PRO 1 ®
IAQ

TRUE COMFORT ⦀

This manual covers the following models:
• **T701**

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
Heat Only Systems - Floor or Wall Furnaces	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.

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)

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

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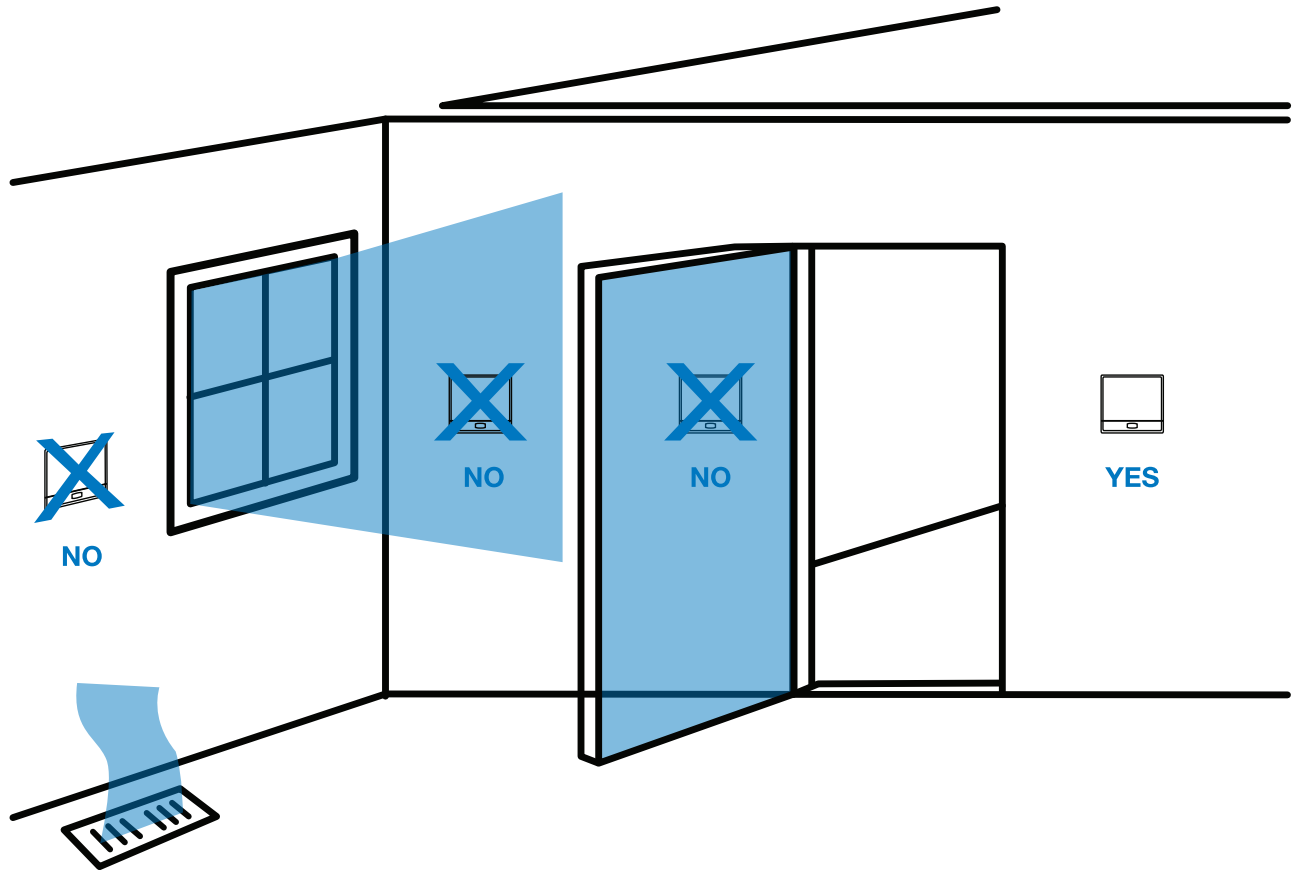
Do not install thermostat in locations:
- Close to hot or cold air ducts
- That are in direct sunlight
- With an outside wall behind the thermostat
- In areas that do not require conditioning
- Where there are dead spots or drafts (in corners or behind doors)
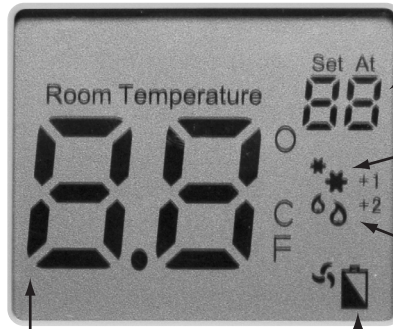- Where there might be concealed chimneys or pipes

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.

Getting to know your thermostat
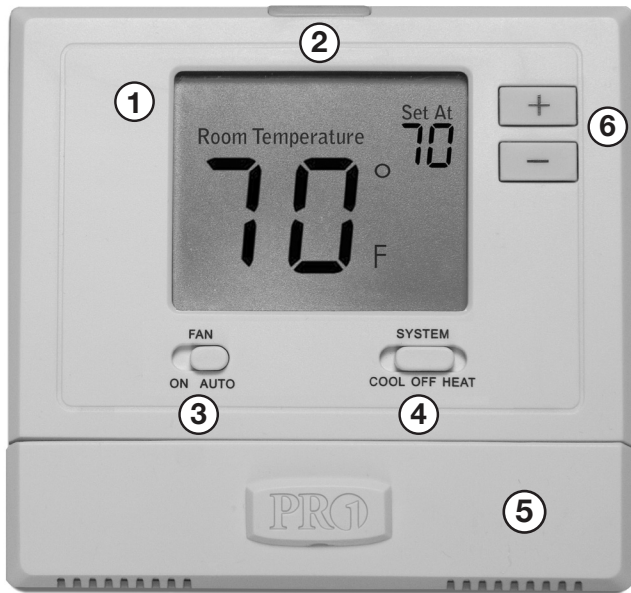
① LCD

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.

Low Battery Indicator: Replace batteries when indicator is shown.

Indicates the current room temperature.

② **Glow in the Dark Light Button**

③ **Fan Switch**

④ **System Switch**

⑤ **Easy Change Battery Door**

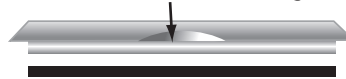⑥ **Temperature Setpoint Buttons**

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.

Removing the private label badge

Use the bevel on lower ridge

Magnet in door

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 in the well of the battery door. 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.

Caution:
Electrical Hazard
Failure to disconnect the power before beginning to install this product can cause electrical shock or equipment damage.
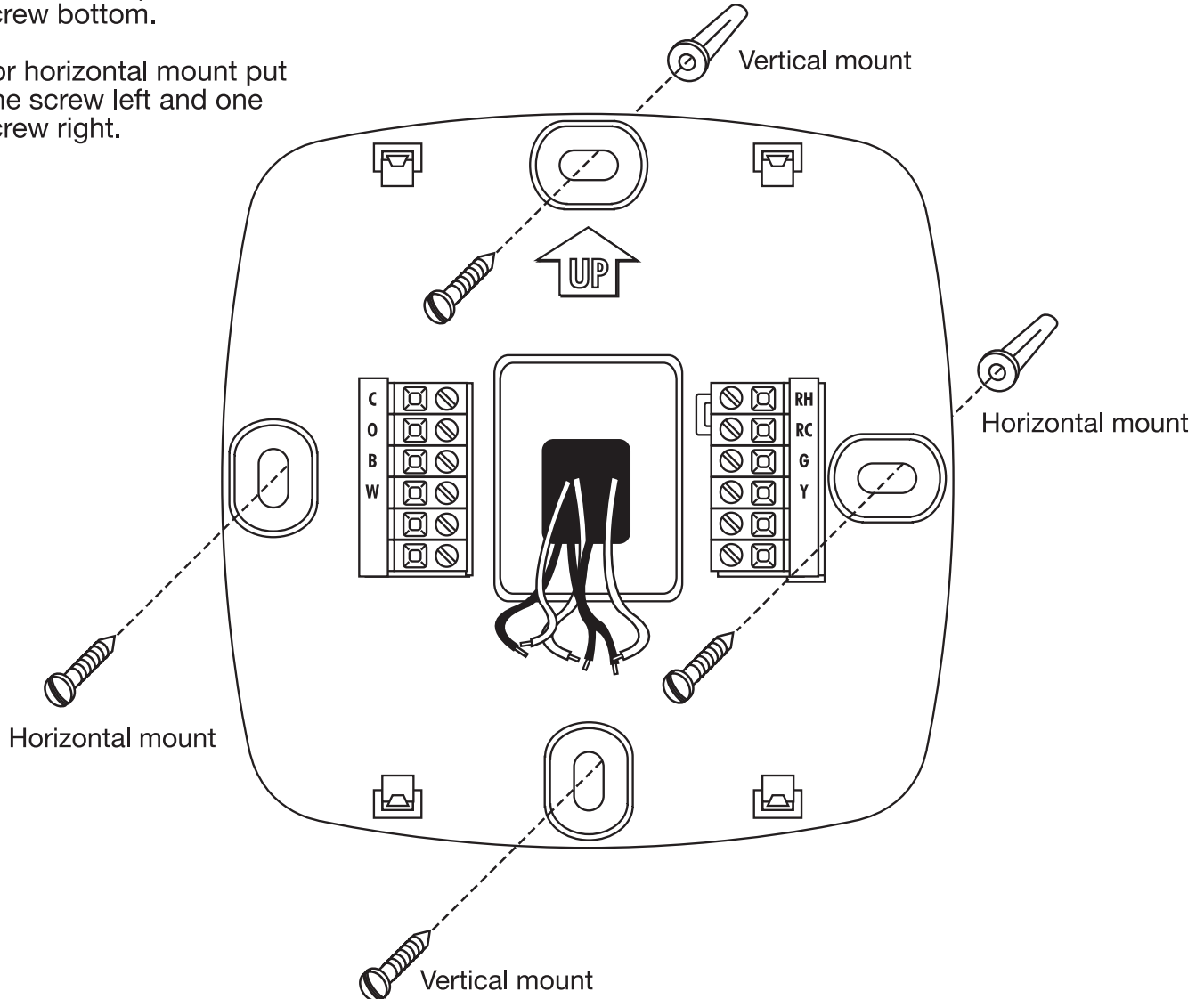
Mercury Notice:
All of Pro1's products are mercury free. However, if the product you are replacing contains mercury, dispose of it properly. Your local waste management authority can give you instructions on recycling and proper disposal.

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

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

Vertical mount

Horizontal mount

Horizontal mount

Vertical mount

UP

C
O
B
W

RH
RC
G
Y

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

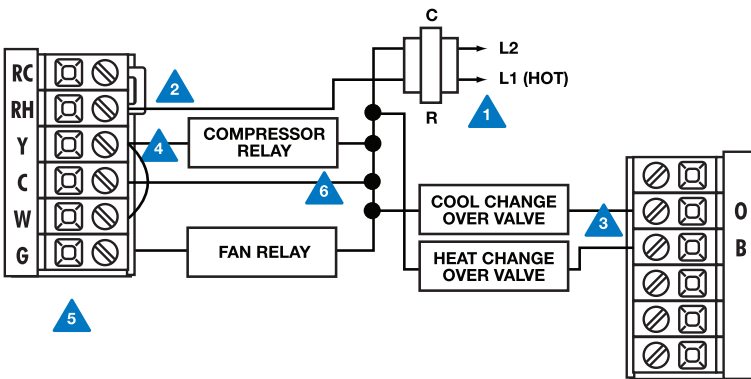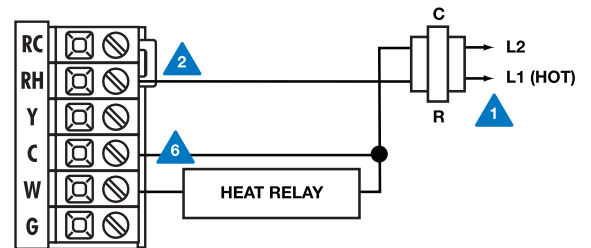## Typical 1H/1C system: 1 transformer
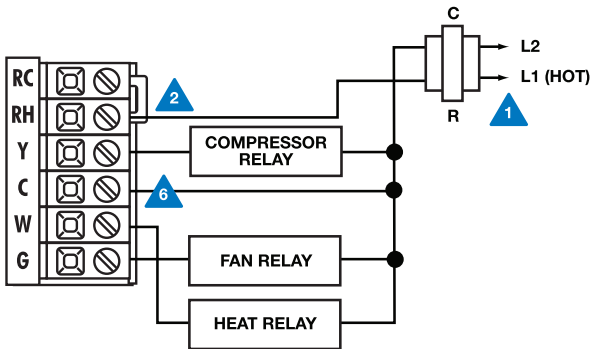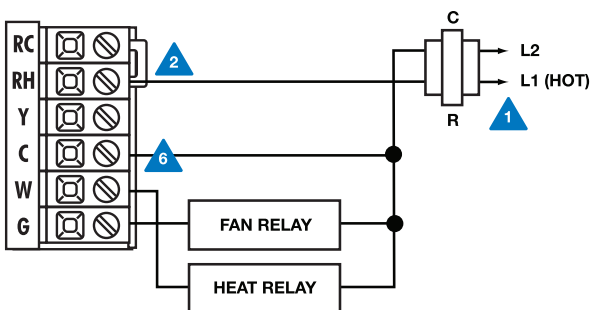
Typical 1H/1C system: 2 transformer
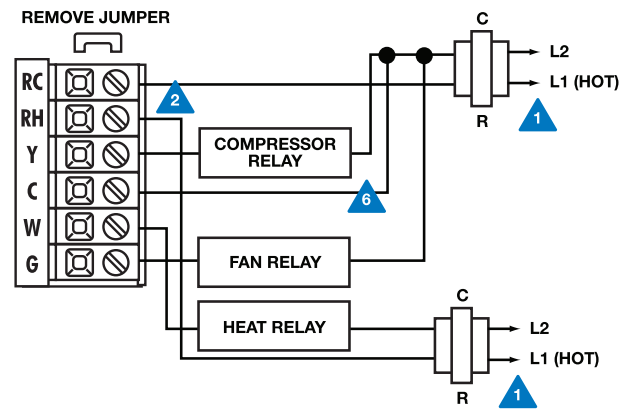
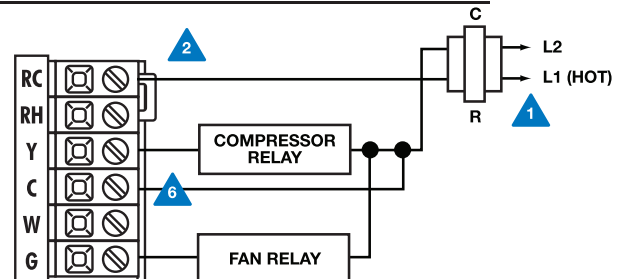## Typical 1H/1C heat pump system
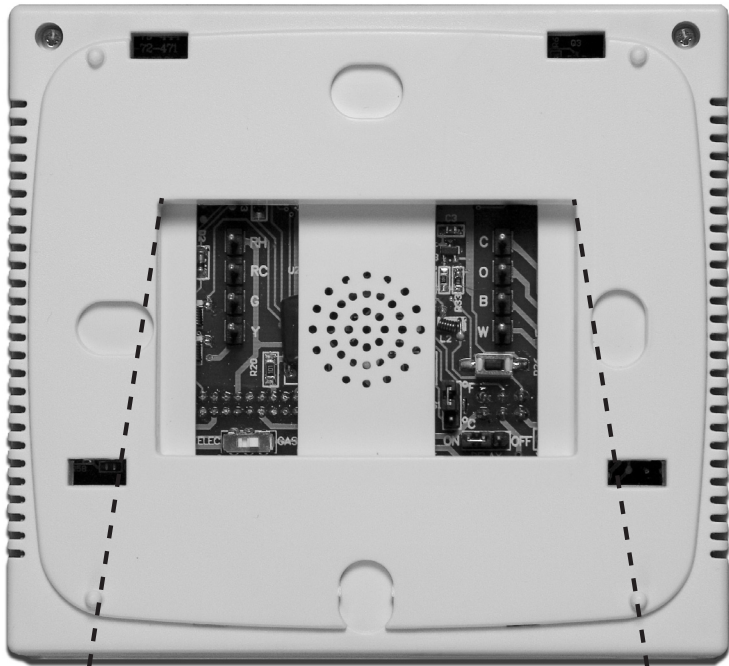
Typical heat-only system
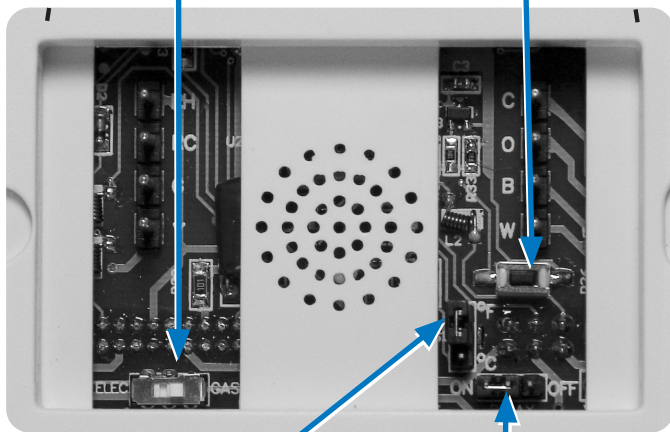
Typical heat-only system with fan

Typical cool-only system

Select **ELEC** or **GAS**
with this switch

Reset button

Select **F** or **C**
with the jumper pin

Select delay **ON** or **OFF**
with the jumper pin

⚠ **Important:**
The **RESET** button must be pressed after changing any switch or jumper pin setting. Batteries must be installed for this operation.

Gas or Electric Setup

Gas: For systems that control the fan during a call for heat, put the fan operation switch to the **GAS** position.

Electric: The thermostat operation switch should be put in the **ELEC** position. This setting allows the thermostat to operate the fan when the fan relay is connected to the **G** terminal.

Fahrenheit/Celsius Display

Select **F** or **C** with the jumper pin on the back of the thermostat.

Delay

The compressor delay will not allow the compressor to be turned on for 5 minutes after the last time the compressor was on. The cooling icon will flash during the delay period. Select **OFF** or **ON** with the jumper pin as desired.

Adjusting the Temperature Swing

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. There are separate swing settings for heat and for cool. Follow the steps below to adjust the **SWING** setting for heat or cool:

1. Select **HEAT** or **COOL** with the system switch.

2. Hold down the ☐ + ☐ and ☐ – ☐ keys together for 3 seconds.

3. Use the ☐ + ☐ or ☐ – ☐ key to adjust the swing. The swing 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 factory default for cooling is 0.5°F and 0.4°F for heating.

4. Wait approximately 10 seconds for the thermostat to return to normal operation.

Room Temperature Calibration

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. You can adjust the room temperature display to ready -4°F to +4°F above or below the factory calibrated reading. Follow the steps below to adjust the temperature reading:

1. Select **OFF** with the system switch.

2. Hold down the ☐ + ☐ and ☐ – ☐ keys together for 3 seconds.

3. Use the ☐ + ☐ or ☐ – ☐ key to adjust the room temperature display.

4. Wait approximately 10 seconds for the thermostat to return to normal operation.

PRO1 Tip

Temperature swing, sometimes called differetial or cycle rate, can be customized for this individual application. For most applications choose a swing setting that is as long as possible without making the occupants uncomfortable.
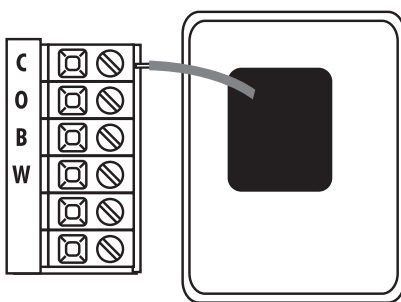
Mount Thermostat

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).

Insert 2 AA Alkaline batteries (included).

Model: T701 **www.pro1iaq.com**

Select Heat, Off, or Cool as needed. Select Fan On for continuous operation or Fan Auto to cycle fan with system.

Use the **+** or **−** keys to select your desired room temperature. A copy of the Operating Manual can be downloaded at www.pro1iaq.com

Replace AA Batteries when low battery indicator shows in display.
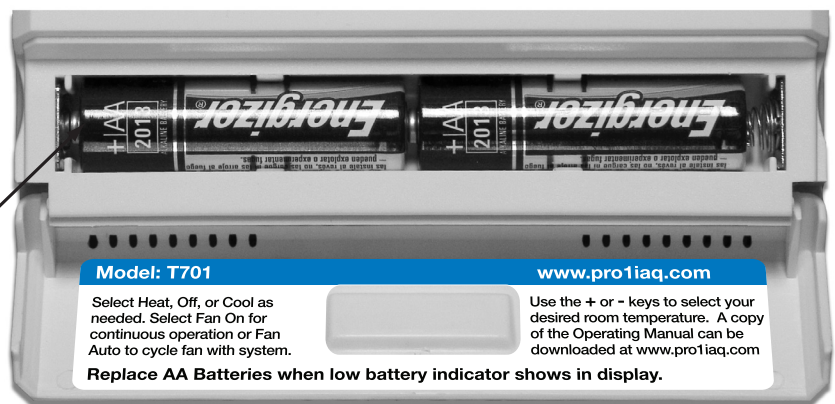
Simple operating instructions are found on the back of the battery door.

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°F to +105°F (0°C 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

Pro1 IAQ Inc.
1111 S. Glenstone
Suite 2-100
Springfield, MO 65804

Toll-free: 1-888-Pro1iaq (776-1427)
Toll Number (Outside the USA): 330-821-3600
Web: http://www.pro1iaq.com
Hours of Operation: Monday - Friday 9 AM - 6 PM Eastern