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

T771

Thermostat Application Guide

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

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Specifications

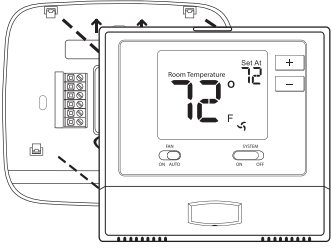
The display range of temperature ...	20°F to 95°F (-6°C to 35°C)
The control range of temperature....	25°F to 90°F (-4°C to 32°C)
Swing (cycle rate or differential)	Heating is adjustable from 0.2° to 2.0° Cooling is adjustable from 0.2° to 2.0°
Power source	18 to 30 VAC, NEC Class II, 50/60 Hz for hardwire Battery power from 2 AA Alkaline batteries
Operating ambient	20°F to +105°F (-6°C to +41°C)
Operating humidity	90% non-condensing maximum
Dimensions of thermostat	4.7"W x 4.4"H x 1.1"D

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Installation Tips

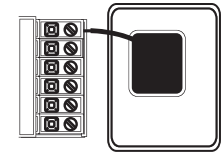
Mount Thermostat

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

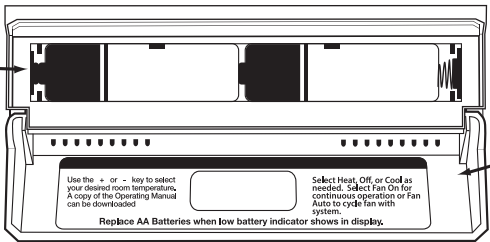
Battery installation is recommended even if thermostat is hardwired (C terminal connected). When thermostat is hardwired and batteries are installed, the thermostat will activate a compressor delay of 5 minutes when the thermostat detects a power outage from the hardwired power supply.



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

Important:

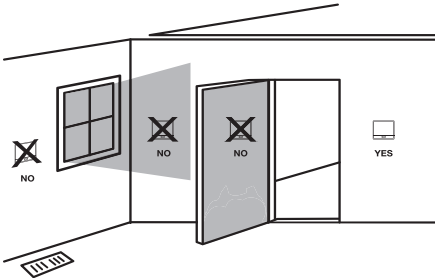
High quality alkaline batteries are recommended. Rechargeable batteries or low quality batteries do not guarantee a 1-year life span.



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.



Installation Tip

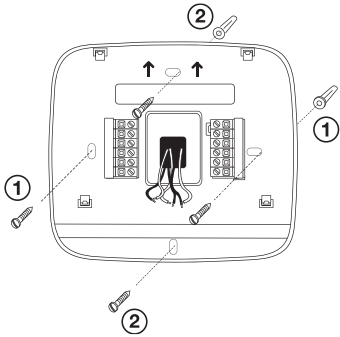
Pick an installation location that is easy for the user to access. The temperature of the location should be representative of the building.

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

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.

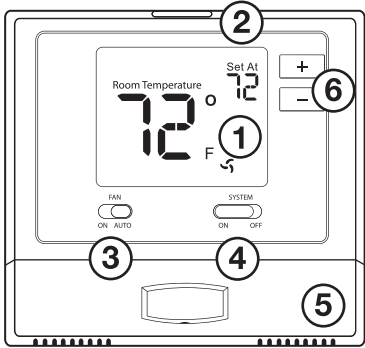


Mercury Notice

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.

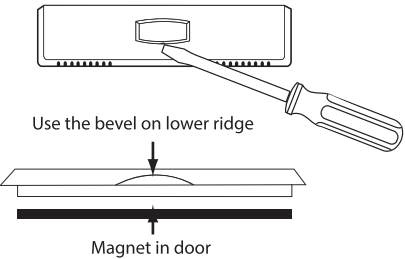
Thermostat Quick Reference

Getting to know your thermostat



- 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



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.




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.**



**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.

Terminal Designations

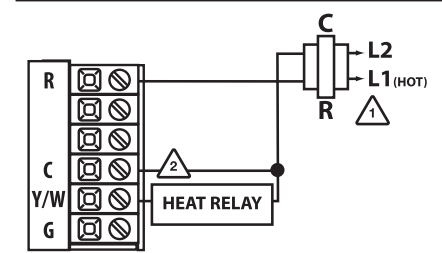
- R** Transformer power from heating or cooling system
- Y/W** Heat relay or Compressor relay
- C** Common wire from system transformer
- G** Fan relay

-  **1** Power supply
-  **2** Optional 24 VAC common connection when thermostat is used in battery power mode

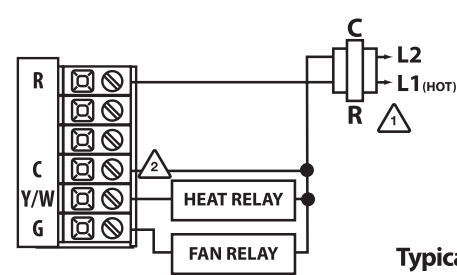
Wiring Tips

- 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.

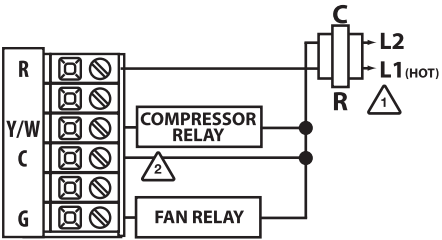
Typical Heat Only System



Typical Heat Only System With Fan



Typical Cool-Only System




5




Technician Setup

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Technician Setup

Selecting Heat or Cool			
<div>1. Select ON with the System Switch.</div> <div>2. Hold down the + and - buttons together for 3 seconds.</div> <div>3. Use the + and - button to select Heat or Cool. Toggle system switch when done.</div>			
Tech Setup Steps	LCD Will Show	Adjustment Options	Default
Heat or Cool		Heat or Cool HE - HEAT CO - COOL	HE

1. Select OFF with the System Switch.
2. Hold down the + and - buttons together for 3 seconds.
3. Use the + and - button to change setting for that step, and the glow in the dark button to move from one step to another. Toggle system switch when done.

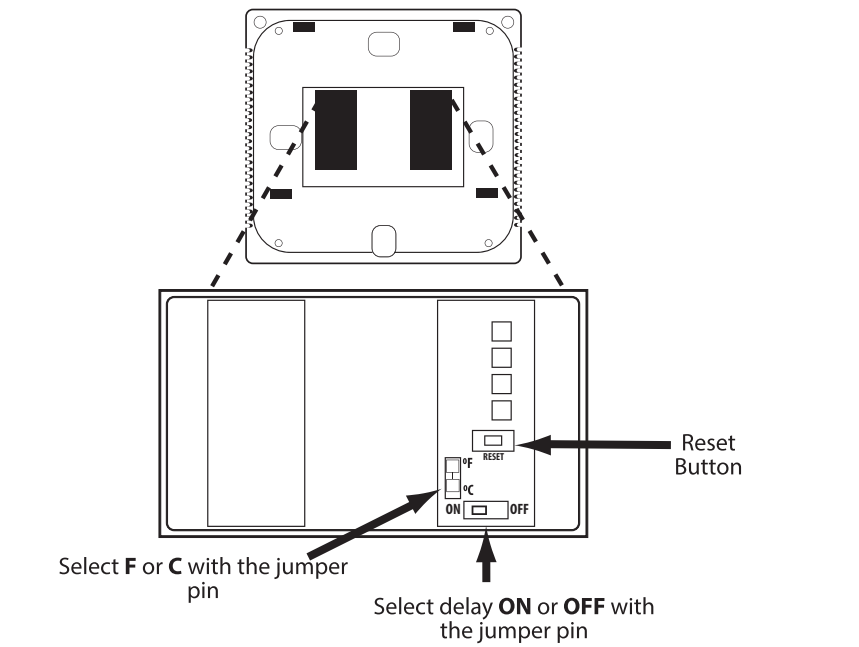
Room Temperature Calibration	This feature allows the installer to change the calibration of the room temperature display. For example, if the thermostat reads 70° and you would like it to read 72° then select +2.		You can adjust the room temperature display to read up to 4° above or below the factory calibrated reading.	0°F
Swing	The swing setting, often called "cycle rate", "differential" or "anticipation" is adjustable. A smaller swing setting will cause more frequent cycles and a larger swing setting will cause fewer cycles. (reference the Technician Setup Menu steps above for how to enter this Menu)		The swing setting is adjustable from 0.2° to 2°. For example: A swing setting of 0.5 will turn the system on and off at approximately 0.5° away from the setpoint. Only the swing for the selected mode (Heat or Cool) is displayed in the menu.	0.4 0.5
Temperature Setpoint Limit	This feature allows you to set a maximum heat setpoint valve. The setpoint temperature cannot be raised above this value. You can also set a minimum cool setpoint value if in cool mode.		Use the + or - key to select the maximum heat setpoint or the minimum cool depending on the selected mode (Heat or Cool).	25° 90°


Fahrenheit / Celsius Display

Select F or C with the jumper pin on the back of the thermostat

Delay

The compressor delay will not allow the compressor to be turned on for 5 minutes after the last time the compressor was on. The cooling icon will flash during the delay period. Select **OFF** or **ON** with the jumper pin as desired.





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