

Global 1420 AC Power Supply



# Honeywell T827 Series Programmable Thermostat Owner's Manual

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# Honeywell

Honeywell T827 Series Programmable Thermostat



## Specifications

- **System Types:** T822/T827 Series Thermostat
- **System Settings:** Base installation, Wiring, Terminal Designations
- **Fan Settings:** Thermostat mounting, Fan switch (select models), System switch (select models)

## Electrical Ratings

Terminal	Voltage (50/60Hz)	Running Current
W1 Heating (Powerpile)	20-30 Vac 750 mVdc (DC Powered) 12 Vdc	0.02-1.2 A
Y2 Cooling	20-30 Vac	.55 A
G Fan	20-30 Vac	0.02-1.2 A

This manual covers the following models\*:

### T822K,L • T827K

Images are for reference only and may not represent the actual thermostat.

## Pre-installation checklist

### Check package contents

- Thermostat
- Wall anchors & screws (2 each)

### Before you begin, make sure you have:

- No. Phillips & small pocket screwdrivers
- Hammer

- Level (optional) Pencil
- Drill and bit (3/16" for drywall, 7/32" for plaster)

**Must be installed by a trained, experienced technician**

Read these instructions carefully. Failure to follow these instructions can damage the product or cause a hazardous condition.

**CAUTION: ELECTRICAL HAZARD**

Can cause electrical shock or equipment damage. Disconnect power before beginning installation.

**MERCURY NOTICE**

If this product is replacing a control that contains mercury in a sealed tube, do not place the old control in the trash. Contact your local waste management authority for instructions regarding recycling and proper disposal.

**Product application**

This thermostat provides control of:

- 24 Vac heating systems (T82 2K)
- 750 mV or 12 Vdc heating systems (T827K)
- 24 Vac cooling systems (T822L)

**System Types**

- Gas or oil
- Warm air, hot water, high-efficiency furnaces, heat pumps, steam, gravity
- Normally closed hot water valves (T822K)
- 2-wire cooling systems (T822L)
- Normally open hot water valves (T822L)

**System Settings**

Heat, Off (select models only)

**Fan Settings**

Auto, On (select models only)

**Specifications**

**Temperature Control Range**

- 45° to 95°F (7° to 35°C)
- 35° to 85°F (2° to 29°C)\*

**Operating Ambient Temperature**

- 0° to 120°F (-18° to 49°C)

## Operating Relative Humidity

- 5% to 90% (non-condensing)

## Dimensions (vertical model)

- 2.88W x 4.75H x 1.5D (inches)
- 73W x 121H x 38D (mm)

## Dimensions (horizontal model)

- 4.75W x 2.88H x 1.5D (inches)
- 121W x 73H x 38D (mm)

**CAUTION:** Do not use a product with this temperature control range in a home. Temperatures at or below freezing can occur. A product with this temperature range is for use in areas where temperatures below freezing can occur, such as a garage.

## Electrical Ratings

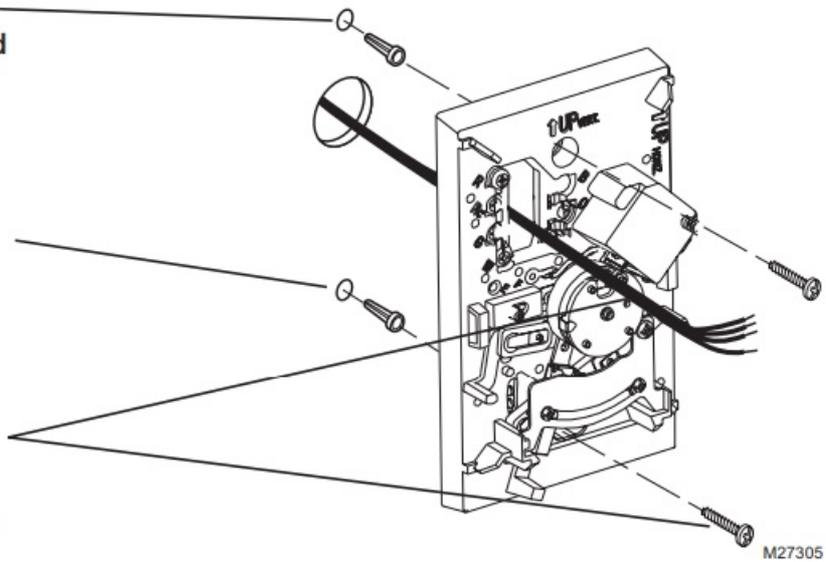
Terminal	Voltage (50/60Hz)	Running Current
<b>W<sup>1</sup></b> Heating	20-30 V <sub>ac</sub>	0.02-1.2 A
(Powerpile)	750 mV <sub>dc</sub>	100 mA <sub>dc</sub>
(DC Powered)	12 V <sub>dc</sub>	.55 A
<b>Y<sup>2</sup></b> Cooling	20-30 V <sub>ac</sub>	0.02-1.2 A
<b>G</b> Fan	20-30 V <sub>ac</sub>	0.02-0.6 A
(Normally open hot water valve.)	20-30 V <sub>ac</sub>	0.02-1.2 A
<sup>1</sup> T822K and T827K		
<sup>2</sup> T822L		

## Base installation

1. Pull wires through wire hole. Position base on wall, level and mark hole positions.

2. Drill holes (3/16" holes for drywall, 7/32" holes for plaster), then tap in supplied wall anchors.

3. Pull wires through base, position over anchors, and insert screws. Check level if desired, then tighten screws.



## Wiring

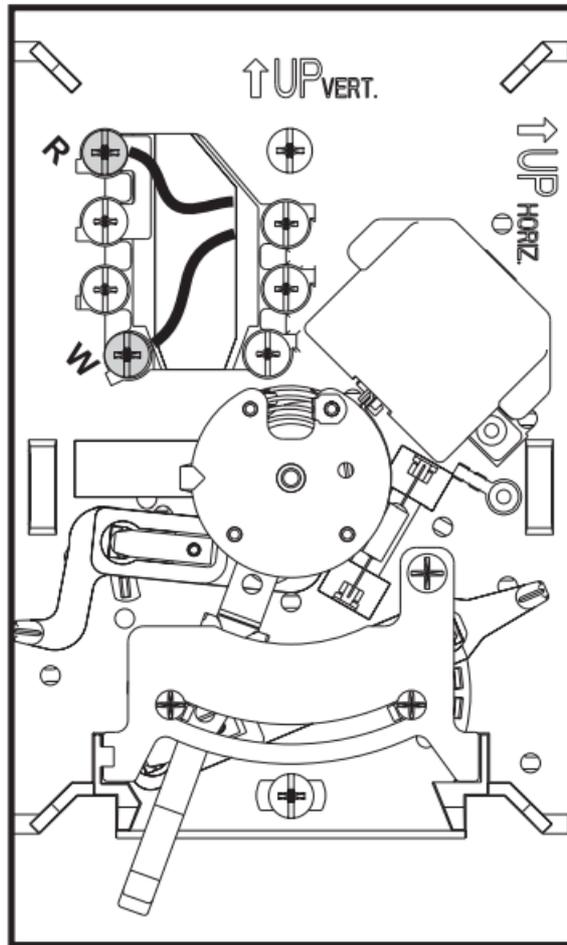
1. Loosen screw terminals, insert bare wires beneath screws, then re-tighten screws.
2. Push any excess wire back into the wall opening
3. Plug the wall opening with nonflammable insulation to prevent drafts from affecting thermostat operation.

## Terminal Designations

- **R** Heating power. Connect to the secondary side of the heating system transformer.
- **W1** Heat relay.
- **Y2** Cool relay, or normally open hot water valve.
- **G** Fan relay (select models only)
  - **1:** T822K and T827K
  - **2:** T822L

## Wire specifications

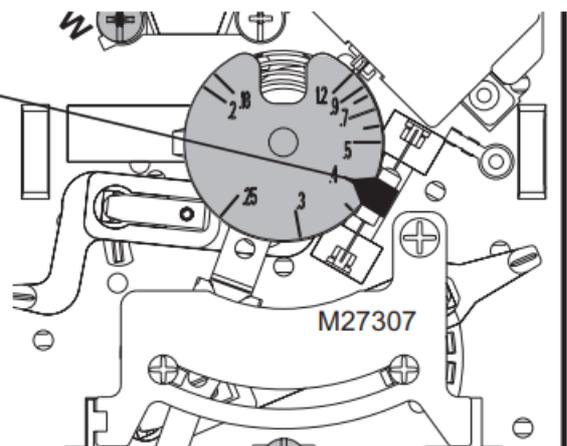
Use an 18-gauge thermostat wire. Shielded cable is not required.



### Set heat anticipator (model T822K only)

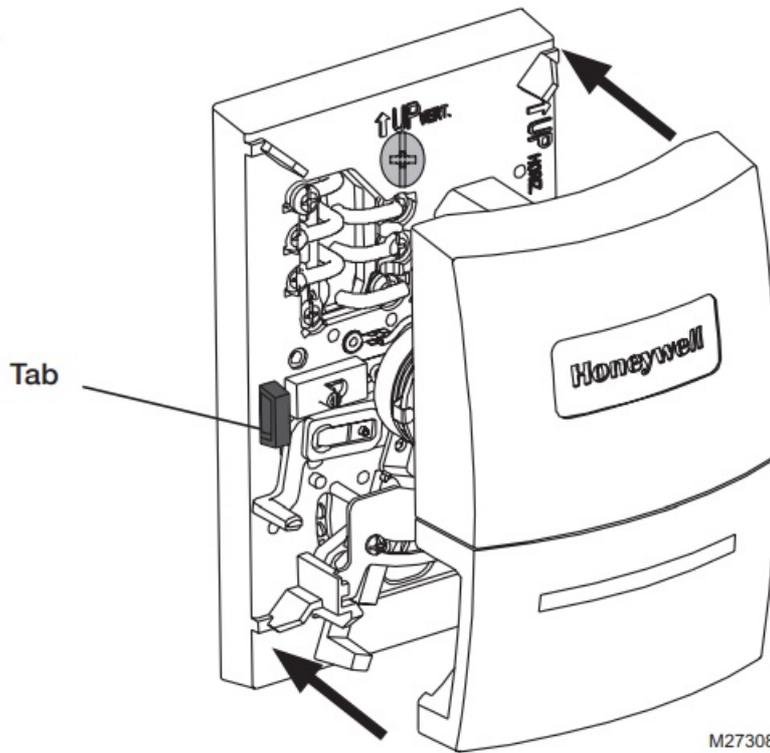
Move the adjustment arrow to the proper setting for your system (see table below).

Your system	Setting
Steam	1.2
Hot water heat	0.8
Warm air (high efficiency)	0.8
Warm air (standard)	0.4
Electric heat	0.3



### Thermostat mounting

Align the slots on the cover with tabs on the sides of the base, then push gently until the cover snaps into place.



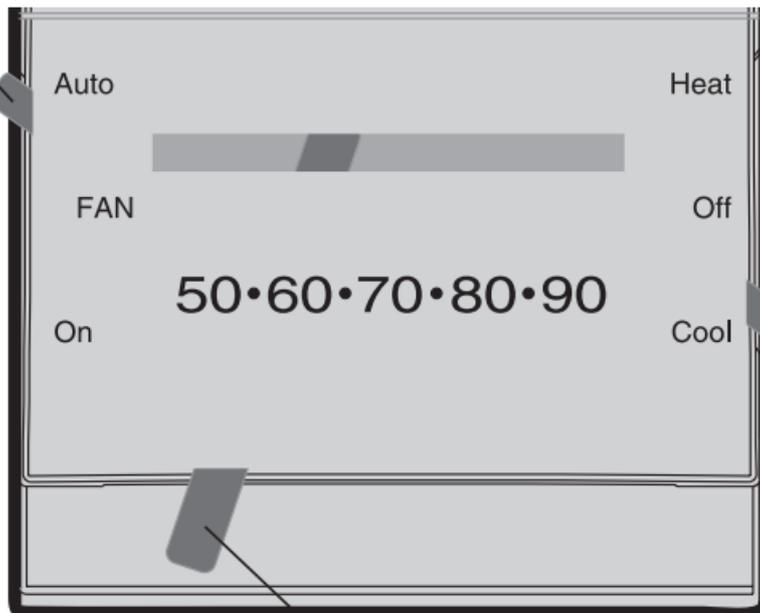
## Operation

### Fan switch (select models)

- **On:** Fan runs continuously.
- **Auto:** Fan runs only when heating or cooling system is on.

### System switch (select models)

- **Heat:** Controls the heating system.
- **Off:** All systems are off.



### Temperature setting

Adjust to set desired indoor temperature.  
 Note: Temperature scale varies by model.

## warranty

### 5-year limited warranty

Honeywell warrants this product to be free from defects in the workmanship or materials, under normal use and service, for a period of five (5) years from the date of purchase by the consumer. If at any time during the warranty period the product is determined to be defective or malfunctions, Honeywell shall repair or replace it (at Honeywell's option).

If the product is defective,

- return it, with a bill of sale or other dated proof of purchase, to the place from which you purchased it; or
- call Honeywell Customer Care at 1-800-468-1502.

Customer Care will make the determination whether the product should be returned to the following address:

- Honeywell Return Goods, Dock 4 MN10-3860, 1885 Douglas Dr. N., Golden Valley, MN 55422, or whether a replacement product can be sent to you.
- This warranty does not cover removal or reinstallation costs. This warranty shall not apply if it is shown by Honeywell that the defect or malfunction was caused by damage which occurred while the product was in the possession of a consumer.
- Honeywell's sole responsibility shall be to repair or replace the product within the terms stated above.  
HONEYWELL SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE OF ANY KIND, INCLUDING ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING, DIRECTLY OR INDIRECTLY, FROM ANY BREACH OF ANY WARRANTY, EXPRESS OR IMPLIED, OR ANY OTHER FAILURE OF THIS PRODUCT.  
Some states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation may not apply to you.
- THIS WARRANTY IS THE ONLY EXPRESS WARRANTY HONEYWELL MAKES ON THIS PRODUCT. THE DURATION OF ANY IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IS HEREBY LIMITED TO THE FIVE-YEAR DURATION OF THIS WARRANTY. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.
- This warranty gives you specific legal rights, and you may have other rights which vary from state to state.
- If you have warranty questions, please write Honeywell Customer Relations, 1985 Douglas Dr., Golden Valley, MN 55422 or call 1-800-468-1502. In Canada, write Retail Products ON15-02H, Honeywell Limited/Honeywell Limitée, 35 Dynamic Drive, Toronto, Ontario M1V4Z9

### Need Help?

For assistance with this product please visit <http://yourhome.honeywell.com> or call Honeywell Customer Care toll-free at 1-800-468-1502

### Automation and Control Solutions

- Honeywell International Inc. 1985 Douglas Drive North Golden Valley, MN 55422
- Honeywell Limited-Honeywell Limitée 35 Dynamic Drive
- Toronto, Ontario M1V 4Z9

### FAQ

• **Q: Can this thermostat be used in areas with freezing temperatures?**

- A: No, this thermostat should not be used in homes where temperatures at or below freezing can occur. It is suitable for use in areas such as a garage where freezing temperatures can occur.

• **Q: What is the warranty for this product?**

- A: Honeywell offers a 5-year limited warranty for this product, covering defects in materials and workmanship.

<http://yourhome.honeywell.com>

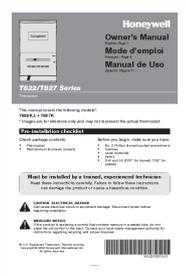
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## Documents / Resources

	<p><a href="#">Honeywell T827 Series Programmable Thermostat</a> [pdf] Owner's Manual T822K, T827K, T822L, T827 Series Programmable Thermostat, T827 Series, Programmable Thermostat, Thermostat</p>
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## References

- [Honeywell Home | Smart Home Comfort and Security](#)
- [Manual-Hub.com - Free PDF manuals!](#)
- [User Manual](#)

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