



# TS-3

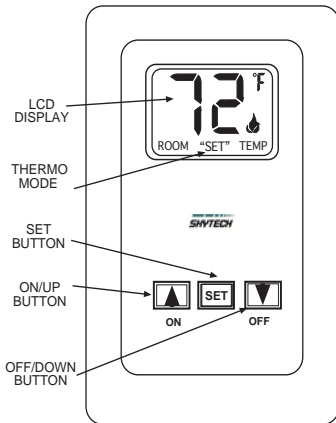
## INSTALLATION AND OPERATING INSTRUCTIONS

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

### 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

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.
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 3V 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

Figure #1

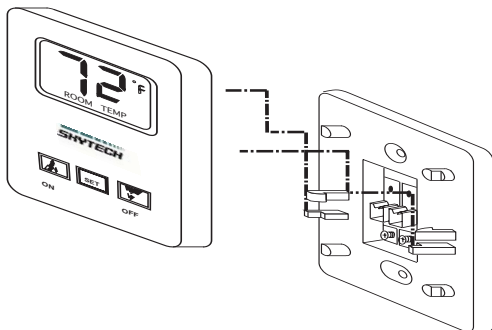
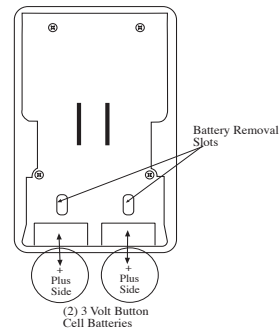
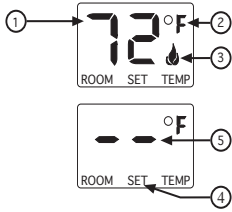


Figure #2



# WIRED WALL MOUNT THERMOSTAT OPERATION

## FUNCTIONS

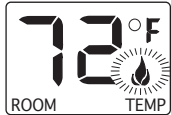


1. ROOM TEMP – Current room temperature.
2. **F** – Degrees Fahrenheit (**C** Indicates degrees Celsius)
3. FLAME ICON – Indicates APPLIANCE IS ON.
4. SET- Indicates TS/R-3 is in thermostat mode.
5. DASHES – Indicate thermostat mode is being disabled. When **TS-3 is not in the thermostat mode. The word (SET) will not appear.**



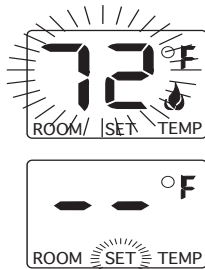
1. This TS/R-3 Wired wall Thermostat has **ON**, **OFF**, and **SET** functions that are activated by pressing the buttons on the face of the TS-3.
2. If the LCD will not come on, check the 3V-button cell battery.

## 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.

## 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:

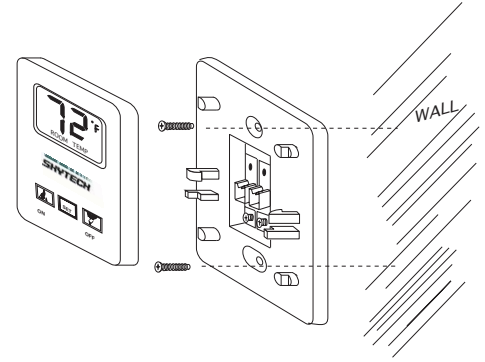
The TS-3 normally reads the ROOM temperature every 2 minutes checking the ROOM temperature against the SET temperature and then sends a signal to the appliance.

**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

1. 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.
3. 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.

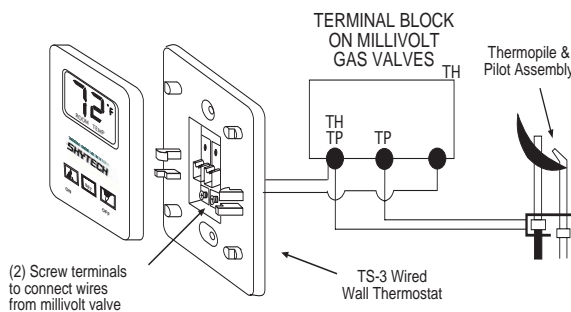
Do not connect any gas valve or electronic module directly to 110-120VAC power. Consult gas appliance manufacturer's instructions and wiring schematics for proper placement of all wires. All electronic modules are to be wired to manufacturer's specifications.

## WIRING INSTRUCTIONS

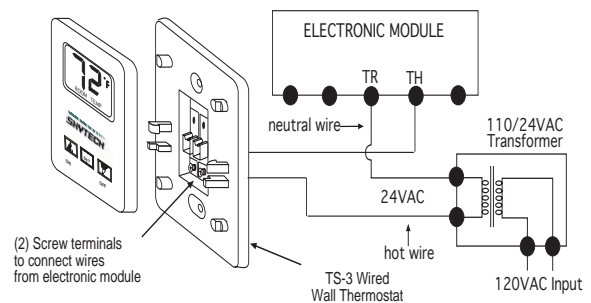
A qualified electrician or a gas technician who is familiar with the gas appliance and gas valves that will be operated by this remote should install the remote control system. Incorrect wiring connections **WILL** cause damage to the gas valve or electronic module operating the gas appliance and may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

### WIRING MILLIVOLT VALVES - ELECTRONIC SPARK IGNITIONS – OTHER APPLIANCES

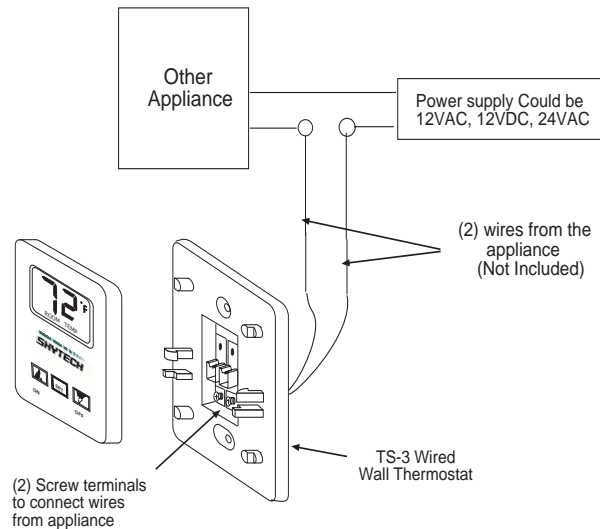
This TS-3 wired wall thermostat connects to a millivolt gas valve, electronic spark ignition systems or other heating appliances as shown below in **Figure #3, Figure #4, & Figure #5**. Connect 18 gauge stranded or solid wires from the TS-3 wired wall thermostat to the gas valve, or electronic module.



**Figure #3(Millivolt Valve)**



**Figure #4 (Electronic Spark System)**



**Figure #5 (Other Appliances)**

## **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 at least 2<sup>0</sup> F (1<sup>0</sup> 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<sup>0</sup> F (1<sup>0</sup> 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<sup>0</sup> F (1<sup>0</sup> C). The 2<sup>0</sup> 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/R-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 – 2ea. (CR2032) 3.0 volt lithium button cell batteries.

FOR TECHNICAL  
SERVICE, CALL:

U.S. INQUIRIES  
888/672-8929 or  
260/459-1703  
Website: [skytechsystem.com](http://skytechsystem.com)

CANADIAN INQUIRIES  
877-472-3923

**MANUFACTURED EXCLUSIVELY FOR SKYTECH II, INC**

# Limited Lifetime Warranty

SKYTECH II warrants the SKYTECH REMOTE CONTROL SYSTEM for a Limited Lifetime of the original owner of this system. This warranty is not transferable to another person it is for the original purchaser of the product. Should any part fail because of defective workmanship or material from the original date of purchase SKYTECH II will repair or, at SKYTECH II option, replace the defective parts.

Replacement parts will be available at no charge for the first (5) five years of this warranty, and will be available at market cost for the Lifetime of the product to that original owner. If SKYTECH II does not have the parts for an individual model, then a replacement SYSTEM will be provided. At no charge for the first (5) five years and sold at market cost for the Lifetime of that product to the original owner.

The Owner must provide a bill of sale, cancelled check, or payment record should be kept to verify purchase date and establish warranty period. Travel, diagnostic cost, service labor to repair the defective SYSTEM, and freight charges on warranty parts to and from the factory will be the responsibility of the owner. SKYTECH will not be responsible for labor charges and/or damage incurred in installation, repair, replacement, or for incidental or consequential damages. Batteries and any damage caused by them are not covered by them are not covered by this warranty.

This warranty does not cover claims, which do not involve defective workmanship or materials.

Damage to the SYSTEM caused by accident, misuse, abuse, or installation error, whether performed by a contractor, Service Company, or owner, is not covered by this warranty. Modification of the SKYTECH product will void this warranty.

IN NO EVENT SHALL SKYTECH BE LIABLE FOR INCIDENTAL AND CONSEQUENTIAL INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, ARE LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY. THIS WARRANTY SUPERSEDES ALL OTHER ORAL OR WRITTEN WARRANTIES.

Some States do not allow the exclusion or limitation of incidental and consequential damages or limitation on how long an implied warranty lasts, so the above limitation may not apply to you. This warranty gives you specific rights and you may have other rights, which vary from state, provision, and nation.

### How to Obtain Service:

Contact SKYTECH II or your SKYTECH Dealer direct with the following information:

- Name, Address, Telephone Number of Owner
- Date of Purchase, Proof of Purchase
- Model Name, Date Code
- Any relevant information or circumstances, e.g., installation, mode of operation when defect was noted.

Warranty claim process will start with all of this information. SKYTECH will reserve the right to physically inspect the product for defects, by authorized representatives.

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Detach at this line for return to: Skytech II 9230 Conservation Way, Fort Wayne, IN 46809 Telephone: (888) 672-8929  
Purchase Date: \_\_\_\_\_ Model: \_\_\_\_\_ Date Code: \_\_\_\_\_

Purchased From: \_\_\_\_\_ Date: \_\_\_\_\_  
Customer Name \_\_\_\_\_ Number of Santa's Helpers \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State/Prov. \_\_\_\_\_ Zip/Postal Code \_\_\_\_\_

Credit Card Number \_\_\_\_\_ Expiring Date \_\_\_\_\_

**(Visa and MasterCard Only) See other side for a special offer for all Remote control Customers**

# Santa's Helper

## Exclusive offer to Skytech Remote Control Owners

This special offer is only provided to customers of Skytech II, Inc. that have purchased a remote control for their Hearth Product. This remote control system can be used for any 110Volt appliance, but perfect your Christmas Tree Lights or any other appliance that is difficult to reach or plug in. Simply plug the receiver into your wall outlet and your appliance into the receiver, push the on button on the transmitter and you are in business. It's that easy.

Model **1310** \$29.95

# Santa's Helper

Santa's Helper is a unique and specialized device designed to save time and effort. Every Christmas brings the challenge of plugging in the lights on the tree. But this year can be different. Simply plug the remote directly into a standard 110 household electrical outlet and plug your light directly into the receiver. You can even use an extension cord for convenience. Then with a

simple push of the button on the transmitter, your lights are turned on and off with ease.

From as far away as 100 feet, the radio frequency controls only what is plugged into the receiver. With over 255 security codes, no other appliances will be affected. And best of all, you don't even have to point the remote at the receiver.

Features:

- 110 VAC - input
- 2 prong polarized plug
- 110 VAC - output
- 2 prong polarized receptacle
- 1000 Watts of rated power or 1/4 HP motor
- Transmitter is battery operated (12 Volt included)
- 255 Security Code
- 100 feet of Operational Distance
- All Radio Frequency
- UL and FCC Approved





888-672-8929 | 888-672-8024 (FAX)  
9230 CONSERVATION WAY | FORT WAYNE, INDIANA 46809

The list price of **\$29.95** for the Santa's Helper has been cut almost in half to **\$15.00 USD** for this exclusive offer. Shipping and handling of **\$5.00 USD** should be added. Send your check, money order or your Visa / MasterCard number, with Expiration Date to our office, along with the warranty information from your remote control for your Hearth Product. You can send this via mail, fax, or e-mail.

Skytech II, Inc.

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