

PRO
Operation Manual

PRO
Operation Manual



T855SH

Pro1 Technologies

P.O. Box 3377

Springfield, MO 65808-3377

Toll Free: 888-776-1427

Web: www.pro1iaq.com

Hours of Operation: M-F 9AM - 6PM Eastern

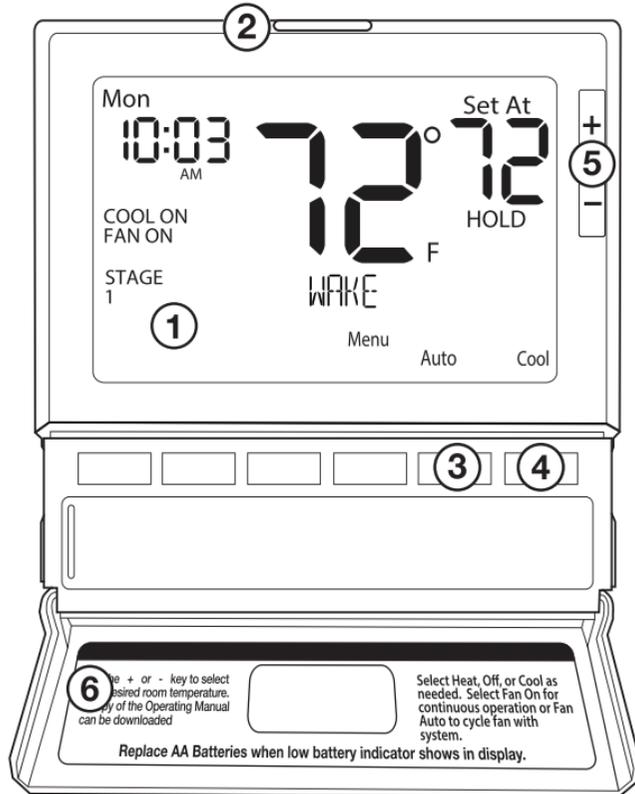
Table of Contents	Page
Table of Contents	1
Thermostat Operation	2-3
Thermostat Quick Reference	4-7
Setting the Humidity	8-11
Programming	12-16
Features	17-20
Warranty Information	21



Caution

Equipment damage hazard. Do not operate the cooling system if the outdoor temperature is below 50 °F (10 °C) to prevent possible compressor damage.

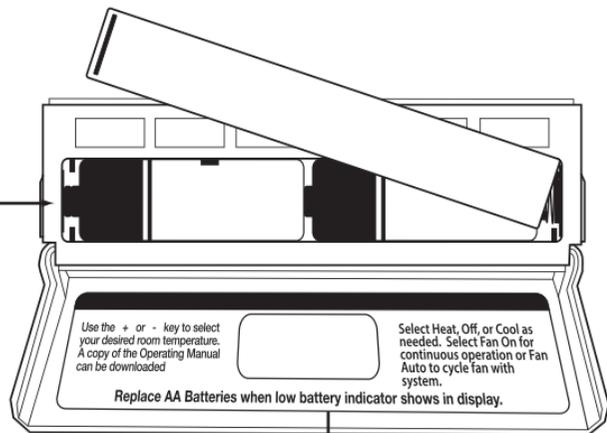
Una version en español de este manual se puede descargar en la pagina web de la compañía.



- 1 LCD Display**
See page 6 for details about this display readout.
- 2 Glow in the dark light button**
The glow in the dark light button will self illuminate for several hours after exposure to ambient light. This button turns on the display light when pressed.
- 3 Fan Button**
Select **ON**, **AUTO** or **IAQ**. The **ON** setting will run the fan continuously. The **AUTO** setting will cycle the fan on only when the heating or cooling system is on. **IAQ** will enable **IAQ FAN MODE**, if selected.
- 4 System Button**
Selects the operation mode on your **HVAC** system. Selecting **HEAT** turns on the heat mode. Selecting **COOL** turns on the cool mode. Selecting **OFF** turns both heating and cooling off. Selecting **AUTO** will turn the **HEAT** or **COOL** on as needed. (**EM HEAT** will appear as an option if operating a heat pump. **EM HEAT** setting will turn on emergency heat)
- 5 Temperature Setpoint Buttons**
Press the **+** or **-** buttons to select the desired room temperature.
- 6 Button / Battery Door**
See page 4 for further information.

Battery Door Information

Replace with 2 AA Alkaline batteries. High quality Alkaline batteries are recommended.



Simple operating instructions are found on the back of the battery door.



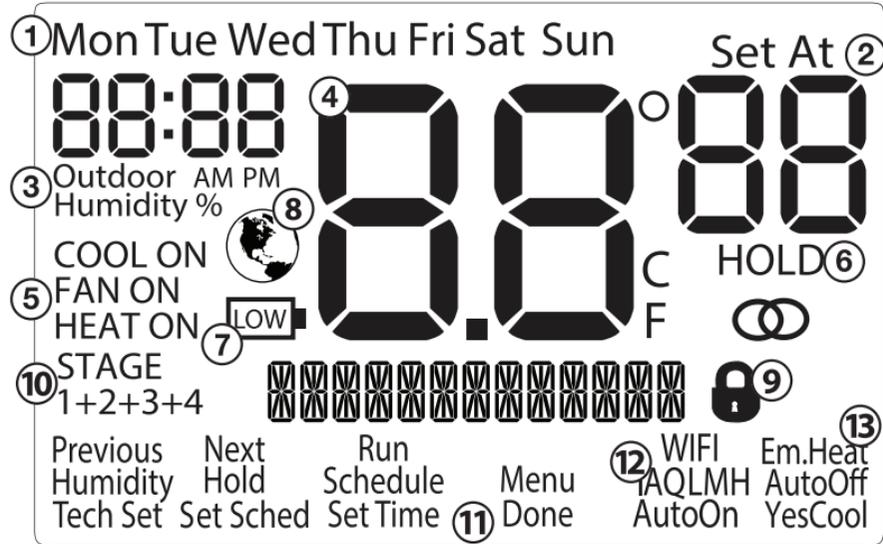
Caution:

When the battery icon  appears replace your AA batteries immediately. Failure to do so may result in your heating & cooling system becoming inoperable. Freezing or overheating can occur.



Important:

The low battery icon is displayed when the AA battery power is low. Whenever the thermostat detects low battery voltage from the AA batteries, the low battery icon will begin flashing on the screen for 21 days (if the batteries are not changed). If the batteries are not changed 22 days after the thermostat detects low battery voltage, the thermostat screen will only show the flashing battery icon until buttons are pressed. If the batteries are not changed 43 days after the thermostat detects low battery voltage, the thermostat screen will only show the flashing battery icon until buttons are pressed and the setpoints will offset to 85°F/29°C in cooling and 55°F/13°C in heating. At this stage, set point changes can be made temporarily, but the setpoints will change back to defaulted values after a 4-hour period. The thermostat will continue to perform this low battery flashing, temperature offset condition until the internal voltage threshold is reached. When the thermostat internal voltage threshold is reached, all relays will be opened and the thermostat will become inoperable until new batteries are installed.



1 Day of the Week

2 Setpoint Indicator: Displays the user selectable setpoint temperature.

3 Time of Day / Outdoor Temp / % Humidity

4 Indicates current room temperature

5 Indicates if heating or cooling equipment is running

6 Hold Indicator: Displayed when the thermostat is in permanent hold

7 Low Battery Indicator

8 Energy Efficient Globe: Indicates the setpoint temperature chosen is a efficient choice.

9 Keypad Lockout: Indicates the thermostat is in keypad lockout

10 Indicates the number of heating or cooling stages running

11 Program Menu Buttons: Shows different options during programming.

12 Fan Button: Changes the fan operation between Auto, IAQ, and On.

13 System Button: Changes the system operation between Off, Cool, Auto, Heat, and Emergency Heat based on system tech setting.

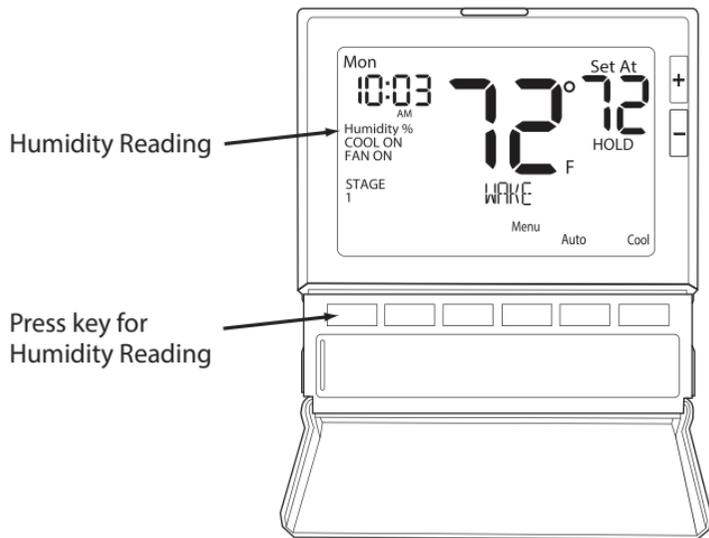
Setting Target Humidity Setpoint

Follow the steps below to change your target humidity setpoint.

Press the **HUMIDITY** key

Use the **+** or **-** key to select the target humidity setpoint.

Press **DONE** when completed.



Setting Target Humidity Setpoint

Ambient humidity will flash in the time field when Humidify or De-Humidify is set to **ON**.

HON will also flash when the Humidity terminal is energized. **dON** will also flash when the De-Humidify terminal is energized.



DAY AND TIME



AMBIENT HUMIDITY



HON
(Humidity Energized)



dON
(De-Humidity Energized)

Note:

The target humidity setpoint is not programmable. Unlike temperature, humidity does not change quickly and should not be programmed.



Humidity is only energized during heat. Dehumidify is only energized during cool. Heat and Cool each have their own target setpoints.

Recommended Heating Settings:

The table on page 11 shows recommended indoor humidity levels in relation to outdoor temperatures during heating (adding humidity).

Recommended Cooling Settings:

Consult your professional HVAC technician for recommended settings for your climate.

Outside Temperature (0° F)	Recommended Relative Humidity
+20° and above	35% to 40%
+10°	30%
0°	25%
-10°	20%
-20°	15%

Set Time (If using programming)

Follow the steps below to set the day of the week and current time:

1. Press the **MENU** button.
2. Press **SET TIME**.
3. Day of the week will be flashing. Use the  or  key to select the current day of the week.
4. Press **NEXT STEP**.
5. The current hour is flashing. Use the  or  key to select the current hour. When using 12-hour time, make sure the correct a.m. or p.m. choice is selected.
6. Press **NEXT STEP**.
7. Minutes are now flashing. Use the  or  key to select current minutes.
8. Press **DONE** when completed.

**Important:**

You will see a **TECH SETUP** option after the **MENU** key is pressed. This **TECH SETUP** key is for installer configuration and should **NOT** be changed unless you consult your professional heating and air conditioning technician.

Set Program Schedule For Four Time Periods

(WAKE, LEAVE, RETURN, SLEEP or OCCUPIED 1, UNOCCUPIED1, OCCUPIED 2, UNOCCUPIED 2)

To customize your 5+1+1 Program schedule, follow these steps:

Weekday:

1. Select **HEAT** or **COOL** with the system switch.
Note: You have to program heat and cool each separately.
2. Press the **MENU** button (If menu does not appear first press **RUN SCHED**).
3. Press **SET SCHED**. **Note:** Monday-Friday (**Monday if in 7day**) is displayed and the **WAKE/OCC1** icon is shown. You are now programming the **WAKE/OCC1** time period for that day.
4. Time is flashing. Use the  or  key to make your time selection for that day's **WAKE/OCC1** time period.
Note: If you want the fan to run continuously during this time period, select **ON** with the **FAN** key. If you want to use **IAQ** mode during this time period, select **IAQ** with the fan key.
5. Press **NEXT STEP**.
6. The setpoint temperature is flashing. Use the  or  key to make your setpoint selection for that day's **WAKE/OCC1** period.
7. Press **NEXT STEP**.
8. Repeat steps 4 through 7 for that day's **LEAVE/UNOCC1** time period, **RETURN/OCC2** time period, and **SLEEP/UNOCC2** time period.

Saturday:

Repeat steps 4 through 7 for the Saturday **WAKE/OCC1** time period, for the Saturday **LEAVE/UNOCC1** time period, for the Saturday **RETURN/OCC2** time period, and for the Saturday **SLEEP/UNOCC2** time period.

Sunday:

Repeat steps 4 through 7 for the Sunday **WAKE/OCC1** time period, for the Sunday **LEAVE/UNOCC1** time period, for the Sunday **RETURN/OCC2** time period, and for the Sunday **SLEEP/UNOCC2** time period.

To customize your 7 day Program Schedule, repeat steps 4 through 8 for the Tuesday, Wednesday, Thursday, Friday, Saturday and Sunday time periods.

A Note About Auto Changeover:

When in Auto you have the ability to switch between auto heat or auto cool by pressing the system key. This can be done once the current mode has reached its setpoint. For example: if in auto heat, the heat setpoint must be satisfied before the thermostat will allow you to switch to auto cool. You can switch out of auto by holding down the system key. To get back into auto, you must toggle the system key to auto.

Set Program Schedule For Two Time Periods (OCCUPIED, UNOCCUPIED)

To customize your 5+1+1 Program schedule, follow these steps:

Weekday:

1. Select **HEAT** or **COOL** with the system key.
Note: You have to program heat and cool each separately.
2. Press the **MENU** button (If menu does not appear first, press **RUN SCHED**).
3. Press **SET SCHED**. **Note:** Monday-Friday (**Monday if in 7day**) is displayed and the **OCCUPIED** text is shown. You are now programming the **OCCUPIED** time period for that day.
4. Time is flashing. Use the or key to make your time selection for that day's **OCCUPIED** time period.
Note: If you want the fan to run continuously during this time period, select **ON** with the **FAN** key. If you want to use **IAQ** mode during this time period, select **IAQ** with the fan key.
5. Press **NEXT**.
6. The setpoint temperature is flashing. Use the or key to make your setpoint selection for that day's **OCCUPIED** period.
7. Press **NEXT**.
8. Repeat steps 4 through 7 for that day's **UNOCCUPIED** time period.

Saturday:

Repeat steps 4 through 7 for the Saturday **OCCUPIED** time period and for the Saturday **UNOCCUPIED** time period.

Sunday:

Repeat steps 4 through 7 for the Sunday **OCCUPIED** time period and for the Sunday **UNOCCUPIED** time period.

To customize your 7 day Program schedule, repeat steps 4 through 8 for Tuesday, Wednesday, Thursday, Friday, Saturday and Sunday.

A Note About Programmable Fan:

The programmable fan feature will run the fan continuously during any time period when it is programmed to be on. This is the best way to keep the air circulated and to eliminate hot and cold spots in your building. If using **IAQ** mode, set fan to IAQ for any time period.

Temporary & Permanent Hold Feature

Temporary Hold: The thermostat will display **HOLD** and **RUN SCHED** on the bottom of your screen when you press the  or  key. If you do nothing, the temperature will remain at this setpoint temporarily for a selected amount of time. After this, the program setpoint will then replace your temporary setpoint.

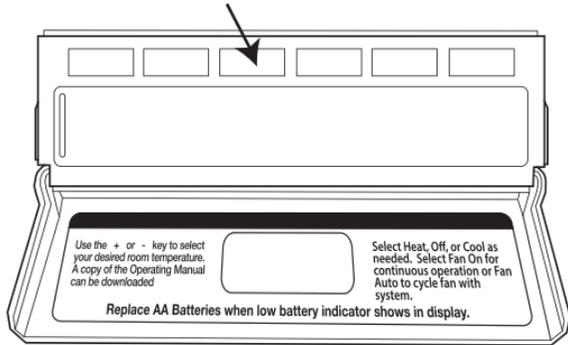
Permanent Hold: With a temporary hold set, if you press the **HOLD** key at the bottom of your screen, you will see **HOLD** appear below the setpoint temperature in the display. The thermostat will now permanently stay at this setpoint and can be adjusted using the  or  keys.

To Return To Program: Press the **RUN SCHED** key at the bottom of your screen to exit temporary and permanent holds.

Filter Change & Other Reminders

If your HVAC contractor has configured the thermostat to remind you when the air filter needs changed, you will see a reminder in the display when your air filter needs to be changed.

Resetting The Filter Change Reminder: When the reminder is displayed, you should change your air filter and reset the reminder by holding down the **Set Time/Next Step** button of the thermostat for 3 seconds.



This thermostat also has other maintenance reminders (Humidity Pad, UV lamp, and IAQ Cell), that are reset with the same procedure.



Energy Efficient Globe Note:

The energy efficient globe indicates the occupant is making an energy efficient choice in temperature control. This is not a tech setting but the energy efficient globe will always appear on the thermostat screen when the setpoints are in a set back state. This feature will only work when programming is turned on.

Filter Change & Other Reminders

**Keypad Lockout Note:**

Keypad lockout provides the option to disable some or all of the buttons on the thermostat. This feature is activated by pressing and holding the  and  buttons for 3 seconds. On this model, the keypad lockout feature has a selectable option to create a custom code for keypad lockout operations. Also, if a code is not created for keypad lockout, this feature will still perform keypad lockout functions without a custom created code. If a custom keypad lockout code is enabled, the custom created code will need to be entered in order to disable the keypad lockout on the screen. If the custom code is created and the occupant forgets the custom lockout code, the master keypad lockout code will always override any custom created code. The master keypad lockout code is 7761.

Warranty Registration

Your new thermostat has a 5 year limited warranty. You must register your thermostat within 60 days of installation. Without this registration the warranty period will begin on the date of manufacture. For warranty issues please contact the HVAC professional that installed this product. You can register your new thermostat in 2 ways:

Online

Go to the company website, select warranty registration and fill out a short registration form.

Mail

Complete the form below and mail it to the address shown.

Warranty Registration

Name: _____ Thermostat Model: _____

Address: _____ Date Installed: _____

City: _____ Complete form and mail to:

State: _____ **Thermostat Warranty Registration**

Zip: _____ Pro1iaq

P.O. Box 3377

Springfield, MO 65808-3377

**Cut Out For
Warranty Registration**



www.pro1iaq.com