

# Model: 4001TH

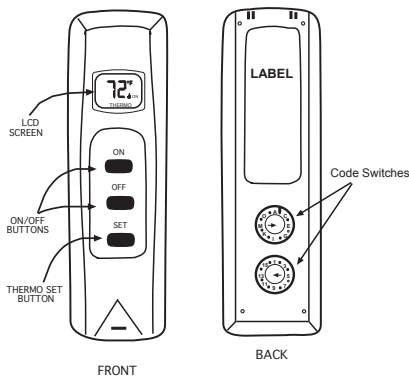
## INSTALLATION AND OPERATING INSTRUCTIONS

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

### INTRODUCTION

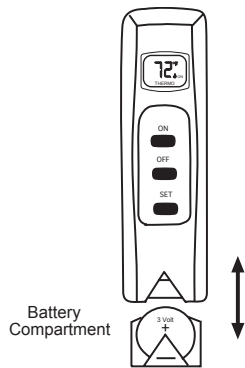
This remote control system was developed to provide safe, reliable, and user-friendly remote control system for gas heating appliances. The system can be operated manually from the transmitter. The system operates on one of 255 settable security codes on the transmitter and receiver.

### TRANSMITTER



The transmitter has ON and OFF and THERMOSTAT functions. This is part of the system's design. If the LCD screen is not working check the position of the transmitter's battery.

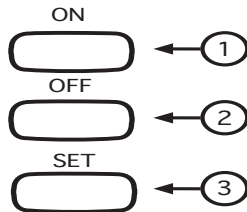
The transmitter has (2) code switches located on the back that will need to be set when installation is complete. **Note: Code setting section**



The transmitter operates on (1) 3V Button Cell (Included) that powers the RF signal. Before using the transmitter the 3V battery must be installed into the battery compartments.

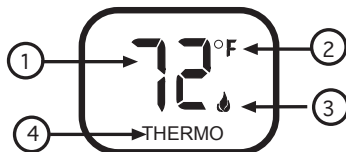
Remove the battery holder from the bottom of the transmitter insert the 3 volt button cell battery in the battery holder with the plus (+) side up. Note the sketch at the left.

It is recommended that CR2032 lithium battery always be used for longer battery life and maximum operational performance.

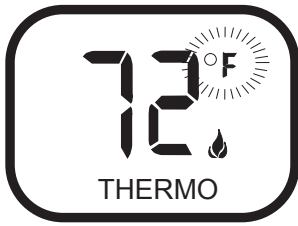


- 1 ON - Operates unit to on position, Manually ON.
- 2 OFF - Operates unit to off position, Manually OFF.
- 3 SET - Sets temperature in thermo mode.

### LCD - Liquid Crystal Display



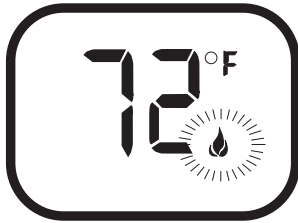
- 1 ROOM Temperature
- 2 °F or °C Icon
- 3 "ON" Flame Icon
- 4 THERMO Mode



## SETTING ° F / ° C SCALE

The factory setting for temperature is ° F. To change this setting to ° C, first

- Press the ON key and the OFF key on the transmitter at the same time this will change from ° F to ° C. Follow this same procedure to change from ° C back to ° F.

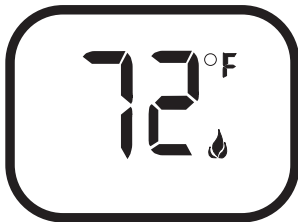


## MANUAL FUNCTION

To operate the system manually perform the following:

### ON OPERATION

Press the ON key the appliance flame will come on. The Flame icon will appear on LCD screen in ON mode



### OFF OPERATION

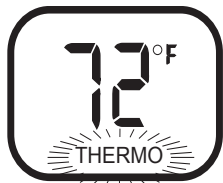
Press the OFF key the appliance flame will shut off. The Flame icon will not appear on LCD screen in OFF mode

## THERMOSTAT FUNCTION

### SETTING DESIRED ROOM TEMPERATURE

This remote control system can be thermostatically controlled when the transmitter is in the THERMO mode (The word **THERMO must be displayed on the screen**). To set the THERMO MODE and DESIRED room temperature, press the SET key and the word **THERMO** will appear on the LCD screen;; the remote is in the thermostatic mode.

Press and hold the SET key until the desired set temperature is reached. (By pressing and holding the set key the LCD screen set numbers will increase from 45° to 99° then restart over at 45°) Next release the SET key. The LCD screen will display the set temperature for 3 seconds and the LCD screen will flash the set temperature for 3 seconds, then the LCD screen will default to display the room temperature:

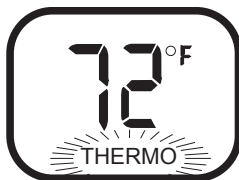


THERMO MODE

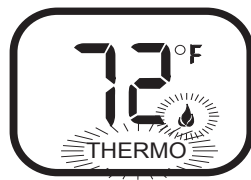


THERMO SET

## TO CHANGE THE SET TEMPERATURE



THERMO OFF



THERMO ON

Press and hold the SET key until the desired set temperature is reached. (By pressing and holding the set key the LCD screen set numbers will increase from 45° to 99° then restart over at 45°) Next release the SET key. The LCD screen will display the set temperature for 3 seconds, then will flash the set temperature for 3 seconds, then the LCD screen will default to display the room temperature.

Press and release the **SET** key to disengage the thermo mode. The word THERMO on the LCD screen will not show when the thermo is not in operation.

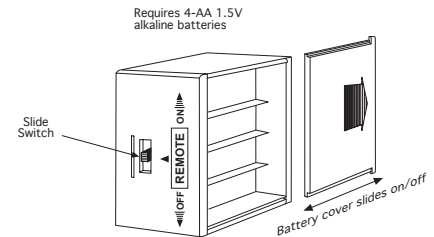
NOTE: The highest SET temperature is 99<sup>0</sup> Fahrenheit (32<sup>0</sup> Celsius) and the lowest temperature is (45<sup>0</sup> Fahrenheit (6<sup>0</sup> Celsius)

## REMOTE RECEIVER

The remote receiver operates on 4 AA-size 1.5V batteries. It is recommended that ALKALINE batteries be used for longer battery life and maximum microprocessor performance. IMPORTANT: New or fully charged batteries are essential for proper operation of the remote receiver.

The remote receiver houses the microprocessor that responds to commands from the transmitter to control system operation. The remote receiver has a 3-position slide switch for selecting the MODE of operation: OFF/REMOTE/ON

- With the slide switch in the ON position the system will remain on until the slide switch is placed in the OFF or REMOTE position.
- With the slide switch in the REMOTE position (centered), the system will only operate if the remote receiver receives commands from the transmitter.
- With the slide switch in the OFF position the system is off.
- **It is suggested that the slide switch be placed in the off position if you will be away from your home for an extended period of time. Placing the slide switch in the OFF position also functions as a safety “lock-out” by both turning the system rendering the remote receiver inoperative.**



## INSTALLATION INSTRUCTIONS

### WARNING

This remote control system 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 remote control or any of its components will void the warrant and may 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.

The following wiring diagrams are for illustration purpose only. Follow instructions from manufacturer of gas valve and/or electronic module for correct wiring procedures. Improper installation of electric components can cause damage to electronic module, gas valve and remote receiver.

## INSTALLATION

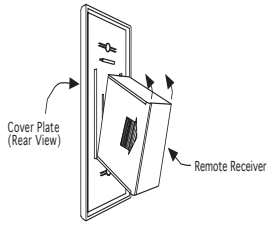
The remote receiver can be either wall-mounted in a standard plastic switch box or placed on or near the fireplace hearth. Preferably, the remote receiver should be wall-mounted in a plastic switch box. When locating the receiver at the hearth PROTECTION FROM EXTREME HEAT IS VERY IMPORTANT. Like any piece of electronic equipment, the remote receiver should be kept away from temperatures exceeding 130<sup>0</sup> F inside the receiver case. Battery life is also significantly shortened if batteries are exposed to high temperatures.

Make sure the remote receiver switch is in the OFF position. It is recommended that 18 gauge solid or stranded wires (included) be used to make connections between the terminal wiring block on the millivolt gas valve or electronic module and the wire terminals on the remote receiver. For the best results use wire with no splices and measuring no longer than 20 ft.

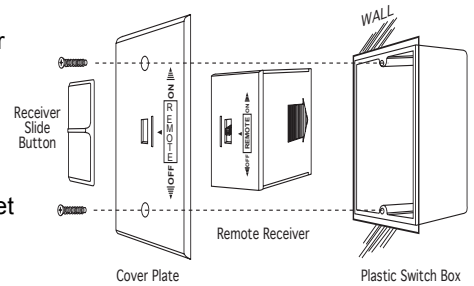
## WALL MOUNTING

Install 4 AA-size 1.5 ALKALINE batteries in the remote receiver. For best performance, remote receiver batteries should be factory fresh when installed. Very little battery power is required to operate the remote receiver, but the electronics are tuned to operate best when battery output is greater than 5.3 volts. Four new AA batteries should provide an output voltage of 6.0 to 6.2 volts. **Be sure batteries are installed with the (+) and (-) ends facing the correct direction.**

To attach Cover Plate to Receiver box  
 Position the receiver as shown in diagram to the left with lower tab on cover plate inserted into groove of receiver make sure the cover plate properly aligns with remote receiver. Pull Receiver up and snap into top tab of cover plate.



Position the cover plate so the word ON is facing up; then, install the remote receiver into the plastic switch box using the two long screws provided. Push the White Button over the receiver slide switch. Make sure the remote receiver code switches has been set to match the transmitter code switches before completing the installation Note: Code setting section.

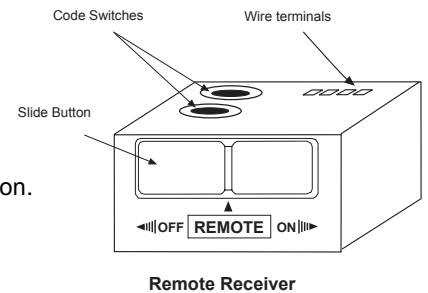


NOTE: The remote receiver will only respond to the transmitter when the 3-position slide button on the remote receiver is in the REMOTE position. If the system does not respond to the battery transmitter on initial use, see CODE SETTING SECTION, and recheck battery positions in the remote receiver.

### HEARTH MOUNT

The remote receiver can be placed on the fireplace hearth or under the fireplace, behind the control access panel. Position where the ambient temperature inside the receiver case does not exceed 130° F. Battery life is also significantly shortened if batteries are exposed to high temperatures. Make sure the remote receiver code switches has been set to match the transmitter code switches before completing the installation Note: Code setting section.

NOTE: Black Slide Button is used for Hearth Mount applications.

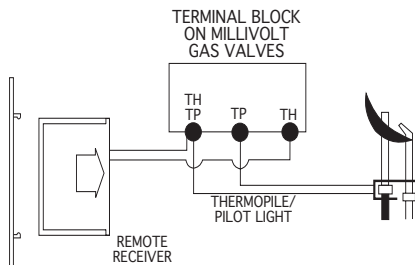


### WIRING INSTRUCTIONS

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

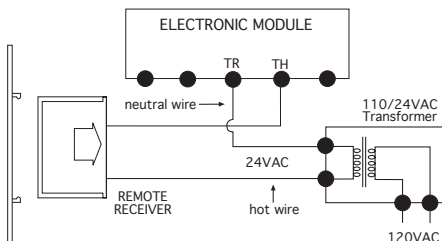
The remote receiver is connected to the millivolt valve using the TH (thermostat) terminals on the terminal block on the millivolt gas valve. Connect 18 gauge solid or stranded wires from the remote receiver to the gas valve.



Operation of the remote receiver is similar to that of a thermostat in that both turn the gas on and off based on input signals. A thermostat's input signals are different temperatures. remote receiver's input signals come from the transmitter.

Connect one of the two wires leading from the receiver to the TH terminal and the other to the TH/TP terminal on the millivolt gas valve it does not matter which wires go to which terminal.

#### WIRING ELECTRONIC SPARK IGNITIONS



The remote control receiver can be connected, in series between a 24VAC transformer and the TR terminal on the ELECTRONIC MODULE. Connect the hot wire from the 24VAC transformer to either of the wires on the remote receiver. Connect the other wire on the receiver (wires included) terminal and the TH (thermostat) terminal on the ELECTRONIC MODULE.

## **SYSTEM CHECK**

### **MILLIVOLT VALVES AND ELECTRONIC SPARK IGNITION SYSTEMS**

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.

- Slide the 3-position button on the remote receiver to the ON position. On millivolt systems the main gas flame (i.e., the fire) should ignite. On Electronic ignition systems the spark electrode should begin sparking to ignite the pilot (the pilot may ignite after only one spark). After the pilot flame is lit, the main gas valve should open and the main gas flame should ignite.
- Slide the button to OFF. On millivolt systems the flame should extinguish (the pilot flame will remain on). On electronic ignition systems the main gas flame and pilot flame should BOTH extinguish.
- Slide the button to REMOTE (the center position), and then press the ON button on the transmitter to change the system to ON. The main gas flame should ignite. On Electronic ignition systems the spark electrode should begin sparking to ignite the pilot (the pilot may ignite after only one spark). After the pilot flame is lit, the main gas valve should open and the main gas flame should ignite.

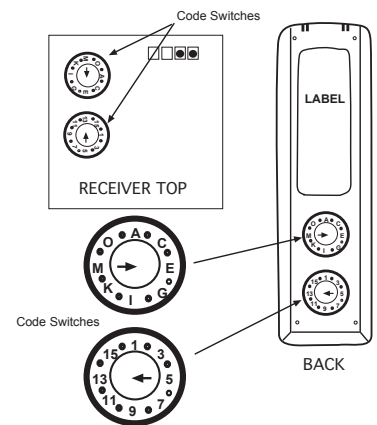
## **GENERAL INFORMATION**

### **CODE SETTING**

**CAUTION:** All units are shipped from the factory with the code switch pre-set to the same codes. These switches must be re-set to different codes during installation to prevent interference from another remote.

Each transmitter can use one of 255 set able security codes. It WILL be necessary to set the transmitter and receiver code switches to a matching security code upon initial use. If a replacement transmitter or receiver is purchased from your dealer or the factory, the code switches must be set to match the receiver transmitter code switches. When setting the code switches set the A through P switch on the transmitter to the same setting as the A through P switch on the receiver. Then set the 1 through 16 switch on the transmitter to the same setting as the 1 through 16 switch on the receiver.

Note: A small screwdriver can be used to change these code switches.  
Note: The figure to the right showing the code switches on the transmitter and receiver.



### **BATTERY LIFE**

Life expectancy of the alkaline batteries in the transmitter should be at least 12 months. Check and replace all batteries annually. When the transmitter no longer operates the remote receiver from a distance it did previously (i.e., the transmitter's range has decreased) or the remote receiver does not function at all, the batteries should be checked. It is important that the remote receiver batteries are fully charged and provides continuous output voltage of a least 5.3 volts. The length of the wire between the remote receiver and gas valve directly affects the operating performance of the remote system. The longer the wire, the more battery power is required to deliver signals between the remote receiver and the gas valve. Recommended length is no longer than 20 feet. The transmitter should operate with as little as 2.5 volts battery power.

### **TROUBLE SHOOTING**

If you encounter problems with your fireplace system, the problem may be with the fireplace itself or it could be with the remote. Review the fireplace manufacturer's operation manual to make sure all connections are properly made. Then check the operation of the remote in the following manner:

- Make sure the batteries are correctly installed in the RECEIVER. One reversed battery will keep receiver from operating properly.
- Check battery in Transmitter to make sure it is installed with the (+) side up.
- Check the code settings on the transmitter and receiver that they are matched settings.
- Be sure RECEIVER and Transmitter is within 20-25-foot operating range.
- Keep RECEIVER from temperatures exceeding 130<sup>0</sup> F. Battery life shortened when ambient temperatures are above 130<sup>0</sup> F.
- If RECEIVER is installed in tightly enclosed metal surround, the operating distance will be shortened.

## **SPECIFICATIONS**

BATTERIES: Transmitter 3V button cell (CR2032)

Remote Receiver 6V – 4ea. AA 1.5 Alkalines

FCC ID No.'s: transmitter –K9L 4001THTX; receiver – K9L

4001RX

Operating Frequency: 433.92MHZ

Canadian ISC ID No.'s: transmitter –2439A 4001THTX; receiver – 2439A 4001RX

### **FCC REQUIREMENTS**

**NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.**