

Model: TS-3 INSTALLATION AND OPERATING INSTRUCTIONS

IF YOU CANNOT READ OR UNDERSTAND THESE INSTALLATION INSTRUCTIONS
DO NOT ATTEMPT TO INSTALL OR OPERATE

CALIFORNIA PROPOSITION 65



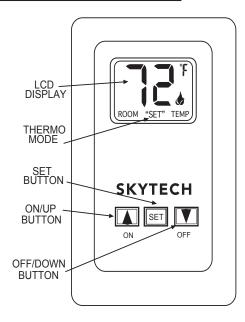
WARNING

This product can expose you to Tetrabromobisphenol-A, which is known to the state of California to cause cancer. (For more information, go to www.p65warnings.ca.gov)

INTRODUCTION

This TS-3 wired wall thermostat was developed to provide a safe, reliable control system for gas heating appliances. The system can be operated thermostatically or manually from the wall unit.

WALL MOUNT THERMOSTAT

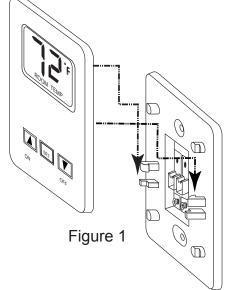


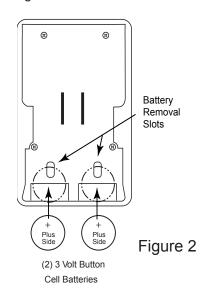
The TS-3 wired thermostat operates on (2) 3V Button Cell (Included) which powers the LCD screen and circuit board. Before using the TS-3 wall thermostat the 3V batteries must be installed into the battery compartments.

It is recommended that CR2032 lithium batteries always be used for longer battery life and maximum operational performance. If the LCD screen will not come on, check the 3V Button Cell battery.

TO INSTALL BATTERIES IN THE THERMOSTAT (TS-3)

- 1. Remove face from backing wall plate this is done by sliding the face up about 1/2" then pull the face off the base plate. As shown in Figure 1.
- 2. Locate the (2) holders for the 3V button cell batteries (See Figure 2).
- 3. Slide the button cell batteries into the battery holders. (Make sure that the batteries are installed with the (+) plus side facing you or up.
- 4. Reinstall the face to the backing plate this is done by sliding the face in and down about 1/2" then check that the (2) male terminal connectors on the face are engaged in the female terminal connectors on the backing plate. As show in Figure 1.

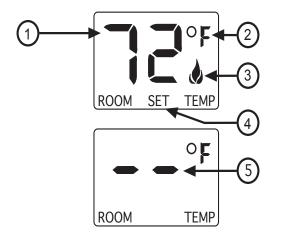




TO REMOVE THE BATTERIES FROM THE THERMOSTAT

- 1. Remove face from backing plate this is done by sliding the face up about 1/2" then pull the face off the base plate. As shown in Figure 1.
- 2. Locate the (2) holders for the 3-volt button cell batteries.
- 3. Insert a small screwdriver into the slot above the button cell battery and push the battery out. As shown in Figure 2.
- 4. Reinstall the face to the backing plate this is done by sliding the face in and down about 1/2" then check that the (2) male terminal connectors on the face are engaged in the female terminal connectors on the backing plate. As show in Figure 1.

TS-3 THERMOSTAT OPERATION



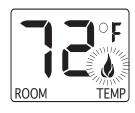
- 1. ROOM TEMP Current room temperature.
- 2. F° = Degrees Fahrenheit (C° = Degrees Celsius)
- 3. FLAME ICON Indicates APPLIANCE IS ON.
- 4. SET- Indicates TS-3 is in thermostat mode.
- 5. DASHES Indicate thermostat mode is being disabled.

Note: The word (SET) will appear when the thermostat mode is enabled.



- 1. This TS-3 wired wall thermostat has ON, OFF, and SET functions that are activated by pressing the buttons on the face of the TS-3.
- 2. If the LCD display will not come ON, check the 3V-button cell battery.

SETTING MANUAL OPERATION



- 1. When the ON button on the TS-3 is pressed a flame icon on the LCD screen will appear when the appliance is ON.
- 2. When the appliance is OFF the flame icon will not appear.

SETTING THERMOSTAT OPERATION



- 1. If the TS-3 is in the thermostat mode the word (SET) will appear on the LCD screen.
- 2. When the SET button is pressed the temperature digits will begin to flash.
- 3. While the temperature digits are flashing use the ON button to increase the set temperature or use the OFF button to decrease the set temperature to your desired temperature.
- 4. When the desired temperature setting is reached press the SET button, again and the word SET will appear on the LCD screen and now the thermostat will automatically send an ON or OFF signal to the appliance.
- 5. To disengage the thermostat mode push the OFF button or push and hold the SET button until (2) dashes appear on the LCD screen. When you release the SET button this will disengage the thermostat mode and the word SET will disappear from the LCD screen.

Skytech: TS-3 Wired Thermostat

SETTING °F / °C SCALE

The factory setting for temperature is degrees Fahrenheit (°F) . To change this setting to Centigrade (°C), you must press and hold both the ON and OFF buttons on the transmitter at the same time until the LCD displays the change. If you want to convert back, repeat the above procedure.

THERMO UPDATING FEATURE

This SKYTECH wired wall thermostat has a THERMO UPDATING Feature built into its software. The THERMO UPDATING Feature operates in the following manner, but only in the THERMOSTAT MODE:

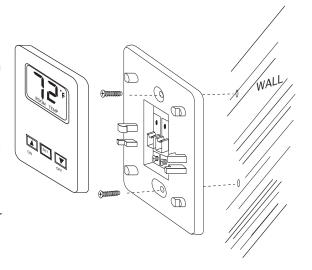
The TS-3 normally reads the ROOM temperature every 2 minutes checking the ROOM temperature against the SET temperature and then sends a signal to the appliance.

NOTE: When locating the TS-3 on a wall remember it should be kept away from direct sources of heat such as heating appliance, incandescent lighting, and direct sunlight. Leaving the TS-3 in direct sunlight, for example, will cause its heat-sensing diode to read the room temperature higher than it actually is; if in THERMOSTAT mode, it may not turn ON the appliance even if the ambient ROOM temperature is below the SET temperature.

INSTALLATION INSTRUCTIONS

WALL MOUNTING THE TS-3 THERMOSTAT

- Remove face from backing plate as shown in Figure 1 then locate the TS-3 to where the (2) thermostat wires from the appliance can be pulled through the hole on the backing plate and connect them to the (2) terminal screws.
- 2. After locating the (2) two mounting holes and mark the holes on the wall.
- Use the (2) two dry wall anchors and screws (that are supplied) to mount the base plate to the wall as shown.
- 4. Thermostat can also be mounted onto an existing (Plastic) electrical box.
- 5. Base plate should be mounted level on the wall for best operation.
- 6. Reinstall the face to the backing plate this is done by sliding the face in and down about 1/2" then check that the (2) male terminal connectors on the face are engaged in the female terminal connectors on the backing plate. As shown in Figure 1.



GENERAL INFORMATION

WARNING

This TS-3 wired wall thermostat must be installed exactly as outlined in these instructions. Read all instructions completely before attempting installation. Follow instructions carefully during installation. Any modifications of the TS-3 or any of its components will void the warranty and may be pose a fire hazard.

Do not connect any gas valve or electronic module directly to 110-120VAC power. Consult gas appliance manufacturer's instructions and wiring schematics for proper placement of all wires. All electronic modules are to be wired to manufacturer's specifications.

Skytech: TS-3 Wired Thermostat REV. 11-14-18 Page 3

WIRING INSTRUCTIONS

A qualified electrician or a gas technician who is familiar with the gas appliance and gas valves that will be operated by this remote should install the remote control system. Incorrect wiring connections WILL cause damage to the gas valve or electronic module operating the gas appliance and may also damage the remote receiver.

WIRING MILLIVOLT VALVES - ELECTRONIC SPARK IGNITIONS - OTHER APPLIANCES

This TS-3 wired wall thermostat connects to a millivolt gas valve, electronic spark ignition systems or other heating appliances as shown below in Figure 3, Figure 4, & Figure 5. Connect 18 gauge stranded or solid wires from the TS-3 wired wall thermostat to the gas valve, or electronic module.

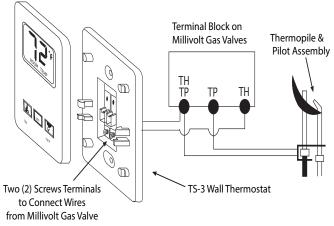
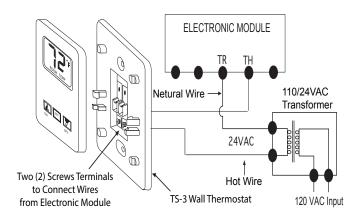


Figure 3 (Millivolt Valves)



Other Appliance

Power Supply (Could be 12VAC, 12VDC or 24VAC)

Two (2) Wires from Appliance (Not Included)

Figure 5 (Other Appliances)

Two (2) Screw Terminals to Connect Wires from

Appliance

SYSTEM CHECK

MILLIVOLT VALVES - ELECTRONIC IGNITION SYSTEMS - OTHER APPLIANCES

Light your gas appliance following the lighting instructions that came with the appliance. Confirm that the pilot flame is ON; it must be in operation for the main gas valve to operate, if you have an electronic ignition system check the power source as well.

- Press the **ON** button on the TS-3 to turn the system to **ON** manually. The main flame should come **ON**.
- Press the **OFF** button on the TS-3 to turn the system to **OFF** manually. The main flame should extinguish (the pilot flame will remain on if you are using a millivolt gas valve system).
- Press the SET button on the TS-3 to change the system to THERMO. Hold the SET button to set the temperature on the TS-3 to a temperature of a least 2°F (1°C) above the ROOM temperature displayed on the LCD screen. With this manual setting, the normal thermostatic cycle is overridden and the system flame will ignite. Set the SET temperature to at least 2°F (1°C) below the room temperature and the system flame will extinguish in a few seconds. Thereafter, it should continue to cycle to ON and OFF thermostatically approximately every two minutes as the ROOM temperature changes, but only when the temperature differential between ROOM and SET temperatures differ at least 2°F (1°C). The 2°F differential is the factory setting.

GENERAL INFORMATION

BATTERY LIFE

Life expectancy of lithium button cell batteries in the TS-3 should be at least (1) season (8) months. Check and replace both batteries annually. The TS-3 should operate with as little as 2.4 volts of battery power, measuring at each of the 3-volt button cell batteries.

TROUBLE SHOOTING

Should you encounter problems with your appliance system, the problem may be with the appliance itself or it could be with the TS-3 wired wall thermostat. Review the appliance manufacturer's operation manual to make sure all connections are properly made. Then check the operation of the TS-3 in the following manner:

- 1. Be sure the TS-3's batteries are properly installed and that the battery output is 2.4 volts on each battery or more. If one battery is installed backward the wired wall thermostat will not operate.
- 2. The TS-3 has (2) 3 volt button cell batteries (1) button cell operates the LCD screen and the other button cell powers the PCB board. If the button cell battery that controls sending the PCB board is low or defective the LCD screen may work but the PCB relay may not close the contact (Check each button cell battery)
- 3. Check that the (2) male terminal connectors on the face are engaged in the female terminal connectors on the backing plate.
- 4. Check the wire connections to the TS-3 from the appliance that they are properly connected

SPECIFICATIONS

BATTERIES: TS-3 wired wall thermostat – Uses (2) CR2032 (3VDC lithium button cell) batteries.

MANUFACTURED EXCLUSIVELY FOR SKYTECH II, INC



Skytech: TS-3 Wired Thermostat REV. 11-14-18 Page 5