

Commercial Smart Wi-Fi Thermostat

PSP4271C Up to 4-heat / 2-cool with Humidity Control
OPTIONAL Wi-Fi and Local API with module

Read all instructions before proceeding.

Store this manual for future reference



CAUTION

Follow the [Installation Instructions](#) before proceeding. Set the thermostat mode to “OFF” prior to changing settings in setup or restoring Factory Defaults.

FCC Compliance Statement

This equipment has been tested and found to comply with the limits for an intentional radiator, pursuant to Part 15, subpart C of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference in radio communications. However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that of the receiver.
- Consult the dealer or an experienced radio or TV technician for help.

Notice: Only peripherals complying with FCC limits may be attached to this equipment. Operation with noncompliant peripherals or peripherals not recommended by **ProStat+™**, is likely to result in interference to radio and TV reception. Changes or modifications to the product, not expressly approved by **ProStat+** could void the user's authority to operate the equipment.

FCC - INDOOR Mobile Radio Information:

To comply with FCC/IC RF exposure limits for general population / uncontrolled exposure, the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

This Device complies with Industry Canada License-exempt RSS standard(s). Operation is subject to the following two conditions: 1) this device may not cause interference, and 2) this device must accept any interference, including interference that may cause undesired operation of the device.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Cet appareil est conforme avec Industrie Canada, exempts de licence standard RSS(s). Son fonctionnement est soumis aux deux conditions suivantes: 1) ce dispositif ne doit pas causer d'interférences, et 2) ce dispositif doit accepter toute interférence, y compris les interférences qui peuvent causer un mauvais fonctionnement de l'appareil.

En vertu des règlements d'Industrie Canada, cet émetteur de radio ne peut fonctionner en utilisant une antenne d'un type et maximale (ou moins) Gain approuvé pour l'émetteur par Industrie Canada. Pour réduire les interférences radio potentielles aux autres utilisateurs, le type d'antenne et son gain doivent être choisis afin que la puissance isotrope rayonnée équivalente (PIRE) ne est pas plus de ce qui est nécessaire pour une communication réussie.

We, **ProStat+**, declare under our sole responsibility that the device to which this declaration relates: Complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This thermostat has the ability to receive updates to its firmware. Periodically firmware updates are released by the manufacturer to add features and/or performance enhancements. This manual was produced reflecting the most current firmware/feature set at the time of publication, firmware rev. 1.0. Firmware releases after rev. 1.0 may not be adequately depicted in this manual. Please refer to the appropriate website or contact your place of purchase to learn about changes to the thermostat after firmware release 1.0.



Innovation, Science and Economic Development Canada
ICES-003 Compliance Label: CAN ICES-3 (B)/NM8-3(B)

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IMPORTANT

Follow Installation Instructions carefully. Disconnect Power to the Heater/Air Conditioner before removing the old thermostat and installing the new thermostat.

Congratulations and thank you for purchasing your new **ProStat+** Smart Wi-Fi thermostat. This guide is intended to help you install and setup the basic features of your thermostat.

Features

- Choose 7-Day, 5/1/1 day or 1-Day Programming
- 365-Day Holiday Programming (when connected to **ProStat+** Web Portal)
- Smart Fan runs continuous during Occupied; Auto during Unoccupied
- Adjustable deadbands for all stages of heating and cooling
- Adjustable staging timers for all stages of heating and cooling
- Adjustable staging turnoffs: deadband or keep active until setpoint
- Smart recovery auto-adjusts Occ 1 start time
- Random Start ensures staggered equip. starts
- Dry Contact for FDD alerts, condensate alarm, etc.
- Setpoint Limiting
- Outdoor sensor ready with Hi/Low readouts for the day
- Choice of English, Spanish or French for Scrolling Display
- CA Title 24 Compliant
- OEM-Branded Equipment Badges Included

Terms

Auto-Changeover: A mode in which the thermostat will turn on the heating or cooling based on room temperature demand.

Cool Setpoint: The warmest temperature that the space should rise to before cooling is turned on (without regard to deadband).

Deadband: The number of degrees the thermostat will wait, once a setpoint has been reached, before energizing heating or cooling.

Differential: The forced temperature difference between the heat setpoint and the cool setpoint.

Heat Setpoint: The coolest temperature that the space should drop to before heating is turned on (without regard to deadband).

Icon: The word or symbol that appears on the thermostat display.

Mode: The current operating condition of the thermostat (i.e. Off, Heat, Cool, Auto, Program On).

Override: During programmed unoccupied periods, pressing the Override button will force the thermostat into occupied settings. During programmed occupied periods, pressing the Override button will force the thermostat into unoccupied settings.

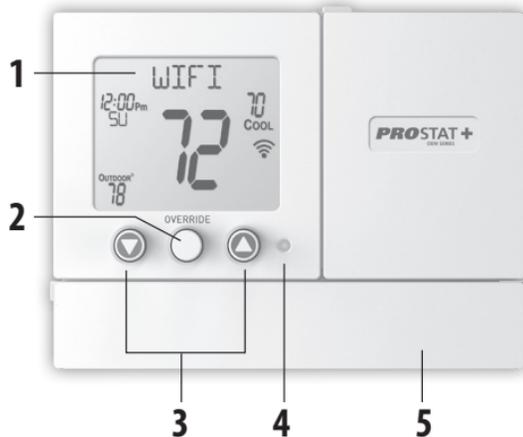
Temperature Swing: Same as Deadband.

Time Period Programming: A program that allows the thermostat to automatically adjust the heat setpoint and/or the cool setpoint based on the time of the day.

1 About Your Thermostat

Front Display

- 1 Backlit, Scrolling LCD Display
- 2 OVERRIDE Button
- 3 Warmer & Cooler Buttons
- 4 Heat or Cool Indicator
- 5 Setup Buttons behind door



**Table for button presses
that are required for
entering various menus**

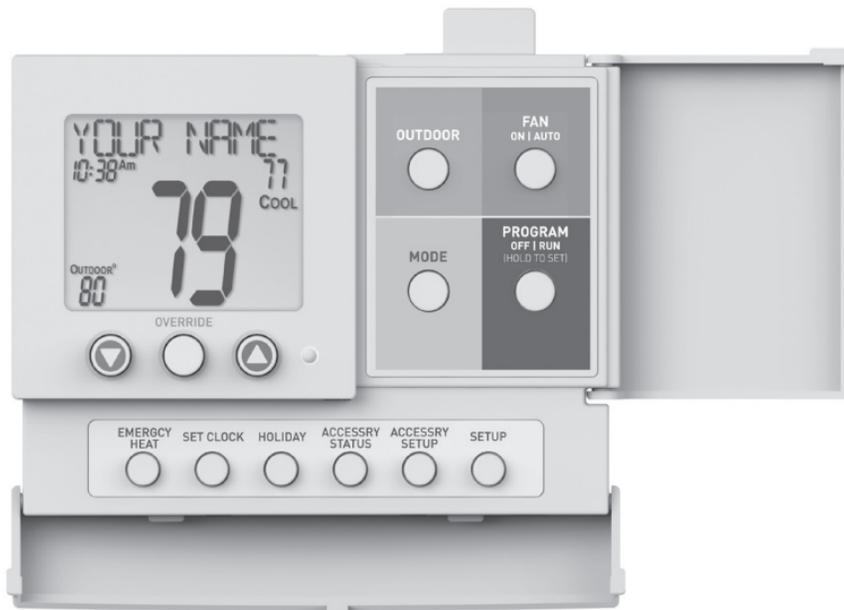
TO ENTER MENU

Setup Steps
Time Schedule
Emergency Heat
Lockout Buttons
Calibration
Wireless Setup

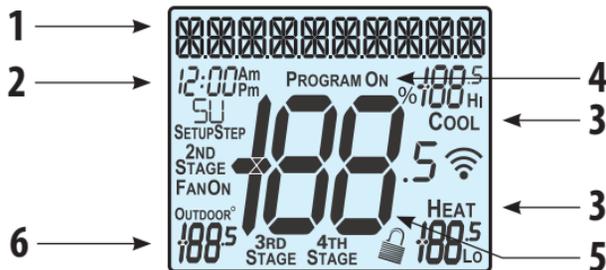
BUTTON PRESS

Press SETUP button
Press SET CLOCK button
Press EMERGENCY HEAT button
MODE, Up & Down for 2 seconds
Press SETUP for 10 seconds
Press ACCESSRY SETUP button

Button Callouts Inside Doors

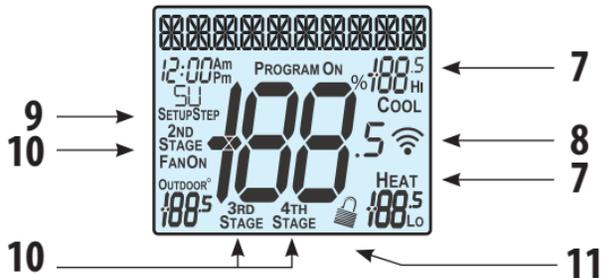


Display Features



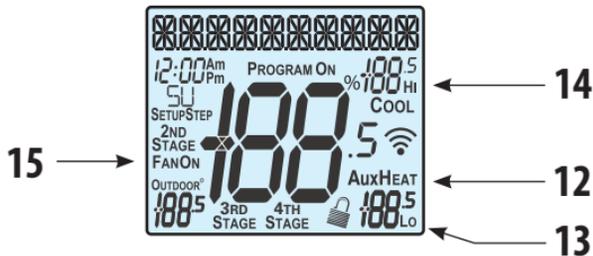
- 1 The **scrolling display** will be used to help you easily navigate the setup screens in the thermostat.
- 2 **Clock with Day of the Week**
Indicates the current time and day. This clock is also used to program the time period schedules.
- 3 **Mode Indicators** Selects the operational mode of the equipment.
HEAT - Indicates the heating mode.
COOL - Indicates the air conditioning mode.
HEAT & COOL - Indicates the system will automatically change-over between heat and cool modes as the temperature varies.
Neither Heat or Cool - Indicates heating and cooling is turned off.
- 4 **Program ON** icon
Indicates that Time Period Programming is running or is enabled to be set.
- 5 **Room Temperature Display**
Indicates the current room temperature and displays the outdoor temperature when selected.
- 6 **Outdoor** icon
Indicates the temperature displayed is from the optional outdoor sensor or the **ProStat+** Web Portal.

Display Features



- 7** **Desired Set Temperature**
Indicates desired room temperature(s). Also displays the highest and lowest temperatures for the day.
- 8** **Wi-Fi icons**
One dot indicates the thermostat recognizes the wireless module. The “full” icon indicates the thermostat is currently connected to the Local access point, via the optional Wi-Fi Module.
- 9** **Setup Step icon**
Indicates the step number when the thermostat is in the setup mode.
- 10** **2nd, 3rd and 4th Stage icons**
Indicates what stage of cooling or heating is currently energized.
- 11**  **icon**
Indicates the keypad has been locked.

Display Features



12 **AuxHeat** icon

Indicates 2nd stage electric strip heat is being used when the thermostat is programmed for Heat Pump operation.

13 **Lo** icon

Indicates the lowest recorded outdoor temperature for the day.*

14 **Hi** icon

Indicates the highest recorded outdoor temperature for the day.*

15 **Fan On** icon

Indicates constant, continuous fan operation. When **Fan On** is not lit - indicates the fan will only operate when necessary to heat or to cool.

** Hi and Lo Temperatures for the day reset at midnight and require an outdoor sensor or **ProStat+** Skyport connectivity.*

2 Basic Operation

During Setup and Programming:

Press the WARMER or COOLER buttons to modify the selection. Press the MODE button to advance and confirm through the setup steps.

Setting the Clock and Day*

**Not available when connected to a ProStat+ Account*

Press the SET CLOCK button. Adjust the clock using the WARMER or COOLER buttons. Press MODE to advance to the day setting. Adjust the day using the WARMER or COOLER buttons. Press the SET CLOCK button to confirm settings.

TIP: To adjust the time by hours press and hold the FAN button while pressing the WARMER or COOLER buttons.



Selecting the Heat or Cool Mode

Select mode by pressing the MODE button.

Heating Only - Only the heating operation will be controlled by the thermostat in this mode.

Cooling Only - Only the cooling operation will be controlled by the thermostat in this mode.

Heating or Cooling (Auto-Changeover) - AUTO will automatically select heat or cool based on room temperature demand.

Neither Heat or Cool (OFF) - OFF indicates heating and cooling is turned off.

Tip : When changing MODE, the new mode will temporarily be shown on the scrolling display

Selecting Your Desired Temperature (adjusting the setpoints)

Auto-Changeover Mode

Pressing the WARMER or COOLER buttons in Auto mode will adjust both the heat and cool setpoints simultaneously. To adjust the heat and cool setpoints individually, choose HEAT mode to adjust the heat setpoint, and COOL mode to adjust the cool setpoint, then return to AUTO mode.



Adjust the desired set temperature with these buttons

Heat or Cool Mode

Pressing the WARMER or COOLER buttons in Heat or Cool mode will adjust only the heat or cool set temperature.

Turning on the Time Period Program

Pressing the **MODE** button should cycle through **OFF**, then the available modes (setup step #2) then Program **ON**. Note that this sequence may be restricted due to step #2 in Setup. The thermostat can be configured to be non-programmable which will keep Program **ON** from appearing in the **MODE** sequence. The thermostat can also be configured to force the program to always be running so the **MODE** button will have no effect.

Using the Fan Button

Fan On indicates constant fan operation. Fan On is not allowed when the thermostat is in the OFF mode. Pressing the FAN button toggles this feature on or off. Fan auto will allow the fan to run only when there is a heat or cool demand.



Using the Override Button

Unoccupied Operation - During programmed, unoccupied periods, pressing the **OVERRIDE** button will force the thermostat into Occupied 1 settings for 30 minutes. Each press of the **OVERRIDE** button will add another 30 minutes of time up to 4 hours.



NOTE: **OVERRIDE** may only be used when the thermostat is set to **PROGRAM ON**.

If the maximum time has been set, the next press of the **OVERRIDE** button will reset the timer and return the thermostat to the correct time period program for the day.

Occupied Operation - During programmed, occupied periods, pressing the **OVERRIDE** button will force the thermostat into an unoccupied period for the rest of the day. During this forced unoccupied period the **OVERRIDE** button will operate as described above

Viewing the Temperature Sensors

OUTDOOR – Press the **Accessory Status** button. If an Outdoor sensor is connected, the reading along with the high and low temperatures for the day will be displayed. The high and low temperatures reset at 12:00 am. If connected to a **ProStat+** Skyport account, the temperatures for your zipcode will be shown unless a wired sensor is connected.



3 Setup Step Table

Step#	Description	Pg#	Range	FD
1	Prog Mode		Non, 1 Day, 5/1/1 Day, 7 Day	7 Day
2	Available Modes		Heat/Cool/Auto/Off, Heat/Cool/Off, Heat/Off, Cool/Off	Heat/Cool/ Auto/Off
3	Backlight		On, Off	Off
4	Backlight Level		Off thru 7 levels of brightness	Level 5
5	Night Dimmer		On/Off	Off
6	Night Dimmer Brightness		Off thru 7 levels of brightness	2 (20%)
7	Night Dimmer Start Time		12A-12A	8:00P
8	Night Dimmer Stop Time		12A-12A	6:00A
9	Current Service Filter Runtime Hours		0-1999 Hours	0
10	Current Service Filter Calendar Days		0-720 Days	0
11	Current Override Hours		0-1999 Hours	0
12	Current UV Lamp Calendar Days		0-720 Days	0
13	Set Service Filter Runtime Hours		0-1950 hours	0
14	Set Service Filter Calendar Days		0-720 Days	0
15	Set UV Lamp Calendar Days		0-720 Days	0
16	Language		English, Espanol, Francais	English
17	Scrolling Method		"L-R Slow, L-R Fast, Word L-R Slow, Word L-R Fast, Whole Word L Slow, Whole Word R Slow, Whl Wrđ Center Fast, Whl Wrđ Center Slow"	"Whole Words Center Fast"
18	Setpoint Limits		0 - 3	0
19	Max Heat Setpoint		35 - 99 Degrees	74
20	Min Cool Setpoint		35 - 99 Degrees	70
21	Cycles Per Hour		No Limit, 2, 3, 4, 5, 6	6
22	Compressor Minimum Off Min.		0, 3, 5 Minutes	5
23	Min. Heat/Cool Setpoint Difference		0 - 6 Degrees	2
24	Number of Heat Stages		0 - 3	2

FD = Factory Default Setting

Installer
Setup Steps
(see Installer
Manual for
more details)

Step#	Description	Pg#	Range	FD
25	Number of Cool Stages		0 - 2	1
26	Number Of Compressor Stages		1, 2	1
27	Number of Aux Stages		0, 1, 2	0
28	1st Stage Deadband		1 - 6 Degrees	2
29	2nd Stage Deadband		0 - 10 Degrees	2
30	3rd Stage Deadband		0 - 10 Degrees	2
31	4th Stage Deadband		0 - 10 Degrees	2
32	Minutes Between 1st and 2nd Stage		0 - 60 Minutes	2
33	Minutes Between 2nd and 3rd Stage		0 - 60 Minutes	2
34	Minutes Between 3rd and 4th Stage		0 - 60 Minutes	2
35	2nd Stage Turnoff Point		Deadband, Setpoint	Deadband
36	3rd Stage Turnoff Point		Deadband, Setpoint	Deadband
37	4th Stage Turnoff Point		Deadband, Setpoint	Deadband
38	Fan Off Delay		0 - 120 Seconds	0
39	F/C		Fahrenheit (F), Celsius (C)	F
40	Comfort Recovery		On, Off	Off
41	Dry Contact Polarity		Open, Closed	Open
42	Dry Contact Use		Condensate Pan, Occupied FDD, Holiday, Doorswitch	
43	Skyport		On, Off	On
44	Local API		On, Off	Off
45	ADR		On, Off	On
46	ADR Action		Observe Setpoint Offset, Observe Static Setpoints	Observe Setpoints Offsets
47	Event Max Cool Setpoint		65 - 99	90
48	Event Min Heat Setpoint		50 - 99	50
49	Static Cool Setpoint		65 - 99	82
50	Static Heat Setpoint		35 - 99	60
51	Cool Setpoint Offset		1 to 10	4
52	Heat Setpoint Offset		-1 to -10	-4
53	Press Fan To Clear All Messages			

Installer Setup Steps

*(see Installer
Manual for
more details)*

How to Change Settings in the Setup Screens

To enter Setup screens, press the **SETUP** button, then press **MODE**. Use the WARMER or COOLER buttons to adjust the value of your selection. Press **MODE** to advance to the next setup step. Press **SETUP** again to leave the setup screens.



Time Period Programming

Selecting Your Time Period Schedule (setup step 1) : Press the Setup button

This thermostat may be configured to be programmable or non programmable.

7 Day Program - Allows all seven days to be programmed independently.

Non Program - No advanced time period programming available.

1 Day Program - Allows one 24 hour day to be programmed. This same schedule will be repeated every day the program is set to run.

5/1/1 Day Program - Allows weekdays, Saturday, and Sunday to be programmed independently.

Selecting Your Available Modes (setup step 2)

Auto-Changeover - Allows the thermostat to turn on heating or cooling based on room temperature demand. Also allows the manual selection of HEAT only or COOL only and OFF.

Heat and Cool - Allows the thermostat to turn on heating or cooling depending on which one has been manually selected. Auto-Changeover is not available when this is selected.

Heat Only - Allows the thermostat to only turn on HEAT or OFF modes.

Cool Only - Allows the thermostat to only turn on COOL or OFF modes.

continued next page

Programming a Daily Time Period Schedule

To enable (RUN) or turn ON the Time Period Schedule press the Program button momentarily.

To turn Off the Time Period Schedule press this button again.

To alter the Time Period Schedule settings; press & hold this button for 5 seconds until the SET PROGRAM prompt appears. Modify the settings with the Warmer and Cooler buttons. Use the **MODE** button to advance through the steps. Press the Program button again to leave the setup screens.



Once the Set Program prompt appears the Mode button will step you through the settings as follows:

Set the Unoccupied Mode – Press the Warmer or Cooler buttons to choose the mode for the Unoccupied period. The thermostat is in Unoccupied when the Time Period Schedule is running and there is not an active Occupied period. The choices are: Off, Heat only, Cool only and AUTO changeover.

Adjust the Unoccupied Cool Setpoint – Press the Warmer or Cooler buttons to adjust the Cooling setpoint for times when the thermostat is in Unoccupied.

Adjust the Unoccupied Heat Setpoint – Press the Warmer or Cooler buttons to adjust the Heating setpoint for times when the thermostat is in Unoccupied.

Select the number of Occupied time periods – Press the Warmer or Cooler buttons to choose the maximum number (up to 3 maximum) of Occupied time periods in a day.

Select the Mode for the Occupied period – Press the Warmer or Cooler buttons to choose the mode for the occupied period. The choices are: Off, Heat only, Cool only and AUTO changeover.

Adjust the Occupied Cool Setpoint – Press the Warmer or Cooler buttons to adjust the Cooling setpoint for comfort.

Adjust the Occupied Heat Setpoint – Press the Warmer or Cooler buttons to adjust the Heating setpoint for comfort.

The following steps determine when the Occupied period(s) will be active.

Enable Occupied 1 – Press the Warmer or Cooler buttons to enable (On) or to disable (Off) Occupied 1 on Monday.

Adjust the Start Time for Occupied 1 – Press the Warmer or Cooler buttons to adjust the start time for Occupied 1 on Monday.

Adjust the Stop Time for Occupied 1 – Press the Warmer or Cooler buttons to adjust the stop time for Occupied 1 on Monday.

Upon pressing Mode after the above step; you will be prompted to Save and Exit or Copy this Occupied schedule to another day.

- **To save and exit** – Press the Program button.
- **To Copy Monday's settings/schedule to Tuesday** – Press Up and then Mode. Press Mode again to copy the Monday settings/schedule to subsequent days.
- **To Program Another Day** – Press Down and then press the Mode button to select the day to program. Repeat the above steps for each day you would like to program.

Backlight (Setup Steps 3-8): Press Setup and then Mode over and over to advance to step #3

Backlight (Setup Step 3)

Off - Backlight turns on only with a button press and turns off after 8 seconds.

On - Backlight is on continuously.

Backlight Intensity Level (Setup Step 4) - The backlight can be adjusted between Off and seven levels of brightness

Night Dimmer (setup step 5) - Selecting On allows for automatic dimming of the display at night.

Night Dimmer Brightness (setup step 6) - Off through seven levels of brightness

Night Dimmer Start Time (setup step 7)

Night Dimmer Stop Time (setup step 8)

4 Advanced Features & Operation

Emergency Heat

Only available if you have a Heat Pump installed. To initiate the Emergency Heat feature, press the EMERGENCY HEAT button. During Emergency Heat operation the thermostat will turn on the fan and auxiliary stages of heat when there is a demand for heat. The 1st stage of heating and all stages of cooling will be unavailable. To exit Emergency Heat, press the EMERGENCY HEAT button.



Please follow the instructions included with the PSPAC-PWF Wi-Fi module to connect to an Access Point or view status. The general instructions are below.

Wi-Fi Module

If the  is present on the display then the thermostat is connected to the Wi-Fi Access Point. If just the “dot” of this icon appears, then just the Wi-Fi module is recognized.

Press the **Accessory Status** button, then press either the Cooler button to view connected Wi-Fi sensors, OR press the Warmer button to view the Wi-Fi status and settings.

Press the **MODE** button to step through the connected sensors or the Wi-Fi status screens listed below.

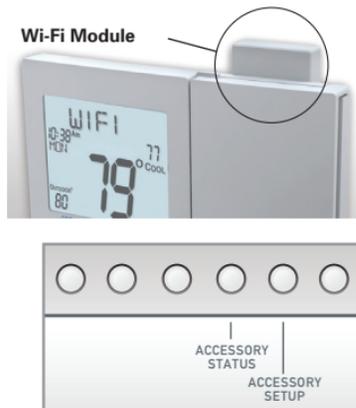
- a. Wi-Fi status (connecting, connected with duration of connection, etc.)
- b. Signal strength
- c. Access point name
- d. IP address
- e. MAC address
- f. **ProStat+** Skyport status (connecting, connected with duration of connection, etc.)
- g. Local API status (Enabled, Disabled)
- h. Module version

At any time press the **Accessory Status** button to leave the status screens.

Press the **Accessory Setup** button to enter Wi-Fi or **ProStat+** Skyport setup:
Press the Cooler button to configure Wi-Fi settings.

Press the Warmer button to join this thermostat to a **ProStat+** account. If the thermostat is connected to Wi-Fi and the Internet, a Device ID will appear on the scrolling display of the thermostat. You will enter this code to add this thermostat to your **ProStat+** account via a browser or the **ProStat+** mobile app.

Note: To connect to **ProStat+** Skyport, Setup Step #43 must be set to on.

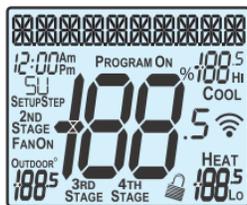


Resetting the thermostat to Factory Defaults (for default values see Advanced Setup Table)

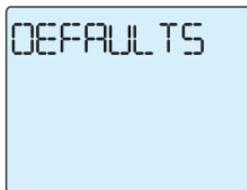
If, for any reason, you desire to return all the stored settings back to the factory default settings, follow the instructions below.

WARNING: This will reset all Time Period and Advanced Programming to the default settings. Any information entered prior to this reset will be permanently lost.

- 1 Press and hold **SETUP** for 10 seconds. All icons will appear on the display. Keep pressing the **SETUP** button until you see this screen.



- 2 After all the icons appear, release **SETUP**. Press and hold **FAN** for 5 seconds. **DEFAULTS** will appear on the display. Keep Pressing the **FAN** button until you see this screen.



- 3 After **DEFAULTS** appears, release **FAN**. Press **SETUP** to return to normal operation.



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PROSTAT™+
OEM SERIES

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