

TP-N-621

VIVE Comfort

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Toll-Free: 1-800-776-1635 **Web:** www.vivecomfort.com

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

Thermostat Applications Guide

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

Table of Contents Page Installation Tips 2 Thermostat Quick Reference 3 Subbase Installation 4 5 Wiring **Technician Setup** 6 7 Technician Setup Menu Mounting and Battery Installation 8 9 **Specifications**

Power Type

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

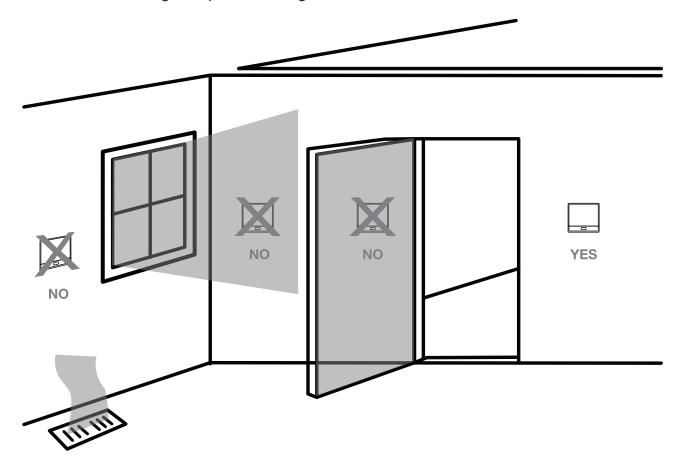
A trained, experienced technician must install this product.

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

Una versión en español de este manual se puede descargar en la página web de la compañía.

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

Installation Tip

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

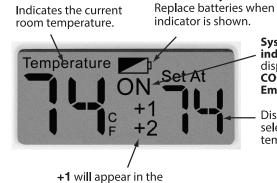
THERMOSTAT QUICK REFERENCE

Low Battery Indicator:

Getting to know your thermostat



1 LCD



display when the auxiliary

heat is active.

- System operation indicators: ON will display when the COOL, HEAT or Emergency Heat is on.
- Displays the user selectable setpoint temperature.

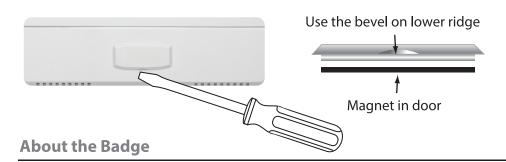
- (2) Fan Switch
- 3 System Switch
- 4 Easy Change Battery Door
- (5) Setpoint Buttons



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



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.

All our thermostats use the same universal magnetic badge. Visit our website to learn more about our dealer imprinting programs.

SUBBASE INSTALLATION



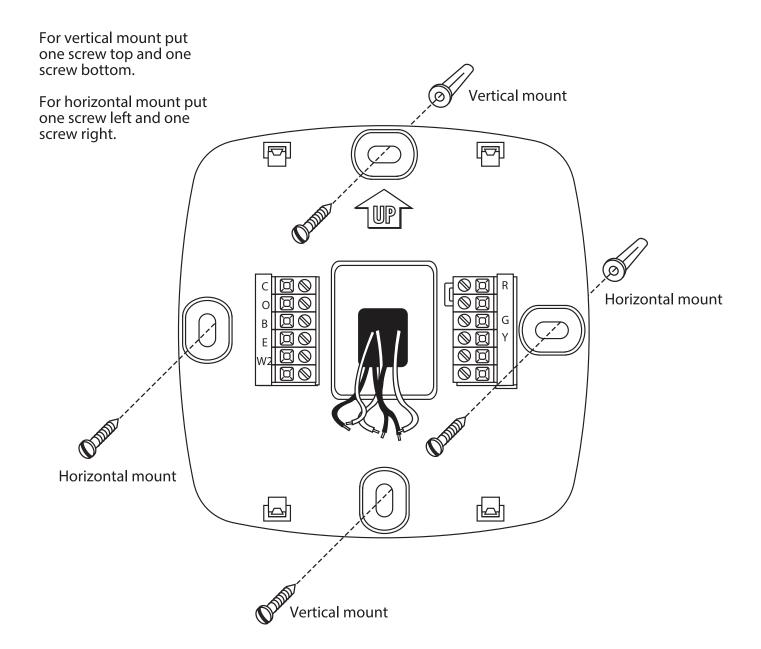
Caution: Electrical Hazard

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



Mercury Notice:

All of our 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.





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.
- Loosen the terminal block screws. Insert wires then retighten terminal block screws.
- 3. Place nonflammable insulation into wall opening to prevent drafts.

Brand	24V Common	24V Hot	Changeover in Cooling	Changeover in Heating	Fan	Emergency Heat	Compressor	Auxiliary Heat	Malfunction Light
Pro1	C (optional)	R	0	В	G	E	Υ	W2	None, Tape Off
Arco/Snyder	C	R	0		G	E	Υ	W1	Х
B.D.P.	C	R	0		G	E	Υ	W1	F
Carrier	C	R	0		G	E	Υ	W2	L
Coleman	BLCK	RED	V		G		Υ	W2	
G.E.	В	R	0		G	X2	Υ	W	
Heil-Quaker	В	R	0		G		Υ	W2	
Honeywell	C	R	0	В	G	E	Υ	Aux	L
Janitrol	C	R	0		G	E	Υ	W2	
Lennox	Х	V/VR	R		F	E	M	Υ	L
Magic Chef	C	R	0		G	E	Υ	W	
Rheem	Х	R		В	G	E	Υ	W2	L
Ruud	X	R		В	G	E	Υ	W2	L
Trane	В	R	0		G	X2	Υ	W	F
Weatherking	C	R	Y1		G		W1	Е	
Wesco	C	R	Y1		G	E	W1	W2	
Westinghouse	Х	R/V	0	Z	G/F	E	Y/C	W/H2	
White-Rodgers	C	R	0	В	G	E	Υ	W2	L
York	В	R	0		G		Υ	W	

Note: This cross reference represents typical systems and is not necessarily representative of your particular application. Always consult the original equipment manufacturer for proper installation instructions.

Terminal Designations

- W2 Auxiliary heat relay Stage 2 heat
- Y Compressor relay Stage 1 heat and cool
- G Fan relay
- O Heat pump changeover valve energized in cooling
- R Transformer power
- Reset button Select **F** or **C** with the jumper pin

- C Common wire from system transformer
- B Heat pump changeover valve energized in heating
- E Emergency heat relay

Note:

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

Fahrenheit/Celsius Display

Select **F** or **C** with the jumper pin on the back of the thermostat. **F** is for Fahrenheit and **C** is for Celsius.



Important:

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

Select Delay

ON or OFF

with jumper pin

TECHNICIAN SETUP MENU

Technician Setup Options

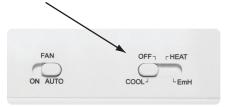
This thermostat has 4 different setup configurations. To setup the thermostat for your particular application:

- 1. Select COOL, HEAT, EmH, or OFF
- 2. Press and hold + and button for 3 seconds. This 3 second delay is designed so that homeowners do not accidentally access the installer settings.

Tech Setup Options Room Temperature Gas Auxiliary Cooling Swing **Heating Swing** Calibration for Heat Pump (SYSTEM: COOL) This feature allows The swing setting, The swing setting, When on, this often called "cycle often called "cycle the installer to feature turns off change the rate", "differential" rate", "differential" the Y terminal 45 calibration of the or "anticipation" is or "anticipation" is seconds after the room temperature adjustable. A smaller adjustable. A smaller second stage of display. For swing setting will swing setting will heat turns on. example, if the cause more frequent cause more frequent thermostat reads 70° cycles and a larger cycles and a larger and you would like it swing setting will swing setting will to read 72° then cause fewer cycles. cause fewer cycles. select + 2. LCD Will Show **Adjustment Options** You can adjust the The cooling swing The heating swing Selectable on or off. room temperature setting is adjustable setting is adjustable display to ready -4°F from ±02°F to from ±02°F to This option should be ±20°F. For example: ±20°F. For example: ON for DUAL FUEL to +4°F above or A swing setting of below the factory A swing setting of applications that use calibrated reading. 05°F will turn the 05°F will turn the a gas furnace for heating on at auxiliary heat. cooling on at approximately 0.5°F approximately 0.5°F above the setpoint below the setpoint and turn the heating and turn the cooling off at approximately off at approximately 0.5°F below the 0.5°F above the setpoint. setpoint. Factory Default Settings 0.8 °F 0.8 °F 0ff

3. Configure the installer options as desired using the table below.

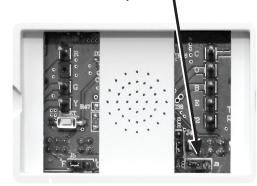
Use the + or - keys to change settings. **Note:** When you want to exit the Technician Setup options select **OFF** using the system switch



Compressor Short Cycle Delay

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.

Using the jumper on the back of the thermostat selecting **ON** will not allow the compressor to be turned on for 5 minutes after the last time the compressor was on. Selecting **OFF** will remove this delay.



The default jumper is set to ON.

Swing Setting 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.

MOUNT THERMOSTAT & BATTERY INSTALLATION

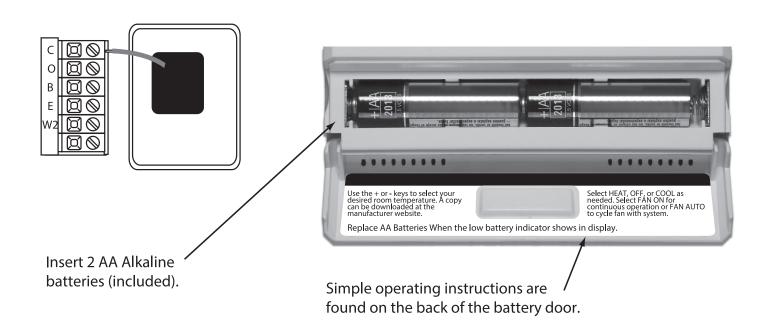
Mount Thermostat

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).



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 0.2°F to 2.0°F
	Cooling is adjustable from 0.2°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 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