Thermostat Quick Reference

Dimensions of thermostat ................. 4.7"W x 4.4"H x 0.8"D

Operating humidity .............................. 90% non-condensing maximum

Batteries

Battery power from 2 AA Alkaline for hardwire

Power source ...........................................18 to 30 VAC, NEC Class II, 50/60 Hz

Swing (cycle rate or differential) ...... Heating is adjustable from 0.2˚ to 2.0˚

The control range of temperature.... 44˚F to 90˚F (7˚C to 32˚C)

The display range of temperature ... 41˚F to 95˚F (5˚C to 35˚C)

Table of Contents

Specifications

Thermostat Application Guide

Power Type

Battery Power

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.

Battery Installation

Technician Setup

Wiring

Thermostat Quick Reference

Installation Tips

Specifications

Table of Contents

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.

Subbase Installation

Horizontal Mount

Vertical Mount

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.

Installation Tip: Electrical Hazard

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

Installation Tip: 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 or you can mail the thermostat to the address on the warranty section for proper disposal.

Thermostat Quick Reference

Getting to know your thermostat

System Operation Indicators:

The COOL, HEAT on icon will display when the COOL, HEAT is on.

Displays the selected setpoint temperature.

Low Battery Indicator:

Replace batteries when indicated is shown.

Important

The low battery icon is displayed when the AA battery power is low. Whenever the thermostat detects low battery voltage from the AA batteries, the low battery icon will begin flashing on the screen for 21 days (if the batteries are not changed). If the batteries are not changed 22 days after the thermostat detects low battery voltage, the thermostat screen will only show the flashing battery icon until buttons are pressed. If the batteries are not changed 43 days after the thermostat detects low battery voltage, the thermostat screen will only show the flashing battery icon until buttons are pressed and the set points will offset to 85°F/29°C in cooling and 55°F/13°C in heating. At this stage, set point changes can be made temporarily but, the set points will change back to defaulted values after a 4-hour period. The thermostat will continue to perform this low battery flashing, temperature offset condition until the internal voltage threshold is reached. When the thermostat internal voltage threshold is reached, all relays will be opened and the thermostat will become inoperable until new batteries are installed.

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.

Unlocking the Private Label Badge

Use the bevel on lower ridge, magnet in door.

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.
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**

- **C** Common wire from secondary side of cooling system transformer
- **O** Heat pump changeover valve energized in cooling
- **B** Heat pump changeover valve energized in heating
- **W** Heat relay

**Wiring 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.

**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.

**Note:**

- Do not 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.

**Caution:**

- Electrical Hazard

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**Typical 1H/1C System: 1 Transformer**

**Typical 1H/1C System: 2 Transformer**

**Typical Heat Pump System**

**Typical Heat-Only System**

**Typical 1H/1C Heat Pump System**

**Typical Cool-Only System**

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**Technician Setup**

**Tech Settings**

1. Select OFF with the System Switch for Tech Settings. Select Heat or Cool for Swing and Limit settings. They are set separately.
2. Hold down the + and - buttons together for 3 seconds.
3. Use the + and - to change setting for that step, press the + and - to change setting for that step, and the glow in the dark light button to move from one step to another.

**Swing & Limit Settings**

1. Select Heat or Cool with the System Switch.
2. Press and hold the + and - buttons together for 3 seconds.
3. Use the + and - to change setting for that step, press the + and - simultaneously to change between tech settings.

**To exit Swing & Limit Settings, slide the System Switch to a different position or wait approximately 20 seconds.**

**To exit Tech Settings, slide the System Switch to a different position or wait approximately 20 seconds.**

**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 wide as possible without making the occupants uncomfortable.