



TP-N-721

Vive Comfort

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 Web: www.vivecomfort.com
 Hours of Operation: M-F 9AM - 6PM Eastern

Thermostat Application 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 Furnace	No
Cool Only Systems	No

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 version en espanol de este manual se puede descargar en la pagina web de la compania.

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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)
 Swing (cycle rate or differential) Heating is adjustable from 0.2° to 2.0°
 Cooling is adjustable from 0.2° to 2.0°
 Power source 18 to 30 VAC, NEC Class II, 50/60 Hz for hardwire
 Battery power from 2 AA Alkaline 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 0.8"D

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Rev. 1612CH

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Installation Tips

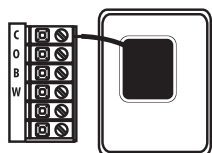
Mount Thermostat

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

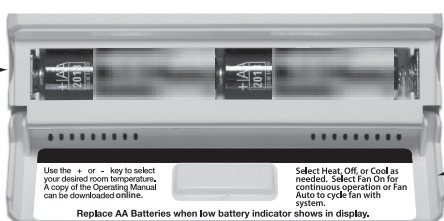
Battery installation is recommended even if thermostat is hardwired (C terminal connected). When thermostat is hardwired and batteries are installed, the thermostat will activate a compressor delay of 5 minutes when the thermostat detects a power outage from the hardwired power supply.



Important:

High quality alkaline batteries are recommended. Rechargeable batteries or low quality batteries do not guarantee a 1-year life span.

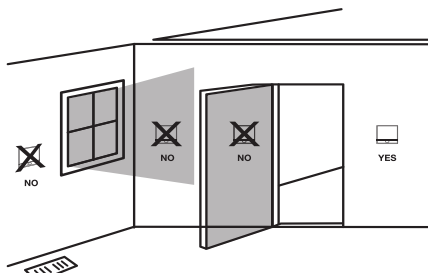
Insert 2 AA Alkaline batteries (included). High quality alkaline batteries are recommended.



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

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

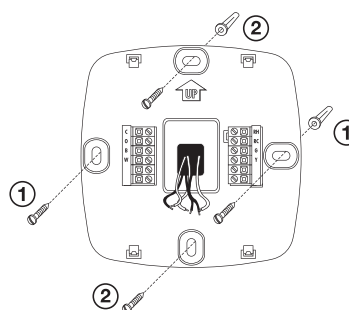


Installation Tip

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

Subbase Installation

- 1 Horizontal Mount
- 2 Vertical Mount



For vertical mount put one screw on the top and one screw on the bottom.
 For horizontal mount put one screw on the left and one screw on the right.



Installation Tip: Electrical Hazard

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



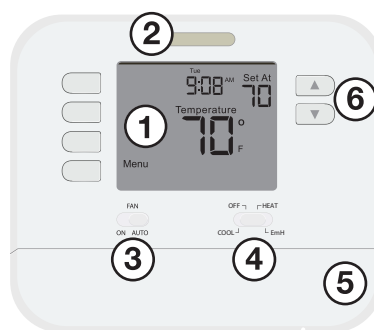
Mercury Notice

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.

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Thermostat Quick Reference

Getting to know your thermostat



Time and days of the week

Displays the selected setpoint temperature.

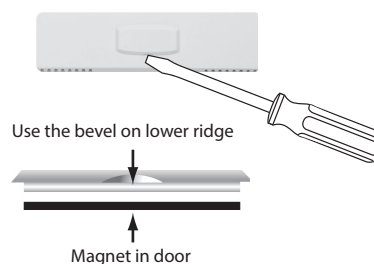
System Operation Indicators:
 The COOL, HEAT or FAN icon will display when the COOL, HEAT or FAN is on.
NOTE: The compressor delay feature is active if these icons are flashing. The compressor will not turn on until the 5 minute delay has elapsed.

Low Battery Indicator:
 Replace batteries when indicator is shown.

Button Options
 +1 will appear in the display when the auxiliary heat is active

- 1 LCD
- 2 Glow in the dark light button
- 3 Fan switch
- 4 System switch
- 5 Easy change battery door
- 6 Temperature setpoint buttons

Removing The 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 screen will only show the low battery indicator but maintain all functionality. If the user fails to replace the batteries after an additional 21 days (days 22-42 since first "low battery" display) the setpoints will change to 55°F (Heating) and 85°F (Cooling). If the user adjusts the setpoint away from either of these, it will hold for 4 hours then return to either 55°F or 85°F. After day 63 the batteries must be replaced immediately to avoid freezing or overheating because the thermostat will shut the unit off until the batteries are changed.

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.**

About The Badge

All of our thermostats use the same universal magnetic badge. Visit the company website to learn more about our free private label program.

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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.



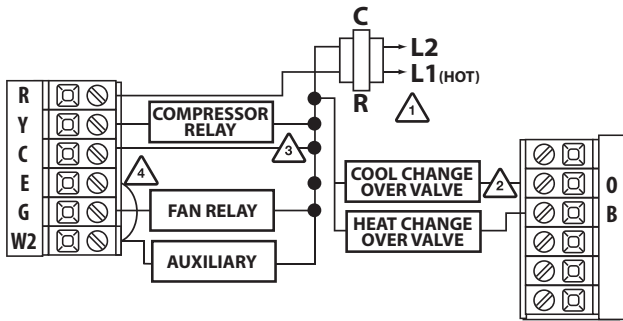
Installation Tip

Do not overtighten terminal block screws, as this can damage the terminal block. A damaged terminal block can keep the thermostat from fitting on the subbase correctly or cause system operation issues.

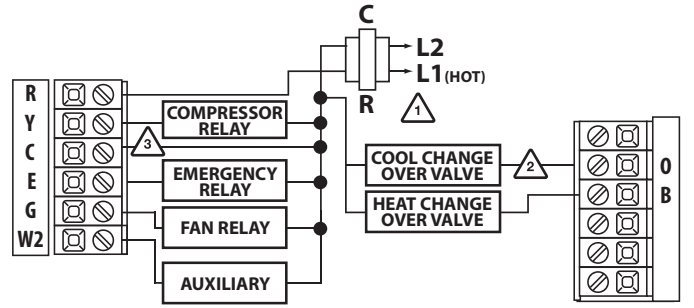
Max Torque = 6in-lbs.

- 1 **Power supply**
- 2 **Use either O or B terminals for changeover valve.**
- 3 **Optional 24 VAC common connection when thermostat is used in battery power mode.**
- 4 **Field-supplied jumper**

2H/1C Heat Pump System - Factory Default Setting



Typical 2H/1C Heat Pump System with separate emergency heat



Note: In many system switch no emergency heat relay a jumper can be installed between E and W2.

Terminal Designations

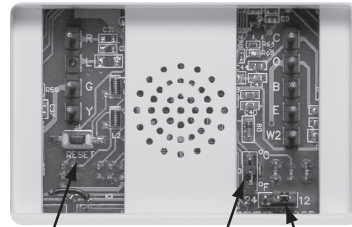
- W2** Auxiliary heat relay - Stage 2
- Y** Compressor relay - Stage 1
- G** Fan relay
- O** Heat pump changeover valve energized in cooling
- R** Transformer
- C** Common wire from system transformer
- B** Heat pump changeover valve energized in heating
- E** Emergency heat relay

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.

12 or 24 Hour Time

12 or 24 hour (military time) can be selected with the jumper pin.



Reset Button
Select F or C with jumper pin
12 or 24 Hour Jumper Pin



Warning:

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

Technician Setup

Tech Settings

1. Select **OFF** with the System Switch.
2. Hold down the **▲** and **▼** buttons together for 3 seconds.
3. Use the **▲** and **▼** to change setting for that step, and the glow in the dark light button to move from one step to another.

Tech Settings	LCD Will Show	Adjustment Options	Default
Filter Change Reminder	100 SE F 1	You can adjust the filter change reminder from OFF to 2000 hours of runtime in 50 hour increments.	OFF
Room Temperature Calibration	CAL 0	You can adjust the room temperature display to read 4° above or below the factory calibrated reading.	0
Minimum Compressor On Time	OFF ON AN	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.	OFF
Compressor Short Cycle Delay	ON OF CO	Selecting "ON" will not allow the compressor to be turned on for 5 minutes after the last time the compressor was switched off. Select "OFF" to remove this delay.	ON
Cooling Swing	dfCO 0.5	The cooling swing setting is adjustable from 0.2° to 2°. For example: A swing setting of 0.5° will turn the cooling on at approximately 0.5° above the setpoint and turn the cooling off at approximately 0.5° below the setpoint.	0.8
Heating Swing	dfHE 0.5	The heating swing setting is adjustable from 0.2° to 2°. For example: A swing setting of 0.5° will turn the heating on at approximately 0.5° below the setpoint and turn the heating off at approximately 0.5° above the setpoint.	0.8

Technician Setup

Tech Settings	LCD Will Show	Adjustment Options	Default
Gas Auxiliary for Heat Pump	ON AG	Selectable ON or OFF. This option should be "ON" for "DUAL FUEL" applications that use a gas or other fossil fuel furnace for auxiliary heat.	OFF
Satisfy Setpoint	ON SF	Use the ▲ or ▼ key to turn ON or OFF.	OFF
Staging Delay	5 Sd	Use the ▲ or ▼ key to select OFF, 10, 15, 30, 45, 60, or 90 minutes.	OFF

Swing Setting Tip

Temperature swing, sometimes called differential 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.

Note: The second stage will turn on at 2x the swing setting. The second stage will turn off when 1x the swing is reached.

Understanding Thermostat Staging

Your thermostat will control two stages of heating. The thermostat will try to maintain your comfort setting using the first stage for energy efficiency. The second stage of heating will only be used if your thermostat cannot maintain your comfort setting using only one stage. When the second stage is used you will see stage2 in the display.

Note: Our standard staging logic, optional satisfy setpoint and optional staging delay allows for job by job customization that balances comfort, energy efficiency and equipment longevity.

Set 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 **▲** or **▼** key to select the current hour. When using 12-hour time, make sure the correct AM or PM 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.