INSTALLATION MANUAL

PRO1 IAQ

TRUE COMFORT

This manual covers the following models:

- **T801**

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)	No
Multi-stage Systems	No
Heat Only Systems	Yes
Cool Only Systems	Yes
Millivolt	Yes

Power Type

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

Table of Contents

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.

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

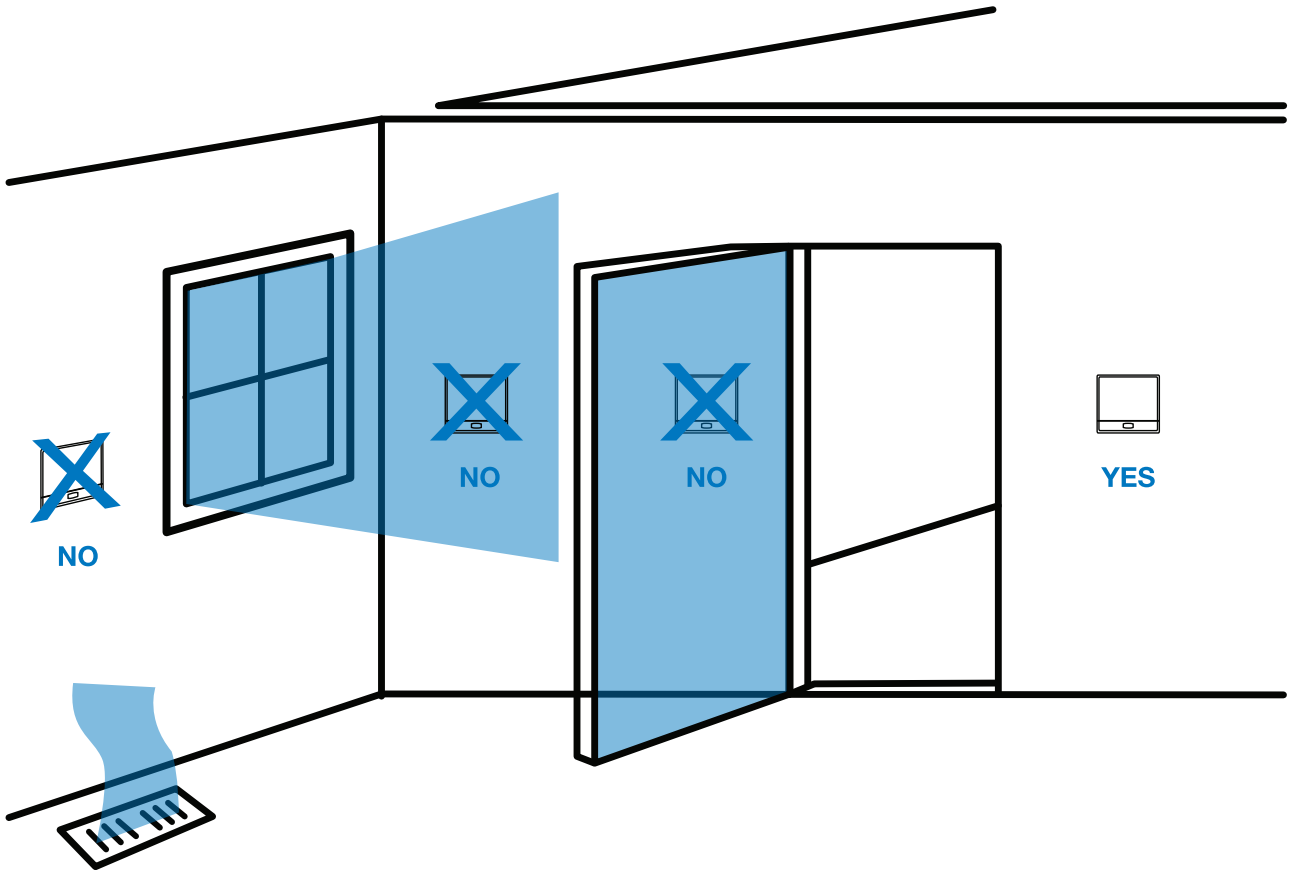
Need Help?

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)

INSTALLATION TIPS

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.



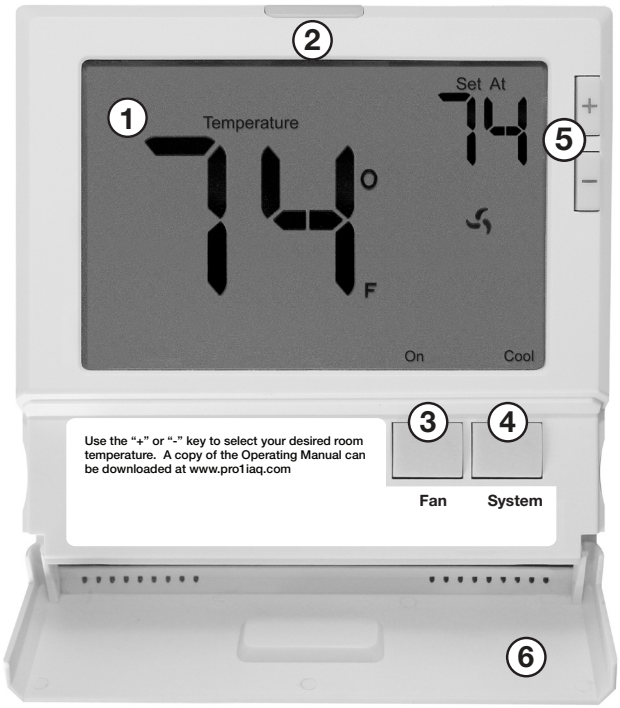
Do not install thermostat in locations:
- Close to hot or cold air ducts
- That are in direct sunlight
- With an outside wall behind the thermostat
- In areas that do not require conditioning
- Where there are dead spots or drafts (in corners or behind doors)
- Where there might be concealed chimneys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

PRO1 Tip

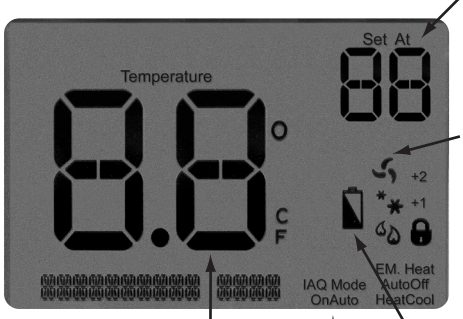
Pick an installation location that is easy for the user to access. The temperature of the location should be representative of the building.

THERMOSTAT QUICK REFERENCE

Getting to know your thermostat



1 LCD



Displays the user selectable setpoint temperature.

System operation indicators: The **COOL, HEAT** or **FAN** icon will display when the **COOL, HEAT** or **FAN** is on.

NOTE: The compressor delay feature is active if these icons are flashing. The compressor will not turn on until the 5 minute delay has elapsed.

Indicates the current room temperature

Button options

Low Battery Indicator: Replace batteries when indicator is shown

2 Glow in the Dark Light Button

3 Fan Button

4 System Button

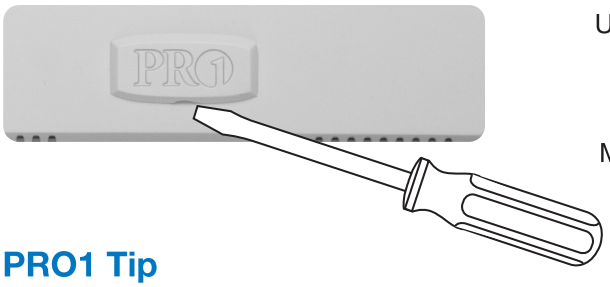
5 Temperature Setpoint Buttons

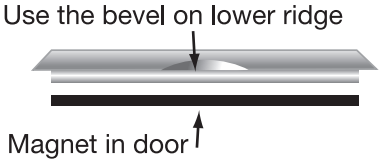
6 Access Door

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 back of the Thermostat.

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.

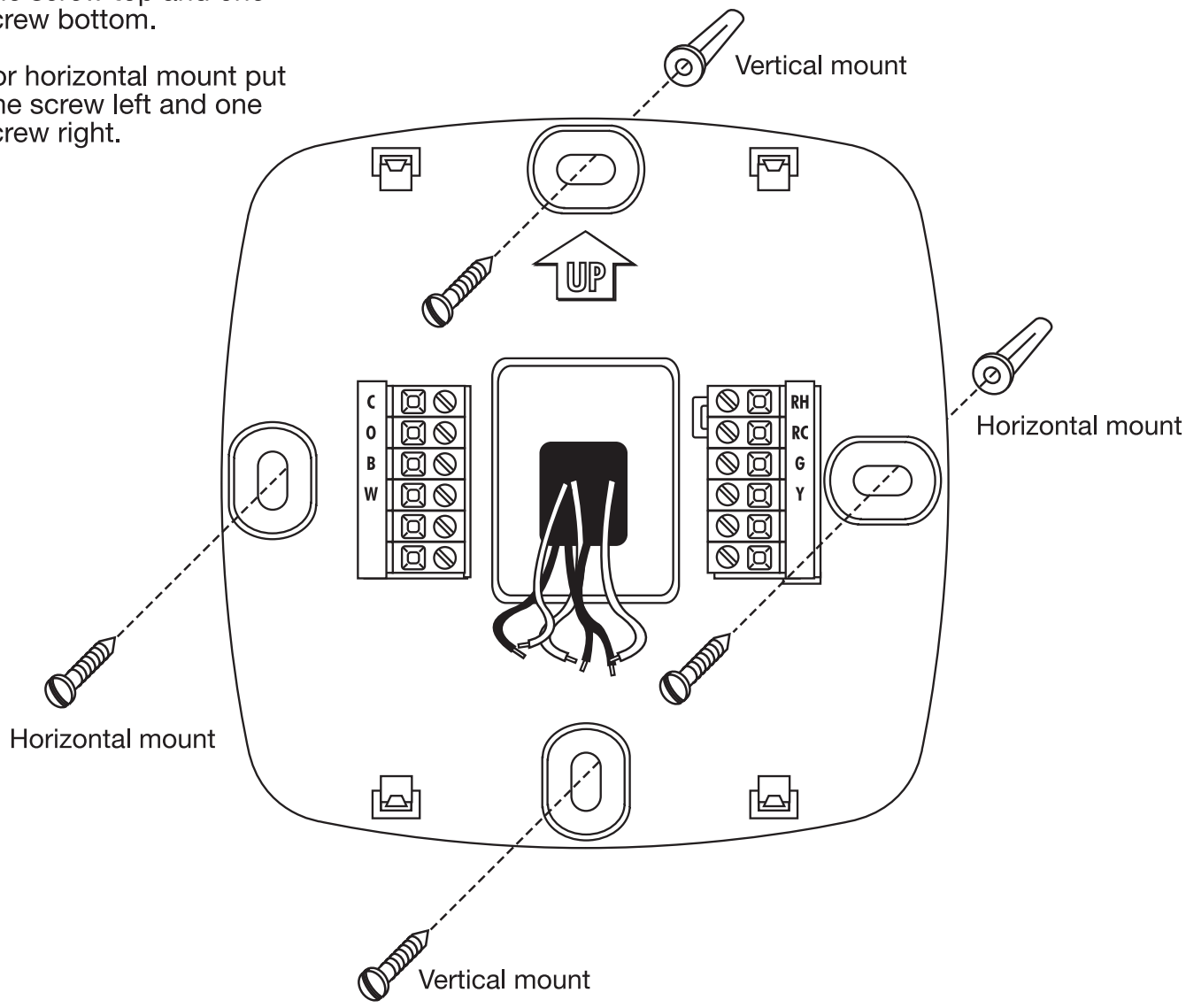
SUBBASE INSTALLATION

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.

For vertical mount put one screw top and one screw bottom.

For horizontal mount put one screw left and one screw right.



Caution: Electrical Hazard

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

Warning:

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

Wiring

1. 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.

Terminal Designations

W Heat relay

Y Compressor relay

G Fan relay

O Heat pump changeover valve energized in cooling

RC Transformer power for cooling

RH Transformer power for heating

B Heat pump changeover valve energized in heating

C Common wire from secondary side of cooling system transformer or for heat only system transformer

PRO1 Tips:

RH & RC terminals

For single transformer systems, leave the jumper wire in place between RH and RC. Remove jumper wire for two transformer systems.

Heat pump systems

If wiring to a heat pump, use a small piece of wire (not supplied) to connect terminals W and Y.

C terminal

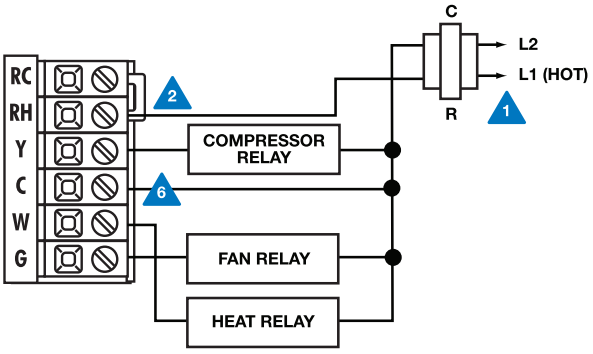
The C (common wire) terminal does not have to be connected when the thermostat is powered by batteries.

Wire specifications

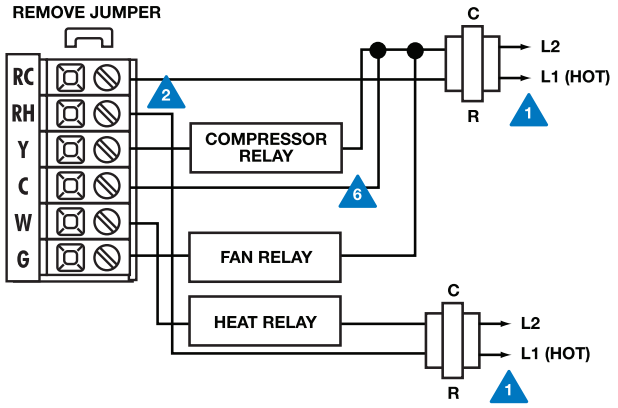
Use shielded or non-shielded 18 - 22 gauge thermostat wire.

1. Power supply
2. Factory-installed jumper. Remove only when installing on 2-transformer systems.
3. Use either O or B terminals for changeover valve.
4. Use a small piece of wire (not supplied) to connect W and Y terminals.
5. Set fan operation switch to electric
6. Optional 24 VAC common connection when thermostat is used in battery power mode.

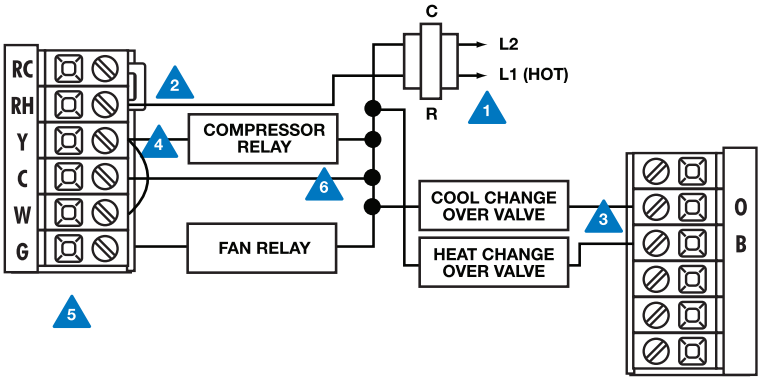
Typical 1H/1C system: 1 transformer



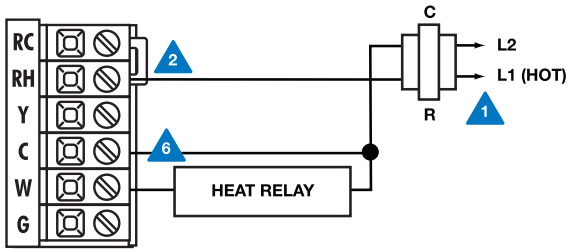
Typical 1H/1C system: 2 transformer



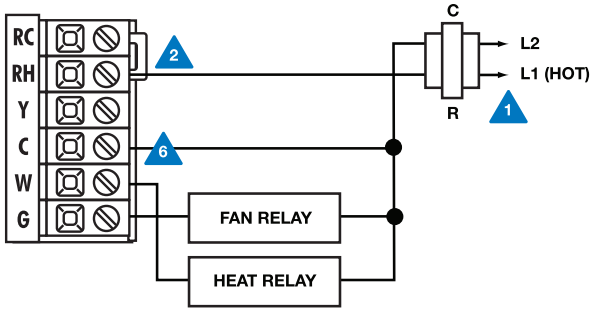
Typical 1H/1C heat pump system



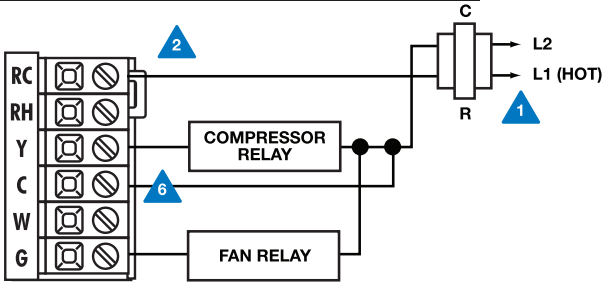
Typical heat-only system



Typical heat-only system with fan



Typical cool-only system



Technician Setup Menu

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

1. Hold down [+] and [−] key together for 3 seconds.
2. Configure the installer options as desired using the table below.
2. Use the [+] or [−] keys to change settings and the **SYSTEM** or **FAN** key to move from one step to another.

   You can press the [+] and [−] keys together for 3 seconds to go back to normal operation. Or the thermostat will go back to normal operation in one minute if no keys are pressed.

Tech Setup Steps

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

TECH SETUP STEPS CONTINUED ON THE NEXT PAGE

Tech Setup Steps (Continued from the previous page)

Fan Operation	Display Light	Contractor Call Number	Beep	System Switch
Select **GAS** for systems that control the fan during a call for heat. Select **ELEC** to generate the fan when the fan relay is connected to the G terminal.	The display light can be configured to come on when any key is pressed or only when the light key is pressed.	Allows you to put your phone number in the display. Selecting "ON" will enable this feature. "OFF" will disable this feature.	When any key is pressed an audible beep will sound. There is an ON or an OFF.	You can configure the system switch for the particular application: Heat - Off - Cool, Heat - Off, Cool - Off, Heat - Off - Cool-Auto
LCD Will Show				
				
Adjustment Options				
GAS or **ELEC**	**OFF** configures display light to come on only with the light key, which will save battery power. **ON** configures the display light to come on when any key is pressed.	If selected on, you will see the input screen after pressing **SYSTEM** key. Use the [+] key to move from one character to another. Use the [−] key to change the blinking character. Press **SYSTEM** key when finished.	If **ON** is selected the beep will sound. If **OFF** is selected, there is no sound.	Use the [+] or [−] key until the desired application is flashing.
Factory Default Settings				
GAS	ON	OFF	On	Heat - Off - Cool

A Note About Auto Changeover:
Auto changeover will switch between heating and cooling as needed. It is very important to make sure the cooling setpoint temperature is at least 3° above the heating setpoint temperature and that the heating setpoint temperature is at least 3° below the cooling setpoint temperature.

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.

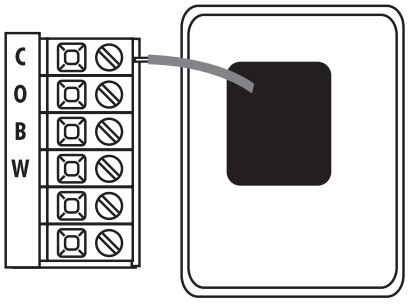
MOUNT THERMOSTAT & BATTERY INSTALLATION

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.

Battery Installation

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



On the back of the thermostat insert 2 AA Alkaline batteries (included).

SPECIFICATIONS & CONTACT INFORMATION

Specifications

The display range of temperature	41°F to 95°F (5°C to 35°C)
The control range of temperature	44°F to 90°F (7°C to 32°C)
Load rating	1 amp per terminal, 1.5 amp maximum all terminals combined
Display accuracy	± 1°F
Swing (cycle rate or differential)	Heating is adjustable from 0.4°F to 2.0°F 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	32° to +105° (0° to +41°C)
Operating humidity	90% non-condensing maximum
Dimensions of thermostat	4.7”W x 4.4”H x 1.1”D

Contact Us

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