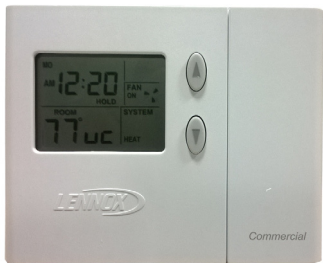




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Dallas, Texas, USA



**THIS MANUAL MUST BE LEFT WITH THE OWNER  
FOR FUTURE REFERENCE**

## Shipping and Packing List

### Shipped with Product

- 1 - Thermostat
- 2 - Plastic Wall Anchors
- 2 - Screws
- 1 - Operation Manual

### Optional Accessories (not included)

- Remote Indoor Sensor: 47W37
- Wall Plate: X2659

## INSTALLATION INSTRUCTION

# C0STAT05FF1L CS3000 Commercial Programmable Thermostat

### CONTROLS

507517-01  
2/2015

## C0STAT05FF1L 5/2 Day Programmable Thermostat

The Lennox ComfortSense® 3000 Series Commercial Programmable Thermostat, Model C0STAT05FF1L (11Y05) is a 5/2 day programmable and 2-heat / 2-cool electronic thermostat. It includes a programmable filter change reminder, an equipment maintenance reminder, and a system check indicator to notify the user when the equipment requires service.

This thermostat is suitable for 2-stage heat / 2-stage cool applications using a gas or electric auxiliary heat source and can also be used with an economizer.



0215

507517-01

The remote indoor sensor when connected and configured will act as a room temperature sensor instead of internal temperature sensor available with the thermostat. The dip switch is used to select either built-in or external remote indoor temperature sensor used for temperature control.

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## IMPORTANT

Read all of the information in this manual before using this thermostat.

All wiring must conform to local and national building and electrical codes and ordinances.

This is a 24VAC low-voltage thermostat. Do not install on voltages higher than 30VAC.

## CAUTION

Do not short (jumper) across terminals on the gas valve or at the system control to test installation. This will damage the thermostat and void the warranty.

## WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life. Installation and service must be performed by a qualified installer, service agency or the gas supplier

## General

These instructions are intended as a general guide and do not supersede local codes in any way. Consult authorities having jurisdiction before installation.

Check equipment for shipping damage. If you find any damage, immediately contact the last carrier.

## Requirements

Be sure that power routed to the thermostat has been powered off before beginning installation.

This thermostat should be used only as described in this manual.

Do not install the thermostat on outside walls (where there is unconditioned space on opposite side of wall) or in locations where direct sunlight may be present.

Install thermostat about 5 feet up from the floor.

## Installation

*NOTE - If this thermostat is replacing an existing thermostat, carefully label the existing thermostat wires so that they can be identified later.*

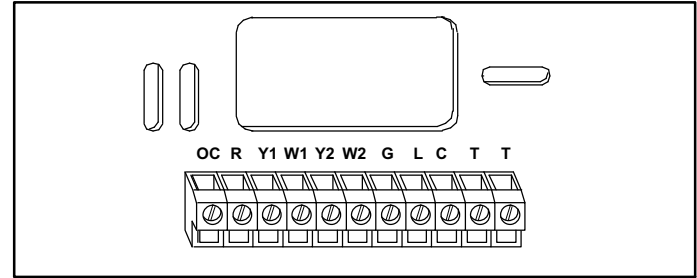
1. If a previously-installed thermostat exists, remove it; if none exists, identify the location for installation (locate, or install wiring as necessary). To facilitate installation, enlarge the hole where the thermostat wires protrude through the wall to about 3/4" wide by 3/4" high.
2. Pull about 3 inches of the thermostat wiring through the wall opening. Strip 1/4" of the insulation from the ends of the thermostat wires.
3. Use a screwdriver to remove the thermostat sub-base from the body. Carefully pry the sub-base away from the body along the bottom edge of the sub-base near the two mounting snaps; then lift the sub-base upward.
4. Use the sub-base as a template to mark the desired mounting hole locations on the wall.
5. Drill two 3/16" holes at the marked locations on the wall. Insert the provided plastic wall anchors provided into the holes. Press the anchors into the holes until anchors are flush with the wall.
6. Align the sub-base over the plastic anchors and secure it to the wall using the provided screws.
7. Use a small slotted screwdriver to secure all wires to the sub-base terminal block. Make thermostat connections as described in table 1.
8. After wiring is complete, thoroughly seal the hole in the wall with a suitable material to prevent unconditioned air in the wall space from entering the thermostat.
9. Set the thermostat DIP switches as required for the application. See table 3 for DIP switch settings.
10. Carefully attach the thermostat body to the sub-base by first engaging the hinges at the top of the unit, then pivoting the body downward until it snaps onto the sub-base.  

The thermostat is now ready for operation. Turn on power to the thermostat and refer to the appropriate *5/2 Programmable Thermostat Operation Manual*.
11. Remove the clear protective film from the face of the thermostat display.

*Note: After this film is removed, some dark streaks or lines may temporarily appear on the display. These are normal and should disappear within a few minutes.*

### Removing Thermostat

The thermostat hinges on tabs on the top of the sub-base. After installation is complete, no tool is needed to remove the thermostat from the sub-base. Pivot the bottom of the thermostat outward (releasing the snaps), then lift up to remove.



**Figure 1. Terminal Strip (11Y05)**

**Table 1. Terminal Designations**

| Terminal | Description                                   |
|----------|---|
| R        | 24VAC   |
| Y1       | Compressor Stage 1 cooling                    |
| W1       | Stage 1 heating                               |
| Y2       | Compressor Stage 2 cooling                    |
| W2       | Stage 2 heating                               |
| G        | Fan   |
| L        | Service indicator                             |
| C        | Common 24VAC                                  |
| T        | Remote Indoor Temperature Sensor connection 1 |
| T        | Remote Indoor Temperature Sensor connection 2 |
| OC       | Occupancy output (economizer)                 |

## DIP Switch Settings

### DIP Switch Settings

This thermostat includes six DIP switches which are located on the back side of the thermostat body. These switches may be used to re-calibrate the thermostat (Cal 1, Cal 2 and Cal±) and to select the internal or remote indoor temperature sensor.

Thermostat includes a DIP switch used to indicate whether electric or gas heat will be used. Also, SSR (Smooth Setback Recovery) can be enabled or disabled. When enabled, this feature provides additional comfort when changing from one program period to the next. If SSR is disabled, the HVAC equipment will respond to a program change at the time the change is set to occur.

However, if SSR is enabled, the HVAC equipment will respond to a program change before the change is set to occur. Refer to table 3 for DIP switch function descriptions.

### Thermostat Calibration

**Cal 1, Cal 2, Cal± DIP switches** may be used to offset or recalibrate the room temperature display. Table 2 provides DIP switch settings and corresponding temperature offset values.

**Table 2. DIP Switch Temperature Offset**

| Cal 1 | Cal 2 | Cal +/- | Temperature Offset |
|-------|-------|---------|--------------------|
| Off   | Off   | Off     | +0°F (no offset)   |
| On    | Off   | Off     | +1°F               |
| Off   | On    | Off     | +2°F               |
| On    | On    | Off     | +3°F               |
| Off   | Off   | On      | -0°F (no offset)   |
| On    | Off   | On      | -1°F               |
| Off   | On    | On      | -2°F               |
| On    | On    | On      | -3°F               |

**Table 3. DIP Switch Function Description**

| <b>ID</b> | <b>Dip switch</b> | <b>Description</b>   | <b>Off</b> | <b>On</b> | <b>Default</b> |
|-----------|-------------------|--|------------|-----------|----------------|
| 1         | Cal 1             | Room temperature offset: 1°F                               | 0°F        | 1°F       | 0°F            |
| 2         | Cal 2             | Room temperature offset: 2°F                               | 0°F        | 2°F       | 0°F            |
| 3         | Cal +/-           | Room temperature offset: Sign                              | Positive   | Negative  | Positive       |
| 4         | Temp Sensor (I/R) | Select Int / Ext (Remote) for selecting temperature sensor | Internal   | Remote    | Internal       |
| 5         | Fan option (E/G)  | Select electric (E) or gas (G) heating fan operation       | G          | E         | G              |
| 6         | SSR               | Enable or disable Smooth Setback Recovery                  | Disable    | Enable    | Disable        |