





15. **Status Indicator Light** (Led 0, 1, 2)

0 = Status indicator never on  
1 = Status indicator on with first stage  
2 = Status indicator on with second stage  
Press the **up** or **down** button to select.

Press the **CONFIG** button for 2 seconds to exit configuration.
- Led

1

### Mode of Operation

- The **SC5811** is a programmable, manual or auto changeover, 2-stage heat, 2-stage cool thermostat. It functions with air conditioning, heat pumps, gas, oil or electric heat systems. An outdoor sensor can be used to monitor the outdoor temperature.
- The thermostat activates the heating appliance when the room temperature is below the set heat temperature (by the differential temperature) and the red indicator light (configurable) on the thermostat will light. The **SC5811** will stop outputting and the red light will turn off when the call for heat has been satisfied. With heat pumps, the thermostat will not let the compressor come on for 4 minutes after it turns off. This protects your compressor.
- When the room temperature is greater than the set cool temperature (by the differential temperature), the cooling device is activated and the green indicator light (configurable) on the thermostat will turn on. The **SC5811** will stop outputting and the green light will turn off when the call for cooling is satisfied. The thermostat will not let the compressor come on for 4 minutes after it turns off. This protects your compressor.
- The **SC5811** has five possible operating modes: **OFF**, **Heat**, **Cool**, **Heat & Cool**, and **Program** mode. In off mode, the thermostat will not turn on heating or cooling devices. The manual fan can be turned on in all operating modes using the fan button. In heat mode, the thermostat controls the heating system. In the cool mode, the thermostat controls the cooling system. In heat & cool mode, the thermostat controls both the heating and cooling systems. In program mode, the thermostat will automatically be controlled by the set program. Program mode can function with heat mode, cool mode, or heat & cool mode. The clock display alternates with the set temperature display for heat & cool mode.
- The program schedule can be overridden by changing the set temperature (up or down button). This puts the **SC5811** thermostat into a 2-hour temporary hold. After 2 hours, it will automatically return to the program schedule.
- The programmable fan feature can be used to recirculate air while in **Program** mode. It is activated during the program schedule set up.
- The **SC5811** also has a button lockout feature. This enables the thermostat to be set to the proper mode and temperature and locked so it cannot be tampered with.
- Button Functions**

**UP** – Used to increase the time, set temperatures and to adjust configuration settings.

**DOWN** – Used to decrease the time, set temperatures and to adjust configuration settings.

**SYS (left)** – Used to change from OFF, HEAT, EMERGENCY HEAT, COOL and AUTO changeover modes

**FAN (right)** – Used to turn on and off the indoor fan.

**PROG (SYS and FAN)** – Used to change from program operation to manual operation.

**UP and PROG** – Held in simultaneously for 10 seconds to lock and unlock the thermostat.

**DOWN and SYS** – Pressed simultaneously to display outdoor remote temperature if remote sensor is connected.

Up button

Down button

FAN button

PROG button

SYS (left)

(right)

**Operating Modes**

There are five possible operating modes for the **SC5811**. Off, Cool, Heat, and Cool & Heat modes are accessed by pressing the **SYS** (left) button. Program mode is accessed by pressing the **SYS** (left) and **FAN** (right) buttons simultaneously.

**OFF Mode**

- In this mode, the thermostat will not turn on the heating or cooling devices
  - Note:** *The indoor fan can be turned on manually in every operating mode by pressing the **FAN** (right) button. The word **FAN** shows on the display and the fan icon appears when the fan operates.*

**Heat Mode**

- In this mode, the thermostat controls the heating system. When the heat outputs, the flame icon appears on the display.
  - Note:** *For heat pumps, there is a four minute delay for your compressor to restart after it has turned off. To bypass the compressor time delay, go to OFF mode for 5 seconds.*

**Emergency Heat Mode (Heat pump systems only)**

- In emergency heat mode, the heat pump system will be disabled and auxiliary heat will become the primary source of heat.

**Cool Mode**

- In this mode, the thermostat controls the cooling system. When the cooling outputs, the snowflake icon appears on the display.
  - Note:** *There is a four minute delay for your compressor to restart after it has turned off. To bypass the compressor time delay, go to OFF mode for 5 seconds.*

**Cool and Heat Mode (Auto Changeover)**

- In this mode, the thermostat controls the cooling and heating systems, automatically changing over from one to the other as needed.
  - The timing display alternates with the set temperature every 10 seconds in the cool and heat mode.

**Program Mode**

- In this mode, the program function is on (PROG displays), and the thermostat will automatically be controlled by the set program schedule. Program mode can function with heat mode, cool mode, or heat & cool mode. The program schedule can be overridden by changing the set temperature (up or down button). After 2 hours, the program schedule will automatically be resumed. To manually return to the program schedule, press the PROG button twice.

**Testing the Thermostat**

Once the thermostat is configured, it should be thoroughly tested.

**CAUTION:** *Do not energize the air conditioning system when the outdoor temperature is below 50 degrees. It can result in equipment damage or personal injury.*

**Heat Test**

- Press **SYS** (left) button until heat mode is displayed.
  - Adjust the set temperature so it is 5 degrees above the room temperature.
  - Heat should come on within a few seconds. Red LED may turn on.
  - Adjust the set temperature 2 degrees below the room temperature and the heat should turn off. There may be a fan delay on your system.

**Note:** *For heat pumps, there is a four-minute delay to protect your compressor after it turns off. To bypass the compressor time delay, go to OFF mode for 5 seconds.*

**Cool Test**

- Press **SYS** (left) button until cool mode is displayed.
  - Adjust set temperature so it is 5 degrees below room temperature.
  - A/C should come on within a few seconds. Green LED may turn ON.
  - Adjust the set temperature 2 degrees above the room temperature and the A/C should turn off. There may be a fan delay on your system.

**Note:** *There is a four-minute time delay to protect the compressor after it turns off. To bypass the compressor time delay, go to OFF mode for 5 seconds.*

**Fan Test**

- Press **FAN** (right) button. Fan displays. Indoor fan turns ON.
  - Press **FAN** (right) button. Indoor fan turns OFF.

**Setting the Time and Day of the Week**

The time and day of the week must be set for your program schedule to operate correctly.

- Press the **SYS** (left) button until you are in the OFF mode.
  - Press and hold the **PROG** button (**SYS** (left) and **FAN** (right) buttons pressed simultaneously) in for 6 seconds.
  - Time displays (hour flashing).  
Press the **up** or **down** button to adjust the hour.
  - Press the **FAN** (right) button once to select minutes (minutes flashing).  
Press the **up** or **down** button to adjust the minutes.
  - Press the **FAN** (right) button once to select day of the week (TODAY flashing).  
Press the **up** or **down** button to select current day of the week.

**Note:** At any time, press the **SYS** (left) button to return to the previous screen or press the **FAN** (right) button to advance to the next screen.

Press the **PROG** button in for 2 seconds to lock values into memory and return to the OFF mode or press the **FAN** (right) button once to enter programming.

**Programming**

**Program Overview**

The **SC5811** programmable thermostat has four periods (MORN, DAY, EVE, NITE) that are customizable for each day of the week. Each period will have a start time, heat temperature, cool temperature and programmable fan option. The **SC5811** monitors the day and time, while maintaining the specific conditions you have chosen for each period in your program.

Setting the program schedule:

- Press the **SYS** (left) button until you are in **OFF** mode.
  - Press and hold the **PROG** button (**SYS** and **FAN** buttons pressed simultaneously) for 6 seconds.
  - Press the **FAN** (right) button 3 times.
  - SUN thru SAT are blinking.

From this screen you have 2 options:

- Press the **FAN** (right) button to begin programming all 7 days at one time, or
  - Press the up button to see the other programming options.

**Note:** The days of the week shown on the display will be programmed simultaneously. The screens are listed below.

Screen 1	SUN	MON	TUE	WED	THU	FRI	SAT
Screen 2		MON	TUE	WED	THU	FRI	
Screen 3		MON					
Screen 4			TUE				
Screen 5				WED			
Screen 6					THU		
Screen 7						FRI	
Screen 8	SUN						SAT
Screen 9							SAT
Screen 10	SUN						

From any of the screens on above, you can press the **FAN** (right) button to begin entering your program schedule. The days shown on the display will all be programmed simultaneously.

Once the **FAN** (right) button is pressed, **MORN** blinks. Use the **up** or **down** button to select a different period (**MORN**, **DAY**, **EVE**, **NITE**).

Press **FAN** (right) button to advance to the next screen. Transition time **hour** blinks. Use the **up** or **down** button to select a different hour.

Press **FAN** (right) button to advance to the next screen. Transition time **minutes** blink. Use the **up** or **down** button to select different minutes.

Press **FAN** (right) button to advance to the next screen. **Heat set temperature** displays. Use the **up** or **down** button to adjust the heat set temperature.

Press **FAN** (right) button to advance to the next screen. **Cool set temperature** displays. Use the **up** or **down** button to adjust the cool set temperature.

Press **FAN** (right) button to advance to the next screen. **Programmable fan** screen displays. Use the **up** or **down** button to select:

Choose: **Off** – Programmable fan disabled >OR< **On** – Indoor fan on continuously

**Note:** Programmable fan operates in Program mode only.

Repeat above steps to program the four periods per day.

When the program schedule is complete, press and hold the **PROG** button (**SYS** and **FAN** buttons pressed simultaneously) in for 2 seconds to return to the **OFF** mode.

**Lockout Feature**

The **SC5811** has a button lockout feature so the mode cannot be changed and the temperature adjustment is limited. Select the appropriate lockout from Configuration Mode Settings (Step 8) of this guide.

To activate the LOCK feature:

- Simultaneously press the **SYS**, **FAN** and **UP** buttons for 10 seconds.
  - Ⓐ will display and the lockout function will be enabled.

To deactivate the LOCK feature, repeat steps 1 and 2 above.

**Factory Preprogramming**

The **SC5811** comes preprogrammed with the following schedule:

<b>MONDAY thru SUNDAY</b>	<b>MORN</b> HEAT 70°F COOL 78°F FAN Off	<b>DAY</b> HEAT 62°F COOL 85°F FAN Off	<b>EVE</b> HEAT 70°F COOL 78°F FAN Off	<b>NITE</b> HEAT 62°F COOL 82°F FAN Off
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**Personal Program Schedule**

Use the following personal program schedule to record your settings:

<b>MONDAY 1</b>	<b>MORN</b> HEAT COOL FAN	<b>DAY</b> HEAT COOL FAN	<b>EVE</b> HEAT COOL FAN	<b>NITE</b> HEAT COOL FAN
<b>TUESDAY 2</b>	<b>MORN</b> HEAT COOL FAN	<b>DAY</b> HEAT COOL FAN	<b>EVE</b> HEAT COOL FAN	<b>NITE</b> HEAT COOL FAN
<b>WEDNESDAY 3</b>	<b>MORN</b> HEAT COOL FAN	<b>DAY</b> HEAT COOL FAN	<b>EVE</b> HEAT COOL FAN	<b>NITE</b> HEAT COOL FAN
<b>THURSDAY 4</b>	<b>MORN</b> HEAT COOL FAN	<b>DAY</b> HEAT COOL FAN	<b>EVE</b> HEAT COOL FAN	<b>NITE</b> HEAT COOL FAN
<b>FRIDAY 5</b>	<b>MORN</b> HEAT COOL FAN	<b>DAY</b> HEAT COOL FAN	<b>EVE</b> HEAT COOL FAN	<b>NITE</b> HEAT COOL FAN
<b>SATURDAY 6</b>	<b>MORN</b> HEAT COOL FAN	<b>DAY</b> HEAT COOL FAN	<b>EVE</b> HEAT COOL FAN	<b>NITE</b> HEAT COOL FAN
<b>SUNDAY 7</b>	<b>MORN</b> HEAT COOL FAN	<b>DAY</b> HEAT COOL FAN	<b>EVE</b> HEAT COOL FAN	<b>NITE</b> HEAT COOL FAN

**SimpleSet™ Field Programming**

**Requires SimpleSet™ Transfer Cable (ACC-WIH21)**

This feature is used for transferring configuration and program schedule from the master to the target thermostat. All thermostats for a job can be mounted and powered up. Configure and program one thermostat. This will be the master. The master will be used to copy the program to the rest of the thermostats.

**Preparing the master to Send:**
  - The master must be powered with 24 VAC.
  - Verify the master thermostat is in **OFF** mode.
  - Press **SYS** (left) button until **OFF** mode displays.
  - Remove cover of the master thermostat by gently pulling near one of the corners at the top of the thermostat.
  - Press the **up** and **down** buttons and **CONFIG** switch simultaneously for 5 seconds.
  - The **OUT** screen displays indicating the master thermostat is ready to transfer data.
  - Turn off power to the master and remove it from the wall.
  - Connect the master to the target using the 3 wire connector. Attach one end to the Master's FP pins and the other end to the Target's FP pins.

**Note:** *Press the up and down buttons and CONFIG switch simultaneously for 5 seconds to exit from data transfer mode and to return the master to the OFF mode.*

**Note:** *Target thermostat must be powered with 24 VAC for field programming to occur.*

When the connection has been made correctly, the master thermostat will power up and the target will count from 5 down to 1. It will then display the **LOCK** confirming the data has been saved in memory. When all target thermostats have been completed, reinstall the master thermostat. Press the **up** and **down** buttons and the **CONFIG** switch simultaneously for 5 seconds to exit from the data transfer mode and to return the master thermostat to the **OFF** mode.

### Troubleshooting

Symptom	Remedy
No display	Check for 24 VAC at thermostat; display is blank when 24 VAC is not present Time and day of week must be reset after extended power loss
System fan does not come on properly	Verify wiring is correct, check Gas/Electric Configuration (see Setting 6)
All thermostat buttons are inoperative	Verify 24 VAC is present; unit locks out when 24 VAC is not present
No response with first button press	First button press activates backlight only
Program schedule activates at the wrong time	Check time (AM/PM) set on thermostat (see Setting the Time)
Thermostat turns on and off too frequently	Adjust temperature differential (see Configuration Mode Settings 2 & 3)
Thermostat does not follow program	Verify it is operating in program mode (PROG displays); check time (AM/PM); check if in 2 hour program override
Fan runs continuously	Press FAN (right) button to turn fan off
Fan turns on occasionally	Program Mode: fan setting in program schedule Check programmable
Status indicator light not on during call	Turn status indicator function on (see Configuration Mode Setting 15)
Room temperature is not correct	Calibrate thermostat (see Configuration Mode Setting 11) If remote sensor is used, check S1 and S2 terminal connections
Ⓐ displays when any button is pressed	Thermostat has the button lockout function activated (see Lockout Feature and Configuration Mode Setting 8)
Ⓔ on display instead of room temperature	Check for a bad connection at S1 and S2 terminals, if used (see Configuration Mode Setting 13)
Heat or Cool not coming on	Verify wiring is correct, gently pull on each wire to verify there is a good connection at terminal block
Problem not listed above	Press Reset button once*

\* **Reset Button Function:** Time and day are reset, configuration and program settings are unchanged.

### FIVE-YEAR LIMITED WARRANTY

The Seller warrants its products against defects in material or workmanship for a period of five (5) years from the date of manufacture. The liability of the Seller is limited, at its option, to repair, replace or issue a non-case credit for the purchase prices of the goods which are provided to be defective. The warranty and remedies set forth herein do not apply to any goods or parts thereof which have been subjected to misuse including any use or application in violation of the Seller's instructions, neglect, tampering, improper storage, incorrect installation or servicing not performed by the Seller. In order to permit the Seller to properly administer the warranty, the Buyer shall: 1) Notify the Seller promptly of any claim, submitting date code information or any other pertinent data as requested by the Seller. 2) Permit the Seller to inspect and test the product claimed to be defective. Items claimed to be defective and are determined by Seller to be non-defective are subject to a \$30.00 per hour inspection fee. This warranty constitutes the Seller's sole liability hereunder and is in lieu of any other warranty expressed, implied or statutory. Unless otherwise stated in writing, Seller makes no warranty that the goods depicted or described herein are fit for any particular purpose.

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