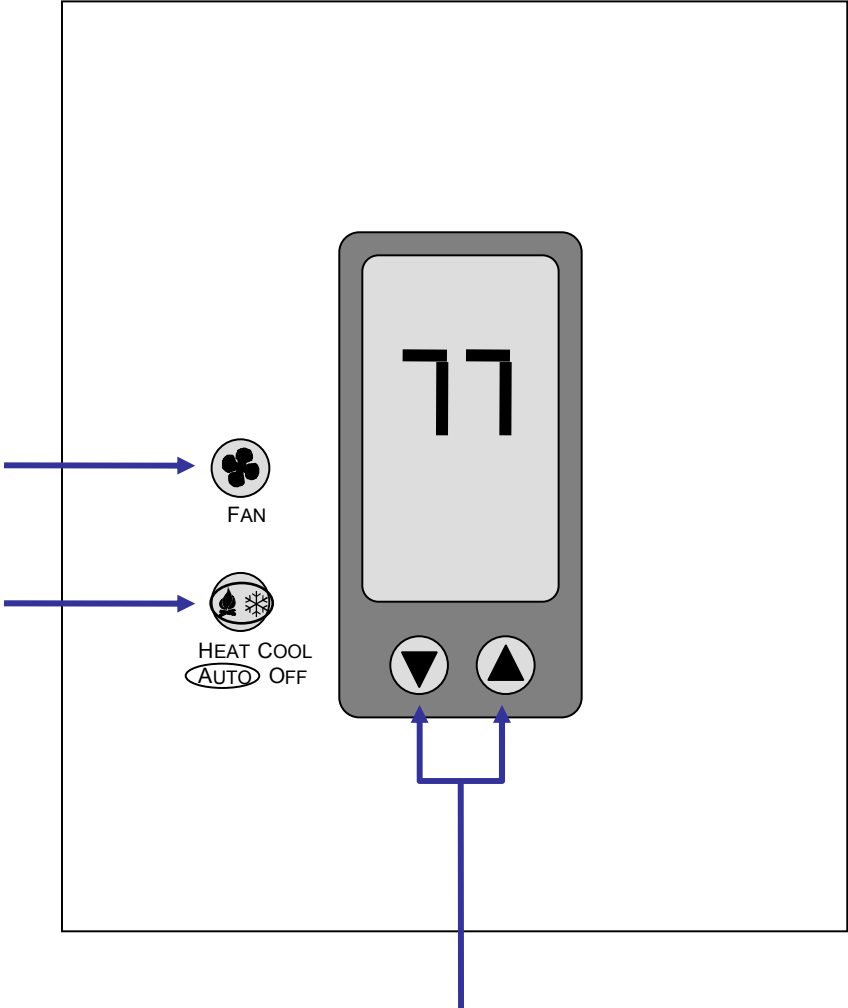


Room temperature will automatically return to the thermostat's last setting within about 15 minutes.

# Buttons on the Thermostat

Turn continuous fan on/off. (This does not make it warmer or cooler, it just moves the air around.)

Turn Heat or Cool on, or turn the system completely off.

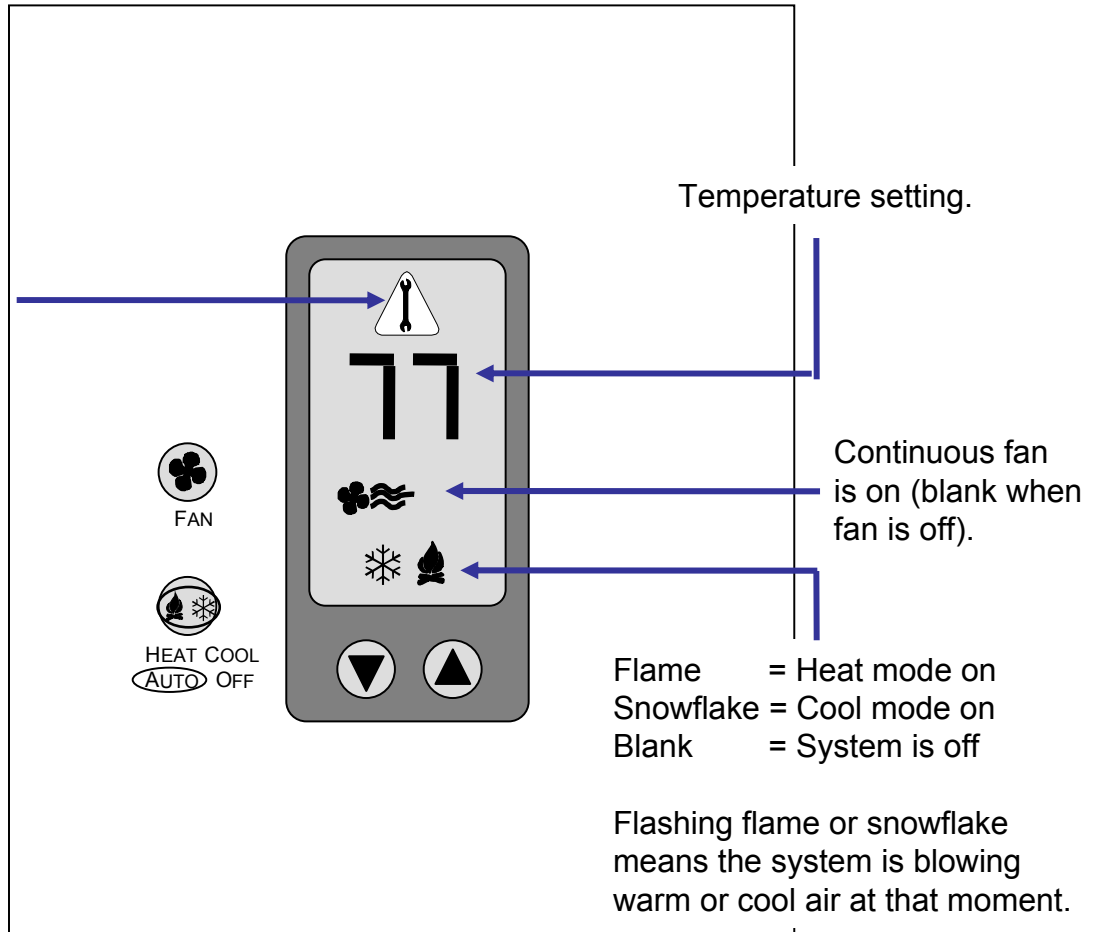


These are the “Warmer/Cooler” Buttons. Press these to raise or lower the temperature. Press Up Arrow for warmer, Down Arrow for cooler.



# Pictures on the Thermostat

Batteries on sensor are low or missing, or sensor is gone. Sometimes this also means the sensor is broken.



# Note to Housekeeping and Front Desk

- If products in the room are ***missing or have been vandalized...***
- If the thermostat screen is displaying a ***flashing wrench...***
- If the thermostat cover is not ***locked down...***



Note the room number  
and description of the  
problem and report it to  
maintenance right away.

# Answering Common Guest Questions

# When Housekeeping Finds a Problem in a Room

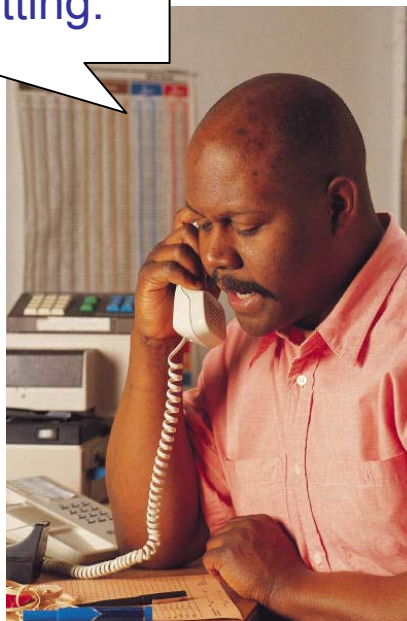
- If products in the room are found to be vandalized or they are not functioning properly, note the room number and report it to maintenance right away.

# Too Hot or Too Cold

If a guest returns to their room and complains it is too hot or too cold,



“Please give it about fifteen minutes to return to your temperature setting.”



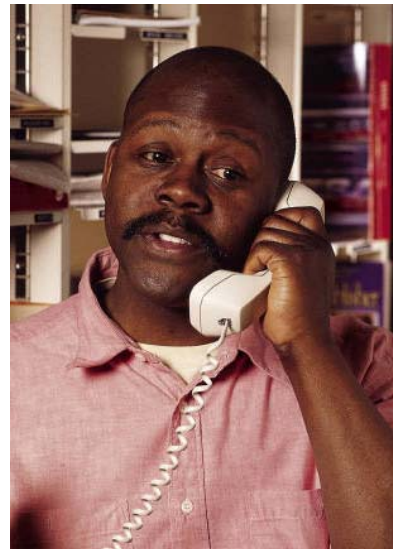
# Temperature Won't Go Lower/Higher



If the guest complains that the thermostat won't let them set it as high or as low as they want.

Explain to them that the thermostat has heat/cool limits, this prevents energy waste.

NOTE: Setting the temperature to extreme temperatures will not make the room get warmer/cooler faster!



# Thermostat is Clicking



“Thermostat is making loud “clicking” noises.

Have maintenance staff replace the thermostat right away.

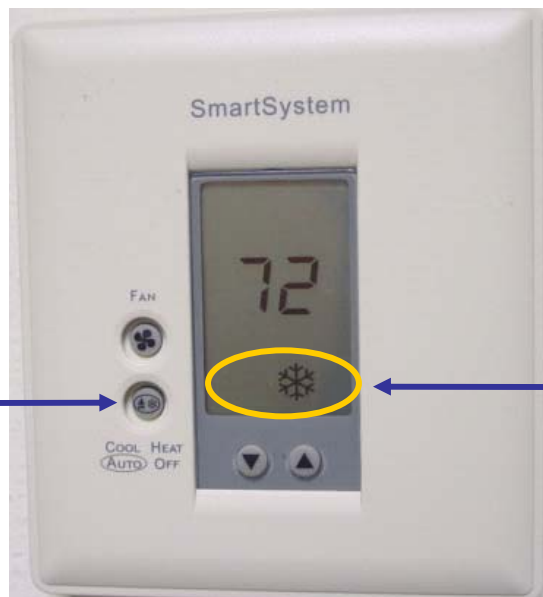


# Thermostat Won't Respond



If the guest complains that they are setting the temperature on the thermostat but the system won't turn on...

The system has probably been turned off; ask the guest to press the HEAT/COOL button. Pressing this button will turn the system back on.



A snowflake or flame symbol should always be displayed. If no symbol is displayed, the system has been turned off.



# What Happens While a Guest is in the Room?

- When a guest is in the room, they control the room temperature, just like a regular thermostat.



- A SmartSystem saves energy in an **empty** room.

# Installing a New Sensor

# Sensor Installation Steps - Overview

1. Remove failed or vandalized sensor.

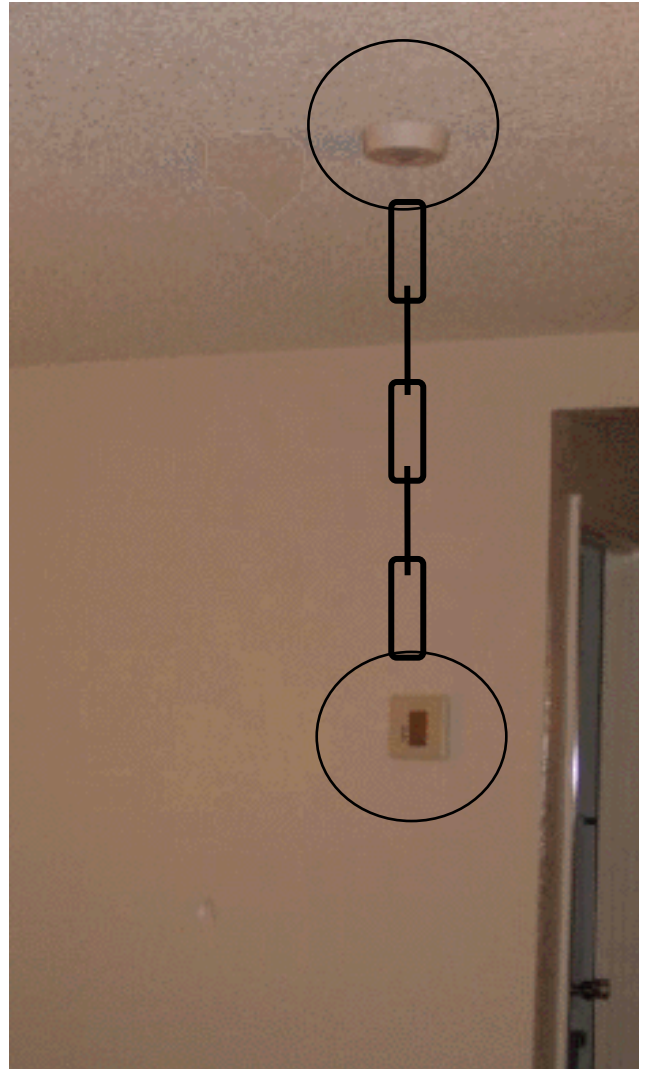
2. Insert Batteries

3. Connect new sensor to the base.

4. Link the new sensor to the thermostat.

# Important Note About Installing a New Sensor

- Units are linked using a wireless signal.
- Never move a sensor to another room.
  - It will not work in the new room until you **establish a new communication link** between the new sensor and the thermostat.
  - Procedures for this are in the LINK THE SENSOR TO THE THERMOSTAT section.



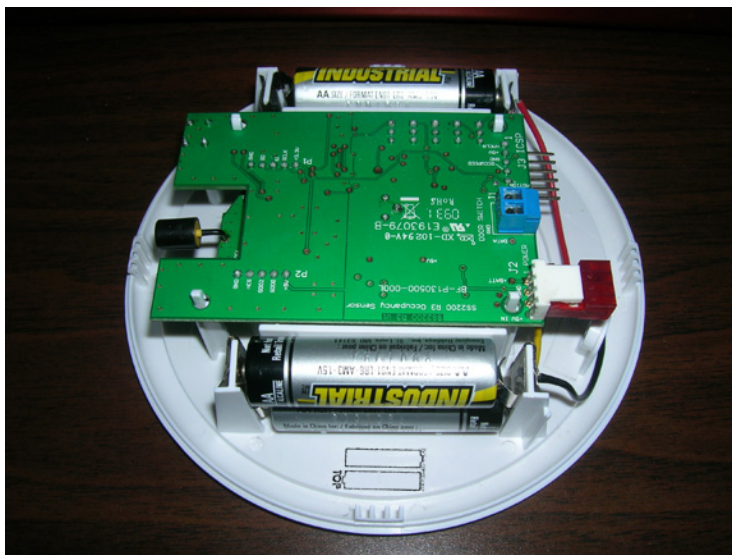
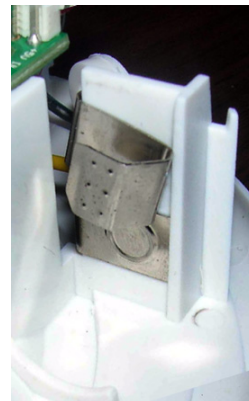
# Remove the Failed or Vandalized Sensor

- Remove the main body of the Sensor from the ceiling mounted base by turning it counter-clockwise.



# Insert Batteries

- Make sure batteries align according to the images in the casing. The “curved” metal pieces of the battery clips should be touching the “flat” end of the batteries as shown below.



# Connect New Sensor to the Base

- Re-attach the main body of the Sensor to the ceiling mounted base by aligning the slots with the tabs. Hold base plate in place and turn clockwise until it snaps into place. If it doesn't line up, spin the sensor  $\frac{1}{4}$  turn and try again. Be sure the security screw is aligned on both sides.



# After the Sensor is Installed



- After you install the sensor you must link the sensor to the thermostat. Proceed to LINK THE SENSOR TO THE THERMOSTAT section.





# Installing a New Thermostat

# Thermostat Installation Steps - Overview

1. Unlock thermostat

2. Remove failed or  
vandalized  
thermostat

3. Attach new  
thermostat to base  
plate

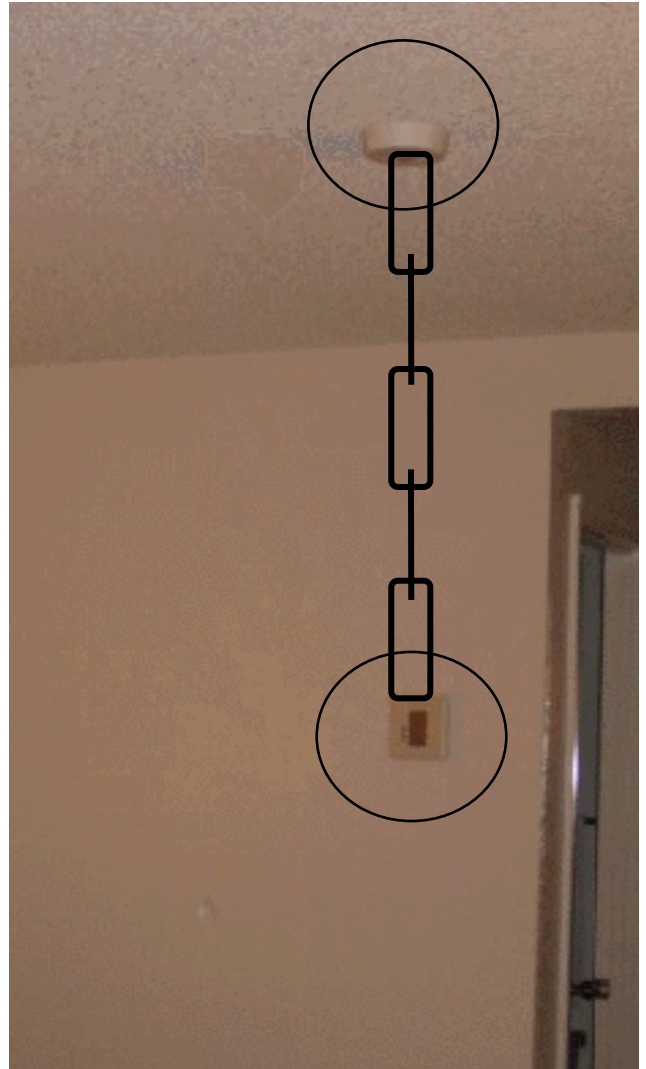
4. Link sensor to  
thermostat.

5. Lock buttons

6. Lock down  
thermostat cover

# Important Note About Installing a New Thermostat

- Units are linked using a wireless signal.
- Never move a sensor to another room.
  - It will not work in the new room until you **establish a new communication link** between the new sensor and the thermostat.
  - Procedures for this are in the LINK THE SENSOR TO THE THERMOSTAT section.



# Unlock the Thermostat

- Unlock the thermostat cover by removing the screw with the appropriate tool. Screw is located at the bottom of the cover.



# Remove Failed or Vandalized Thermostat

- Remove the front of the thermostat from the base plate by inserting a small screwdriver in the seam as shown. The front should lift off. Leave the base plate mounted to the wall.



# Attach New Thermostat to Base Plate

- Press the new thermostat body onto the base plate, attaching the top first.



Wait a few seconds, the temperature should appear.

# After the Thermostat is Installed



- After you install the thermostat you must link the sensor to it. Proceed to LINK THE SENSOR TO THE THERMOSTAT section.



# Link the Sensor to the Thermostat



Tool needed...a straightened paper clip!



# Unlock the Thermostat

- If not already done, unlock the thermostat cover by removing the screw with the appropriate tool. Screw is located at the bottom of the cover.



# The Hidden Buttons

- The buttons hidden under the thermostat cover are locked to prevent guest tampering or confusion.



- Next you will unlock these buttons
  - The hidden buttons are used to set up a link between the thermostat and the sensor.
  - New thermostat will already have buttons unlocked.

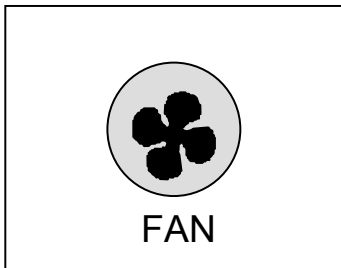
# Pressing the Buttons

- Press the buttons quickly, do not stop.
  - If you are not quick enough, the screen will go back to the normal temperature setting display and you will have to start over.

# Unlock the Buttons

**(NOTE: New Thermostat Will Already Have Unlocked Buttons)**

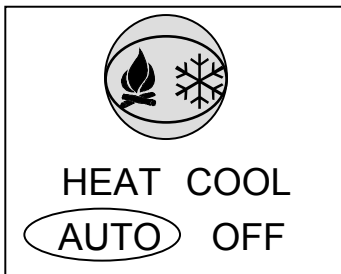
1.



Press and hold.

Press and hold the “FAN” button until it turns on, then off, then on again.

2.



Press once.

Quickly press the HEAT/COOL/AUTO/OFF button once.

3.



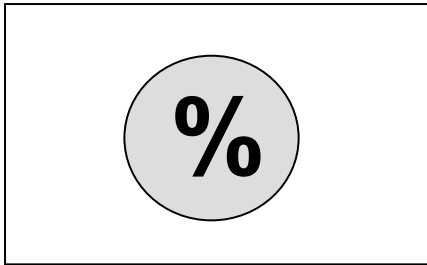
Wait.

All of the symbols should briefly appear.

Then the screen will show “00” for a few seconds. Now press the Fan button again to turn the fan off.

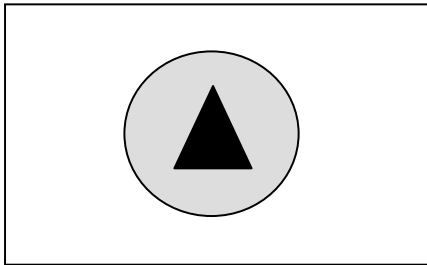
Finally, the screen will revert to the normal display which shows temperature setting. The buttons are now unlocked.

# Erase Old Sensors From Thermostat's Memory



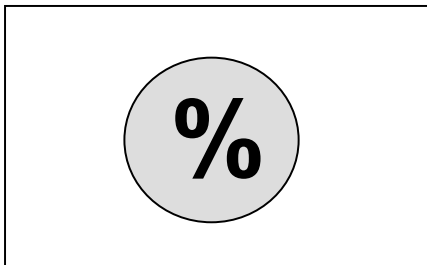
Press three times.

Press the “%” three times in a row, the screen should show “00”.



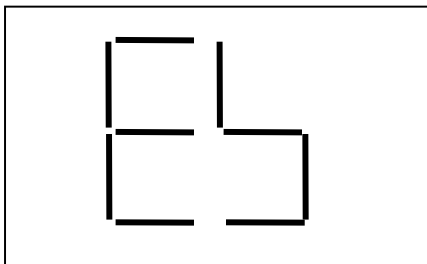
Press to go to “03”.

Press the UP arrow until you reach “03”.



Press once.

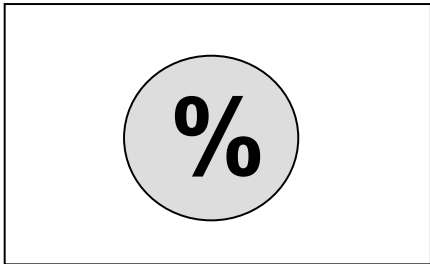
Press “%” once.



Sensors erased. Now press “%” once.

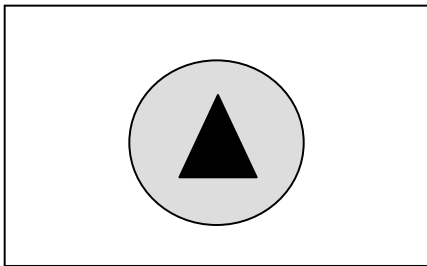
Old sensor is now erased from memory. Screen shows Erased Sensors symbol. Press “%” one more time and wait one minute. Next pages show procedure for linking a new sensor to this thermostat.

# Put the Thermostat into “Learn” Mode



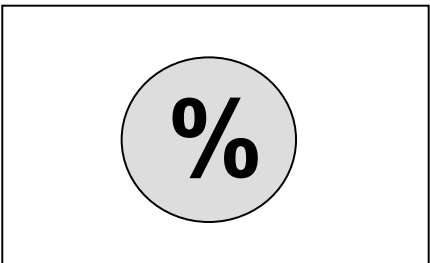
Press three times.

Press the “%” three times in a row, the screen should show “00”.



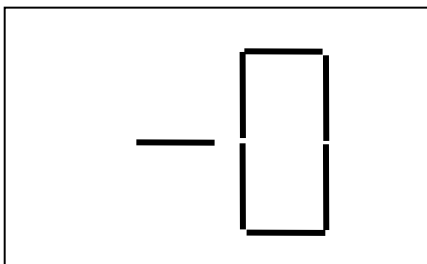
Press to go to “02”.

Press the UP arrow until you reach “02”.



Press once.

Press “%” once.

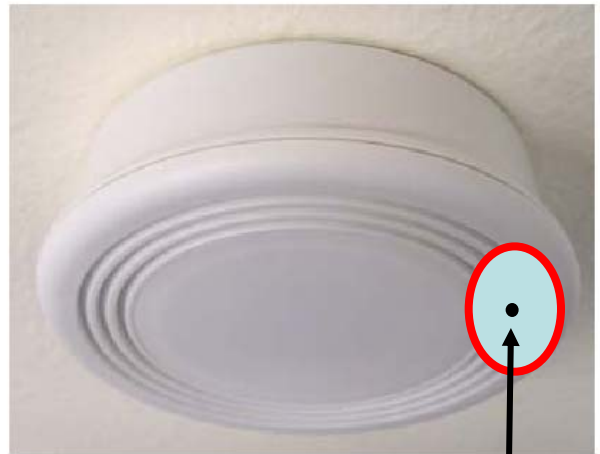


Screen shows ready to learn.

The screen should now show “-0”. This means the thermostat is now in “Learn” mode and ready to learn the sensor.

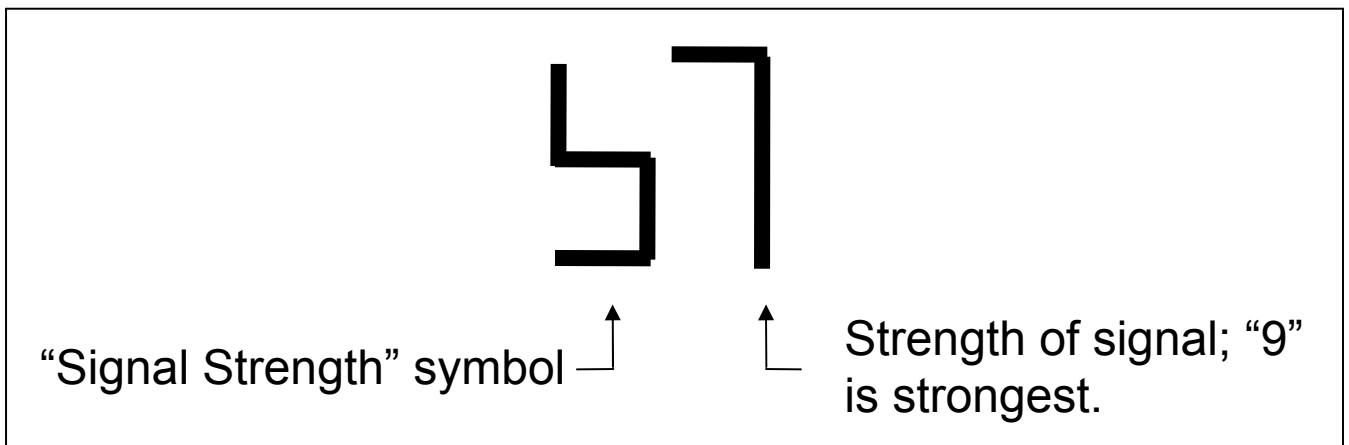
# Establish Radio Link

- Insert a straightened paper clip into the small hole on the face of the ceiling-mounted sensor.
- Push lightly – you will feel a small switch inside the sensor when you press it.



# Check the Signal Strength

- Look at the thermostat. It should now display a symbol and a signal strength number. The number displayed indicates the strength of the signal. Signal should be “2” or higher.
- It should look something like this:

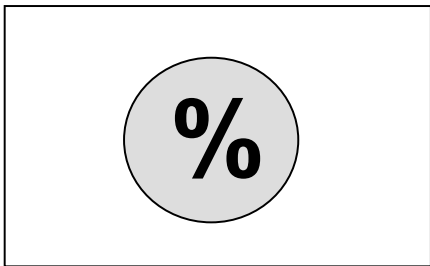


- Now press “%” and wait for the screen to revert to the normal temperature setting display.



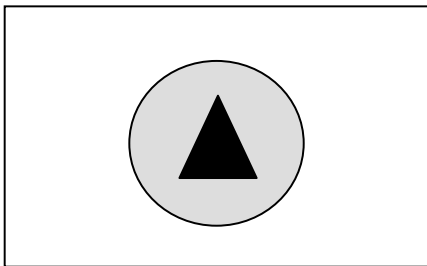
# Double Check Radio Link

To be sure the thermostat has learned this sensor, check the number of sensors in the thermostat's memory:



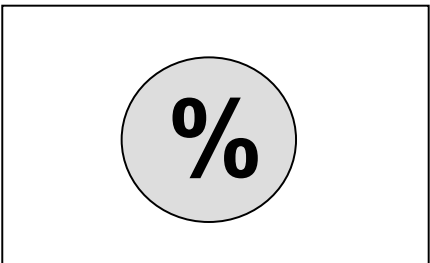
Press three times.

Press the “%” three times in a row, the screen should show “00”.



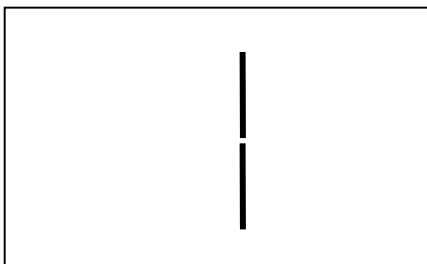
Press to go to “04”.

Press the UP arrow until you reach “04”.



Press once.

Press “%” once.



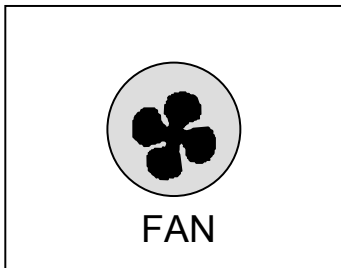
Screen shows 1 sensor learned.

The screen should now show the number of sensors linked to this thermostat, should be “1”.

After a few seconds, the screen will return to the normal temperature setting display.

# Lock the Buttons

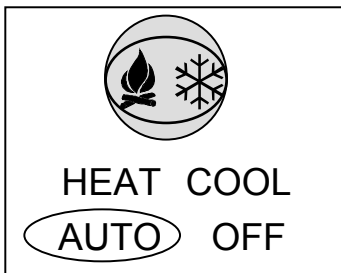
1.



Press and hold.

Press and hold the “FAN” button until it turns on, then off, then on again.

2.



Press once.

Quickly press the HEAT/COOL/AUTO/OFF button once.

Blank Screen

The screen should go blank for a few seconds. Wait.

Wait.



Then the hourglass and % will flash for a few seconds. Wait.

Finally, the screen will revert to the normal display which shows temperature setting. The buttons are now locked.

# Lock the Thermostat Cover

- Lock the thermostat cover by replacing the screw with the appropriate tool.



# Troubleshooting

## IMPORTANT!

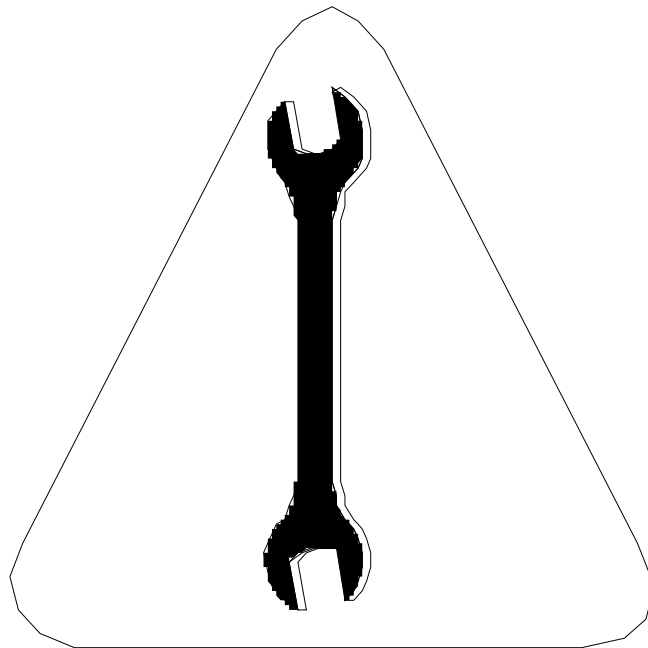
If there is a problem with a sensor or thermostat, it must be fixed immediately. If it is not fixed right away your property may be wasting valuable energy.

# Equipment Maintenance

- All air conditioning/heating equipment must be maintained according to the manufacturer's recommendations
- If an air conditioning/heating unit stops working, it must be repaired or replaced immediately

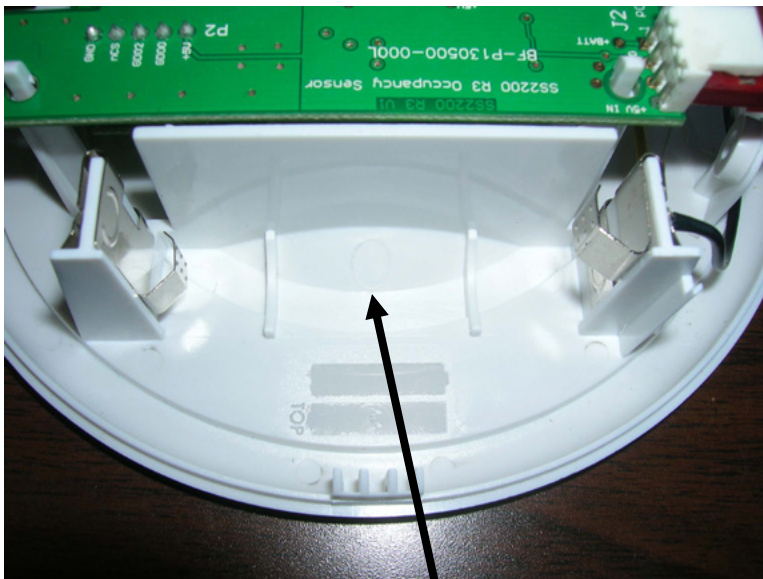
# What Does the Flashing Wrench Mean?

- What does it mean when this symbol is flashing on the screen?



# Low Batteries?

- Most of the time, a flashing wrench means the batteries are low or missing.
- Check the batteries
  - Has someone removed the batteries?
  - Are the batteries in backwards?
  - Is there one or more dead batteries?
  - Are the batteries making contact with the metal?



Missing batteries

# Flashing Wrench Problem Solved

- Twenty-four hours later, double-check that the service wrench did not reappear
  - If it does, double-check the batteries
  - If the screen still shows the service wrench, the sensor may be defective



## If the Screen Went Completely Blank, Displays an “Inkblot” on the Front or Thermostat Has Been Crushed or Stolen

- Return the thermostat, obtain a new one and install it according to thermostat installation instructions



Inkblot (crushed)

- Re-link the sensor to this new thermostat (see the LINK THE SENSOR TO THE THERMOSTAT SECTION).



Blank screen

# If a Button is “Stuck”

- Press the button in the middle, it should pop out
- If the button does not “unstick”, then send the defective unit back to Smart Systems for replacement



# What if All of the Symbols are Starting to Appear on the Screen?

- If all of the symbols on the thermostat's screen are starting to show through ("ghosting")...
- Return the thermostat to Smart Systems and install a new thermostat.



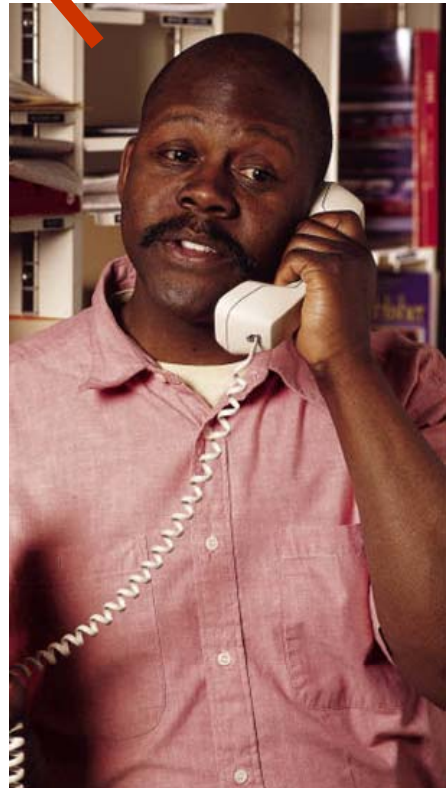
# What if the Thermostat is Clicking Loudly?

- If the thermostat begins to make constant clicking noises, it is defective.
- Return the defective thermostat to Smart Systems, install a new thermostat.



“Click”  
“Click”  
“Click”

# Need Help?



Call Customer Care:

(800) 380-9640

# Product Return Procedures

1. Contact Telkonet SmartEnergy and ask for the Technical Support department.
  - Telephone: (800) 380-9640
  - Email: [rma@ethostream.com](mailto:rma@ethostream.com)
2. Describe the problem to our support technicians and obtain a RMA number.
3. Place the product in a box with proper packaging and send it to Telkonet SmartEnergy. Write the RMA number on the mailing label and box.
4. You may be contacted back in regards to your RMA, or the product will be returned as soon as possible.

Thank you for  
your cooperation.



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