INSTALLATION MANUAL



TRUE COMFORT ||||

This manual covers the following models:

• T755

Thermostat Applications Guide

| Description | |
|---|-----|
| Gas or Oil Heat | Yes |
| Electric Furnace | Yes |
| Heat Pump (No Aux. or Emergency Heat) | Yes |
| Heat Pump (with Aux. or Emergency Heat) | Yes |
| Multi-stage Systems | Yes |
| Heat Only Systems | Yes |
| Cool Only Systems | Yes |
| Millivolt | Yes |

Power Type

Battery Power
Hardwire (Common Wire)
Hardwire (Common Wire) with Battery Backup

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Una versión española de este manual puede ser descargada en www.pro1iaq.com

A trained, experienced technician must install this product.

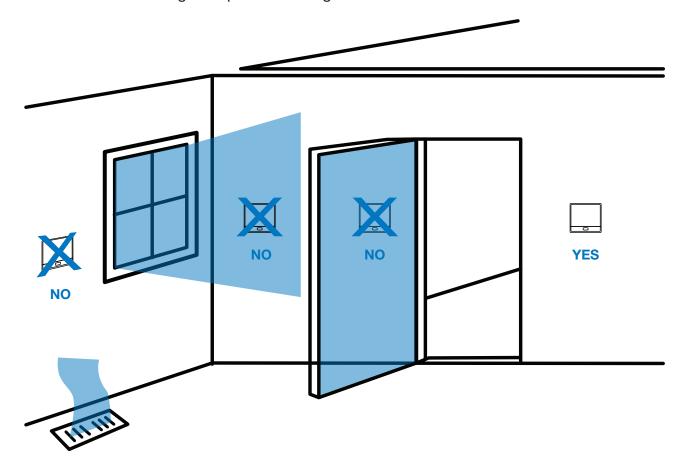
Carefully read these instructions. You could damage this product or cause a hazardous condition if you fail to follow these instructions.

Need Help?

For assistance with this product please visit http://www.pro1iaq.com or call Pro1 Customer Care toll-free at 888-Pro1iaq (776-1427) during normal business hours (Mon-Fri 9 AM - 6 PM Eastern)

Wall locations

The thermostat should be installed approximately 4 to 5 feet above the floor. Select an area with average temperature and good air circulation.



Do not install thermostat in locations:

- Close to hot or cold air ducts
- That are in direct sunlight
- With an outside wall behind the thermostat
- In areas that do not require conditioning
- Where there are dead spots or drafts (in corners or behind doors)
- Where there might be concealed chimneys or pipes
- Where appliances could radiate heat

PRO1 Tip

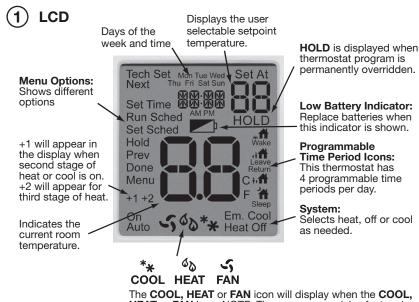
Pick an installation location that is easy for the user to access.

The temperature of the location should be representative of the building.

THERMOSTAT QUICK REFERENCE

Getting to know your thermostat





- ② Glow in the Dark Light Button
- (3) Fan Button
- 4 System Button
- 5 User Program Buttons
- 6 Temperature Setpoint Buttons
- (7) Battery Door
- 8 Universal Private Label Badge



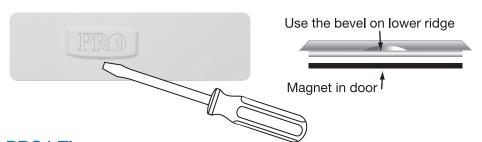
Important:

The low battery indicator is displayed when the AA battery power is low. If the user fails to replace the battery within 21 days, the thermostat display will only show the low battery indicator as a final warning before the thermostat becomes inoperable. The batteries are located on the front of the thermostat.

turn on until the 5 minute delay has elapsed.

HEAT or **FAN** is on.NOTE: The compressor delay feature is active if these icons are flashing. The compressor will not

Removing the private label badge



Gently slide a screwdriver into the bottom edge of the badge. Gently turn the screwdriver counter clockwise. The badge is held on by a magnet. The badge should pry off easily. **Do not use force.**

PRO1 Tip

All Pro1 thermostats use the same universal magnetic badge.

Visit our website at www.pro1iaq.com to learn more about our free private label program.

SUBBASE INSTALLATION



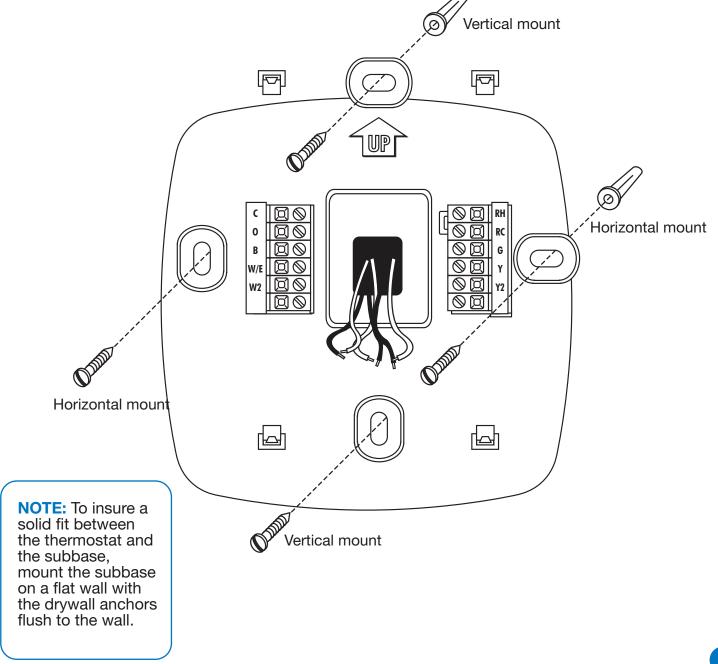
Caution: Electrical Hazard

Failure to disconnect the power before beginning to install this product can cause electrical shock or equipment damage.



Mercury Notice:

All of Pro1's products are mercury free. However, if the product you are replacing contains mercury, dispose of it properly. Your local waste management authority can give you instructions on recycling and proper disposal.



Wiring

- If you are replacing a thermostat, make note of the terminal connections on the thermostat that is being replaced. In some cases the wiring connections will not be color coded. For example, the green wire may not be connected to the G terminal.
- 2. Loosen the terminal block screws. Insert wires then retighten terminal block screws.
- 3. Place nonflammable insulation into wall opening to prevent drafts.
- 4. Push wire into the wall so the thermostat can mount securely to the subbase.



Warning:

All components of the control system and the thermostat installation must conform to Class II circuits per the NEC Code.

Wire specifications

Use shielded or non-shielded 18 - 22 gauge thermostat wire.

Terminal Designations

This thermostat is shipped from the factory to operate a conventional heating and cooling system. This thermostat will also operate a heat pump system. See the "heat pump" configuration step on page 8 of this manual to configure the thermostat for heat pump applications.

| Terminal | 2 Heat 2 Cool Conventional System | 2 Heat 2 Cool Heat Pump System | 3 Heat 2 Cool Heat Pump System |
|----------|--|--|---|
| RC | Transformer power (cooling) | Transformer power (cooling) | Transformer power (cooling) |
| RH | Transformer power (heating) | Transformer power (heating) | Transformer power (heating) |
| С | Transformer common (For 2 transformer systems, use RH common.) | Transformer common | Transformer common |
| В | Energized in heating | Heat pump changeover valve energized in heating | Heat pump changeover valve energized in heating |
| 0 | Energized in cooling | Heat pump changeover valve energized in cooling | Heat pump changeover valve energized in cooling |
| G | Fan relay | Fan relay | Fan relay |
| W/E | First stage of heat | Emergency heat relay | Emergency heat relay |
| Υ | First stage of cool | First stage of heat & cool | First stage of heat & cool |
| Y2 | Second stage of cool | Second stage of cool | Second stage of cool & second stage of heat |
| W2 | Second stage of heat | Auxiliary heat relay, second stage of heat | Auxiliary heat relay, third stage of heat |

PRO1 Tips:

C terminal

The **C** (common wire) terminal does not have to be connected when the thermostat is powered by batteries.

Note:

In many systems with no emergency heat relay a jumper can be installed between E and W2.

TECHNICIAN SETUP MENU

Technician Setup Menu

This thermostat has a technician setup menu for easy installer configuration. To set up the thermostat for your particular application:

- 1. Press **MENU** button
- 2. Press and hold **TECHNICIAN SETUP** button for 3 seconds. This 3 second delay is designed so that homeowners do not accidentally access the installer settings.
- 3. Configure the installer options as desired using the table below.

Use the + or - keys to change settings and the **NEXT STEP** or **PREV STEP** key to move from one option to another. **Note:** Only press **DONE** key when you want to exit the Technician Setup options.

Tech Setup Steps Filter Minimum Room Compressor Cooling Heating Change **Temperature** Compressor Short Cycle Delay Swing Swing Reminder Calibration On Time This feature will flash This feature allows This feature allows the The compressor short The swing setting, often The swing setting, often **FILT** in the display the installer to change installer to select the cycle delay protects the called "cycle rate", called "cycle rate", after the elapsed run the calibration of the minimum run time for compressor from "short "differential" or "differential" or time to remind the room temperature cycling". This feature will "anticipation" is "anticipation" is the compressor. adjustable. A smaller adjustable. A smaller user to change the display. For example, For example, a setting of not allow the compressor to be turned on for 5 filter. A setting of swing setting will cause swing setting will cause if the thermostat 4 will force the compressor to run for at **OFF** will disable this reads 70° and you minutes after it was last more frequent cycles and more frequent cycles and least 4 minutes every would like it to read turned off. a larger swing setting will a larger swing setting feature. 72° then select +2. time the compressor cause fewer cycles. will cause fewer cycles. turns on, regardless of the room temperature. **LCD Will Show** COOF [] П COAL []F CAL HELL Prev Done **Adjustment Options** You can adjust the You can adjust the You can select the Selecting **ON** will not The cooling swing The heating swing filter change room temperature minimum compressor allow the compressor to setting is adjustable setting is adjustable run time from "off", "3", "4", or "5" minutes. reminder from **OFF** display to ready -4°F from $\pm 0.2^{\circ}$ F to $\pm 2^{\circ}$ F. be turned on for 5 from $\pm 0.2^{\circ}$ F to $\pm 2^{\circ}$ F. to 2000 hours of to $+4^{\circ}$ F above or For example: A swing setting of 0.5°F will turn minutes after the last For example: A swing runtime in 50 hour below the factory If 3, 4, or 5 is selected, setting of 0.5°F will time the compressor was increments. calibrated reading. the compressor will run on. Select **OFF** to the cooling on at turn the heating on at for at least the selected approximately 0.5°F approximately 0.5°F remove this delay. time before turning off. above the setpoint and below the setpoint and turn the cooling off at turn the heating off at approximately 0.5°F below the setpoint. approximately 0.5°F above the setpoint. **Factory Default Settings** 0°F 0.5 °F 0.4 °F **OFF OFF** ON

Note: To lock the keypad hold down the + and - keys for 3 seconds. You will see a lock in the display. To unlock the keypad hold down the + and - keys for 3 seconds.





TECHNICIAN SETUP MENU

| Next MORN DA | Select F for Fahrenheit temperature read out or select C for Celsius read out | You can select either a 12 or 24 hour clock setting. | Select GAS for systems that control the fan during a call for heat. Select ELEC to have the thermostat control the fan during a call for heat. | You can configure thi thermostat to have a 5+1+1 program o non-programmable. |
|--|--|--|---|---|
| | | | | |
| Prev Done | Prev Done | Prev Done | Prev Done | Prev Done |
| djustment Options Use the + or - key to turn on or off. | °F for Fahrenheit °C for Celsius | Use the + or - key to select 12 or 24 hour clock. | GA or EL | Use the + or - key 5d for 5+1+1, or 0d for non-progammable. |
| actory Default Settings ON | °F | 12 Hour Clock | GAS | 5d |



PRO1 Tip

The second stage will turn on at 2x the swing setting. The second stage will turn off when 1x the swing is reached. For example, if the swing setting is .8 degrees for heating and the thermostat is set at 70°F, the first stage will turn on at approximately 69.2°F. The second stage will turn on at 68.4°F. The second stage will turn off at 69.2°F and the first will turn off at 70.8°F. If third stage is used, it will turn on at 3x the swing and turn off at approximately 2x the swing.

TECHNICIAN SETUP MENU

| Tech Setup Steps | (Continued from th | e previous page) | | |
|--|---|--|---|--|
| Heat Pump | System Switch | Gas Auxiliary for Heat Pump | Stages of Heat | Cooling Fan Delay |
| When turned on the thermostat will operate a heat pump. 1. EM.Heat will show as an option in the system switch. 2. Y will be first stage of heat & cool, W/E will be emergency heat relay & W2 will be auxiliary heat relay. | You can configure the system switch for the particular application: Heat - Off - Cool, Heat - Off, Cool - Off, Note: EM. Heat will show if in heat pump mode. | This option will turn the heat pump off 45 seconds after the auxiliary heat relay turns on. For 2 heat applications, the first stage will turn off 45 seconds after the auxiliary stage turns on. For 3 heat applications, the first and second stage will turn off 45 seconds after the auxiliary stage turns on. | You can configure the thermostat to operate a 3 stage heat pump system. 2H = 2 heat, 2 cool 3H = 3 heat, 2 cool | The cooling fan delay setting will delay the fan from coming on in cool mode and keep running after the compressor shuts off for a short time to save energy in some systems. |
| Next HP LIM LIFE Prev Done Adjustment Options | Next 595T Prev Done Cool Heat Off | Next Frev Done | Next HEST Prev Done | Prev Done |
| OFF configures the thermostat for non heat pump systems ON configures the thermostat for heat pump systems | Use the + or - key until the desired application is flashing. | For heat pump systems that are "dual fuel" (use a gas furnace for auxiliary stage heat) you can turn this feature on to turn off the heat pump when the auxiliary stage of heating has been called for. | Use the + or - key to change between 2 heat and 3 heat. 2 heat will use Y1 as first stage and W2 as auxiliary. 3 heat will use Y1 as first stage, Y2 as second stage and W2 as auxiliary. | You can select the Cooling Fan Delay from "Off", "15", "30", "60" or "90" seconds. If 15, 30, 60 or 90 is selected the fan will not turn on for that many seconds when there is a call for cool and will run for that many seconds after satisfying a call for cool. |
| Factory Default Settings OFF | Heat - Off - Cool | OFF | 2 Stages | OFF |

Note: If Contractor Call Number is selected **ON**, your phone number will show in the display if there has been a continuous call for heating or cooling for 24 hours or if the light button is held down for 3 seconds. To remove the phone number from the display, hold the light button down for 3 seconds.

MOUNT THERMOSTAT & BATTERY INSTALLATION

Mount Thermostat

Align the 4 tabs on the subbase with corresponding slots on the back of the thermostat, then push gently until the thermostat snaps in place.

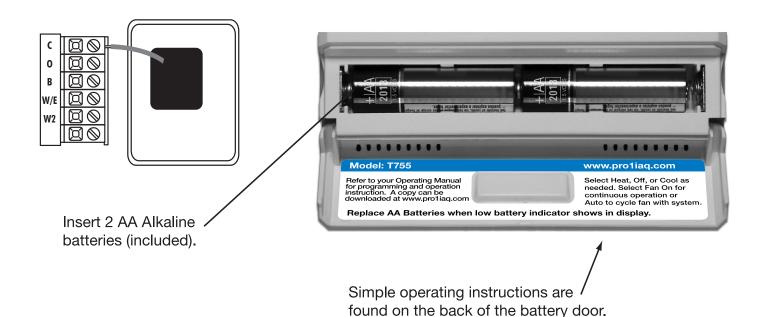
Note: To insure a solid fit between the thermostat and the subbase:

- 1. mount subbase to flat wall
- 2. use screws provided
- 3. drywall anchors should be flush with the wall
- 4. wires should be pushed into the wall



Battery Installation

Battery installation is optional if thermostat is hardwired (**C** terminal connected).



PROGRAMMING THE THERMOSTAT

Set Time

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

- 1. Press MENU
- 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 ____ 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

Programming

All programmable Pro1 thermostats are shipped with an energy saving pre-program. You can customize this default program by following the Set Program Schedule.

Your thermostat can be programmed to have all the weekdays the same, a separate program for Saturday, and a separate program for Sunday. There are four time periods for each program (WAKE, LEAVE, RETURN, SLEEP).

| Factory Default Program | | | | |
|-------------------------|---------------|---------|--------------------------------|--------------------------------|
| Day of the Week | Events | Time | Setpoint Temperature (Heat) | Setpoint Temperature (Cool) |
| Weekday | Wake 🕌 | 6 a.m. | 70° F (21° C) | 75° F (24° C) |
| | Leave 👬 | 8 a.m. | 62° F (17° C) | 83° F (28° C) |
| | Return i | 6 p.m. | 70° F (21° C) | 75° F (24° C) |
| | Sleep 🐪 | 10 p.m. | 62° F (17° C) | 78° F (26° C) |
| Saturday | Wake 🚜 | 8 a.m. | 70° F (21° C) | 75° F (24° C) |
| | Leave 👬 | 10 a.m. | 62° F (17° C) | 83° F (28° C) |
| | Return 👬 | 6 p.m. | 70° F (21° C) | 75° F (24° C) |
| | Sleep 🐪 | 11 p.m. | 62° F (17° C) | 78° F (26° C) |
| Sunday | Wake 🕌 | 8 a.m. | 70° F (21° C) | 75° F (24° C) |
| | Leave 👬 | 10 a.m. | 62° F (17° C) | 83° F (28° C) |
| | Return in the | 6 p.m. | 70° F (21° C) | 75° F (24° C) |
| | Sleep 🕌 | 11 p.m. | 62° F (17° C) | 78° F (26° C) |

PROGRAMMING THE THERMOSTAT

You can use the table below to plan your customized program schedule if using 5+1+1.

| | Programming Table | | | |
|--------------------|-------------------|------|--------------------------------|--------------------------------|
| Day of the Week | Events | Time | Setpoint Temperature (Heat) | Setpoint Temperature (Cool) |
| Weekday | Wake 🕍 | | | |
| | Leave diff | | | |
| | Return in | | | |
| | Sleep 👚 | | | |
| Saturday | Wake 🖈 | | | |
| | Leave diff | | | |
| | Return in | | | |
| | Sleep 👚 | | | |
| Sunday | Wake 🔏 🔒 | | | |
| | Leave (iff | | | |
| | Return in | | | |
| | Sleep 👚 | | | |

| Set Program | Schedule |
|-------------|----------|
|-------------|----------|

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

- Select HEAT or COOL using the SYSTEM key. Note: You have to program heat and cool each separately.
- 2. Press MENU
- Press SET SCHED. Note: Monday-Friday is displayed and the WAKE icon is shown. You are now programming the WAKE time period for the weekday setting.
- 4. Time is flashing. Use the ____ or ___ key to make your time selection for the weekday **WAKE** time period. Note: If you want the fan to run continuously during this time period, select **ON** with the **FAN** key.
- 5. Press **NEXT STEP**
- 6. The setpoint temperature is flashing. Use the + or key to make your setpoint selection for the weekday **WAKE** period.
- 7. Press **NEXT STEP**
- 8. Repeat steps 4 through 7 for weekday **LEAVE** time period, for weekday **RETURN** time period, and for weekday **SLEEP** time period.

Saturday:

 Repeat steps 4 through 7 for Saturday WAKE time period, for Saturday LEAVE time period, for Saturday RETURN time period, and for Saturday SLEEP time period.

Sunday:

 Repeat steps 4 through 7 for Sunday WAKE time period, for Sunday LEAVE time period, for Sunday RETURN time period, and for Sunday SLEEP time period.

A Note About Programmable Fan:

The programmable fan feature will run the fan continuously during any time period it is programmed to be on. This is the best way to keep the air circulated and to eliminate hot & cold spots in your building.

SPECIFICATIONS & CONTACT INFORMATION

Specifications

| The display range of temperature The control range of temperature | 44°F to 90°F (7°C to 32°C) |
|--|---|
| Load rating Display accuracy | 1 amp per terminal, 1.5 amp maximum all terminals combined |
| Swing (cycle rate or differential) | |
| owing (eyolo rate of amerorital) | Cooling is adjustable from 0.4°F to 2.0°F |
| Power source | 18 to 30 VAC, NEC Class II, 50/60 Hz for hardwire (common wire) |
| | Battery power from 2 AA Alkaline Energizer batteries |
| Operating ambient | |
| Operating humidity | |
| Dimensions of thermostat | 4.7"W x 4.4"H x 1.1"D |

Contact Us

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