# Model: 4001TH

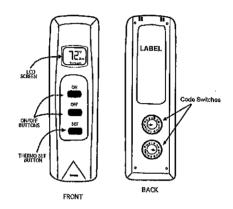
# **INSTALLATION AND OPERATING INSTRUCTIONS**

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

#### INTRODUCTION

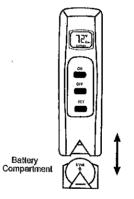
This remote control system was developed to provide safe, reliable, and user-friendly remote control system for gas heating appliances. The system can be operated manually from the transmitter. The system operates on one of 255 settable security codes on the transmitter and receiver.

#### **TRANSMITTER**



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

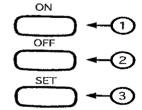
The transmitter has (2) code switches located on the back that will need to be set when installation is complete. **Note: Code setting section** 



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



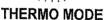
- 1 ROOM Temperature
- 2 °F or °C Icon
- 3 "ON" Flame Icon
- 4 THERMO Mode













# Press the <u>ON</u> key and the <u>OFF</u> key on the transmitter at the same time this will change from $^{0}$ F to $^{0}$ C. Follow this same procedure to change from $^{0}$ C back to $^{0}$ F.

first

SETTING OF / OC SCALE

# MANUAL FUNCTION

To operate the system manually perform the following:

#### **ON OPERATION**

Press the  $\underline{ON}$  key the appliance flame will come on. The Flame icon will appear on LCD screen in  $\underline{ON}$  mode

The factory setting for temperature is <sup>o</sup> F. To change this setting to <sup>o</sup> C.

#### **OFF OPERATION**

Press the <u>OFF</u> key the appliance flame will shut off. The Flame icon will not appear on LCD screen in <u>OFF</u> 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 <u>THERMO</u> must be displayed on the screen). To set the THERMO MODE and DESIRED room temperature, press the <u>SET</u> key and the word <u>THERMO</u> will appear on the LCD screen;; the remote is in the thermostatic mode.

Press and hold the <u>SET</u> key until the desired set temperature is reached. (By pressing and holding the set key the LCD screen set numbers will increase from  $45^{\circ}$  to  $99^{\circ}$  then restart over at  $45^{\circ}$ ) Next release the <u>SET</u> 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:

# TO CHANGE THE SET TEMPERATURE







THERMO ON

Press and hold the <u>SET</u> 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 <u>SET</u> 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 <u>SET</u> key to disengage the thermo mode. The word THERMO on the LCD screen will not show when the thermo is not in operation.

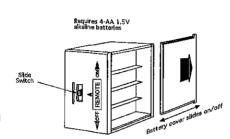
NOTE: The highest SET temperature is 99° Fahrenheit (32° Celsius) and the lowest temperature is (45° Fahrenheit (6° Celsius)

#### 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 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.

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° 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.

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#### 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.

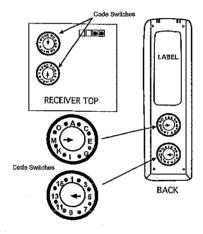
#### **GENERAL INFORMATION**

#### **CODE SETTING**

<u>CAUTION:</u> 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 <u>WILL</u> be necessary to set the transmitter and receiver code switches to a matching security code upon <u>initial</u> 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 doe 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° F. Battery life shortened when ambient temperatures are above 130° 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

4001RX

Operating Frequency: 433.92MHZ

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

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.

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