#### **Installation Tips**

# TP-S-701i

## **Vive Comfort**

P.O. Box 3377

Springfield, MO 65808-3377 Toll Free: 888-776-1427 Web: www.vivecomfort.com

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

#### **Thermostat Application 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	No

#### **Power Type**

Hardwire (24V Common Wire)

#### 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.

#### WIFI

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Frequency Range	2.4 Ghz ISM radio band
	Supporting 802.11
	P/G/N Standards

# WIFI Setup

Wiring

**Table of Contents** 

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Thermostat Quick Reference

Specifications

Installation Tips

Specifications	
The control range of temperature	41°F to 95°F (5°C to 35°C) 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)	
Power source	18 to 30 VAC, NEC Class II, 50/60 Hz for hardwire. 500 mA
Operating ambient	
Operating humidity	90% non-condensing maximum 4.7"W x 4.4"H x 0.8"D
Difficusions of thermostat	4./ W X 4.4 11 X 0.0 D

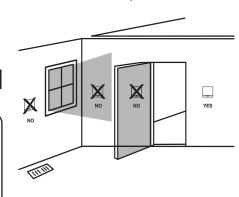
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Thermostat Quick Reference

Rev. 2019

#### **Wall Installation**

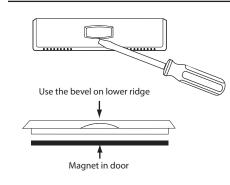
The thermostat should be installed approximately 4 to 5 feet above the floor. Select an area with average temperature and good air circulation. Pick an installation location that is easy for the user to access. The temperature of the location should be representative of the building.



#### 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

#### 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.

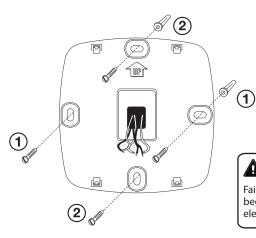
All of our thermostats use the same universal magnetic badge. Visit the company website to learn more about our free private label program.

## THE PUWER OF PARTNERSHIP

#### **Subbase Installation**

# **(2**) (5) 0 HERT (3)

- (**1**) LCD
- (2) Glow in the dark light button
- **(3**)Fan button
- **4**) System button
- (5) Temperature setpoint buttons



### 1 Horizontal Mount

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

#### 2 Vertical Mount

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

#### Electrical Hazard

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

Top text field used in programming, will \_also show time of day when a schedule program is being used.

> Indicates the current room temperature.

Bottom left text field used in programming and hold functions. Will also show current fan setting.

Displays the user Set At 3711371 1371 **-** 137113711371 137113711371 1371 2311371 1331 **-** 133113711371 1331137113711371 selectable setpoint temperature.

COOL ON

**HEAT ON** 

0

-SYSTEM-

NATURANIAN NATURANIAN

WIFI signal

Indicator

Indicates mode of system running. (Flashing indicates 5 min compressor delay).

WIFI Connection Indicator

Bottom right text field used in programming and hold functions. Will also show current system setting.

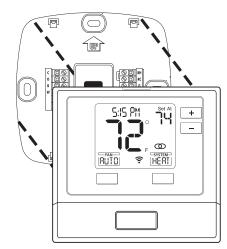
**NOTE:** To ensure a solid fit between the thermostat and subbase:

- 1. Mount subbase on a flat wall
- 2. Use provided screws.
- 3. Ensure drywall anchors are flush with wall.
- 4. Push wires into wall.

### 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.

#### **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.



## Wiring

Power Supply

Factory-installed jumper, remove only when installing on 2-transformer system.

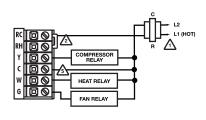
Use either O or B terminals for changeover valve.

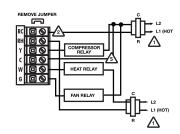
4 Use a small piece of wire (not included) to connect W and Y terminals.

A 24 VAC 500mA common connection is required with this thermostat.

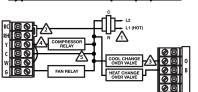
#### Typical 1H/1C system: 1 transformer

#### Typical 1H/1C system: 2 transformers

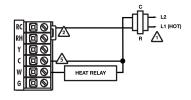




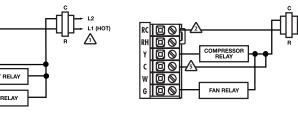
#### Typical 1H/1C heat pump system



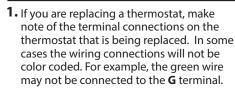
#### Typical heat only systems w/o fan



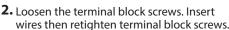
#### Typical cool-only sytem



# Wiring



**Replacement Thermostat Wiring** 



- **3.** Place nonflammable insulation into wall opening to prevent drafts.
- **4.** This thermostat requires a 24V common wire to the C terminal.

# 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.



#### Installation Tip Max Torque = 6in-lbs.

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.

#### Wiring Chart

For all systems, the following terminals are wired according to whether you have a single or dual transformer system as shown:

	RH	RC	C	G
SINGLE TRANSFORMER SYSTEM	24 VAC HOT JUMPER SHOULD REMAIN INSTALLED		24 VAC Common 500mA	Blower / Fan
DUAL TRANSFORMER SYSTEM	24 VAC-Heat *REMOVE PROVIDED JUMPER	24 VAC-Cool *REMOVE PROVIDED JUMPER	24 VAC Common 500mA *FROM COOL TRANSFORMER	Blower / Fan

\*FAILURE TO REMOVE PROVIDED JUMPER ON DUAL TRANSFORMER INSTALLATIONS COULD CAUSE SEVERE DAMAGE TO HVAC SYSTEMS

0 Terminal	Heat pump changeover valve Energized during cooling
B Terminal	Heat pump changeover valve Energized during heating

Note: Devices such as a float switch that mechanically break circuits should be installed so that they break the control wire (Y) not the power (R). Interrupting the power circuit will shut off power to the thermostat completely and not allow it to operate.

If using in Heat Pump without Auxiliary or Emergency heat application, please see wiring diagram on previous page.



### **Technician Setup Menu**

Typical heat only system

#### To enter tech setup:

- 1. Press and hold the + and buttons for 3 seconds.
- 2. Press and hold TECH button.
- 3. Configure the installer options as desired using the table below. Use the + or buttons to change settings and the PREV and NEXT buttons to move from one step to another.
- 4. To exit tech setup: press and hold the + and buttons for 3 seconds, or wait 20 seconds.

#### LCD Will Show Adjustment Options **Tech Setup Steps** Default This feature allows the installer to You can adjust the room Room change the calibration of the room temperature display to read 4° above or below the factory temperature display. For example, if the thermostat reads 70 degrees and you 0 Temperature 1 calibrated reading. Calibration would like it to read 72 then select +2. The compressor short cycle delay COMP DELRY Selecting "On" will not allow the Compressor protects the compressor from "short cycling". This feature will not allow the compressor to be turned on for 5 compressor to be turned on Short Cycle 0NDisplay minutes after it was last turned off. The swing setting often called "cycle COOL SHING The cooling swing setting is adjustable from 0.2° to 2°. A swing setting of 0.5° will begin cooling at approximately 0.5° above the setpoint and stop approximately 0.5° below the rate", "differential", or "anticipation" is adjustable. A smaller swing setting will Cooling 0.5°F cause more frequent cycles and a larger Swing swing setting will cause fewer cycles setpoint. HERT SHING The heating swing setting is adjustable from 0.2° to 2°. A The swing setting often called "cycle rate", "differential", or "anticipation" is adjustable. A smaller swing setting will Heating swing setting of 0.5° will begin heating at approximately 0.5° below the setpoint and begin cause more frequent cycles and a larger swing setting will cause fewer cycles. 0.4°F Swing approximately 0.5° above the setpoint. This feature allows you to set a maximum heat setpoint value. The HE I Use the + and - buttons to select Heating the maximum heat setpoint. setpoint temperature cannot be raised above this value. Setpoint 90 Limit Use the + and - buttons to select This feature allows you to set a maximum cool setpoint value. The setpoint temperature cannot be raised the maximum cool setpoint. Cooling Setpoint above this value. 44 Limit

## **Swing Setting Tip**

Tech settings continued on next page ...

# 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 wide as possible without making the occupants uncomfortable.

## Technician Setup Menu

**Tech Setup continued:** 

#### LCD Will Show Adjustment Options Default **Tech Setup Steps** This feature allows you to display OR 0 °F for Fahrenheit temperature in either Fahrenheit or Celsius. °F °F or °C You can select either 12 or 24 hour 127248 Use the + and - key to clock setting. 12 or 24 12 select 12 or 24 hour clock 12 **Hour Clock** DISPLIGHT The display light can be configured to operate 3 different ways. To come on only when the Light Key is pressed, AUTO "AU" - Any key ON ON "On" - Always ON OFF "OF" - Only light key ON Display **AUTO** Light when Any Key is pressed, or stay on ALL 280588M83LE You can configure this thermostat to Select "OF" to configure the accept a programmed schedule from the mobile App, if WIFI thermostat for NON-Program mable. (Time of day will NOT Programmable communication is set up through your appear on display). home network. (Only displayed if **OFF** Select "ON" to configure the connected to the thermostat for programmable operation, from the app. SYS MODE You can configure the system for your Use the + and - key until the particular application. HEAT-OFF-COOL desired application is flashing. Heat System HC - Heat - OFF - Cool Off Set COOL-OFF H - Heat Only Cool C - Cool Only FRN OPER GAS - "GS" 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. ELEC - "EL' Fan GAS Operation

or initial setup.

# Operation of the FAN & SYSTEM button when connected to WIFI and running a programmable schedule from the app:

When the set at temperature is changed while an app schedule is running, the thermostat will enter a temporary hold, and the Fan and System buttons change to RUN and HOLD for 5 seconds. If you wish to enter PERMANENT HOLD press the HOLD button at this time.

If you don't press the HOLD button within the 5 seconds, it will remain in temporary hold for 4 hours.

When connected to WIFI you may also have the ability to turn programming ON or OFF by pressing and holding the FAN button for 3 seconds, while the FAN BOX appears.

These WIFI Technician steps/ options are intended for information and trouble-shooting. They are not used for installation

Follow these steps to enter the WIFI-technical information menu.

- 1. Press and hold the + and buttons together for 3 seconds.
- 2. Press WIFI button at lower right.
- **3.** Top of display will show: "WIFI NOTOK" if NOT connected to WIFI. "WIFI OK" if connected to WIFI.
- **4.** IF **NEXT** button is pressed, top of display will show:

The firmware and software versions that are installed on the thermostat. You can scroll through them with the + and - buttons.

**5.** IF **NEXT** button is pressed again, top of display will show:

The SSID # of the thermostat. if **NEXT** is pressed again, you will return to step 4.

The only normal function you would use this step for would be to RESET WIFI provisioning. For example: If you replaced your home WIFI router and need to connect via a different network.

Follow these steps to enter the WIFI-technical information menu.

- 1. Go through steps 1 and 2 from the WIFI menu at left.
- **2.** Press and hold the TECH button at lower left for 3 seconds.
- **3.** Top of display will show: "RESET WIF!"
- **4.** Press the **YES** button at lower left. After a 5 second countdown, the thermostat will reset.

Or press NO to exit