



**Model: 4001TH-A**

**INSTALLATION AND OPERATING INSTRUCTIONS**

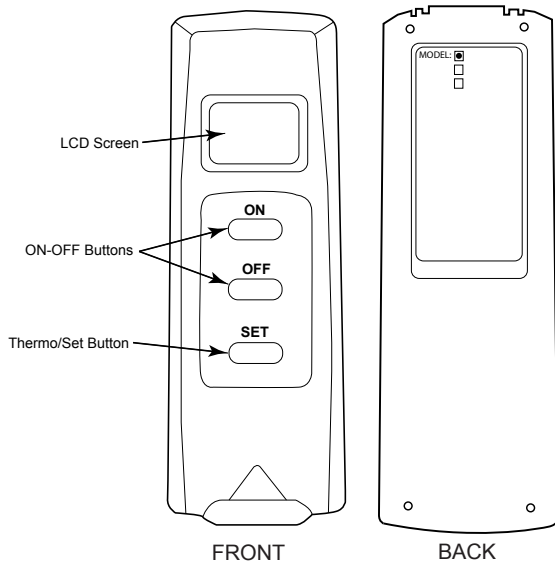
**IF YOU CANNOT READ OR UNDERSTAND THESE INSTALLATION INSTRUCTIONS DO NOT ATTEMPT TO INSTALL OR OPERATE**

**INTRODUCTION**

This remote control system was developed to provide a safe, reliable and user-friendly remote control system for gas heating appliances. It has a built-in thermostat. This all battery system operates independently of household current. The system operates on radio frequencies with a non-directional signals. The systems operating range is approximately 20-feet. The system operates on one of 10,000,000 security codes that are programmed into the transmitter at the factory, the remote receiver's code must be matched to that of the transmitter prior to initial use. It is designed to be used with millivolt gas valves as a dry contact switch.

**NOTE:** This product is designed for use with an attended hearth appliance or fire feature. Adults must be present when the Control System is operating. DO NOT program or thermostatically set this Control to operate a hearth appliance or fire feature when adults are not physically present. Furthermore, DO NOT leave the hearth appliance or fire feature burning unattended; it may cause damage or serious injury. If an adult is going to be away from the hearth appliance or fire feature for any length of time, then the handheld/wall mount, receiver/control module and application should be in the "OFF" position.

**TRANSMITTER**

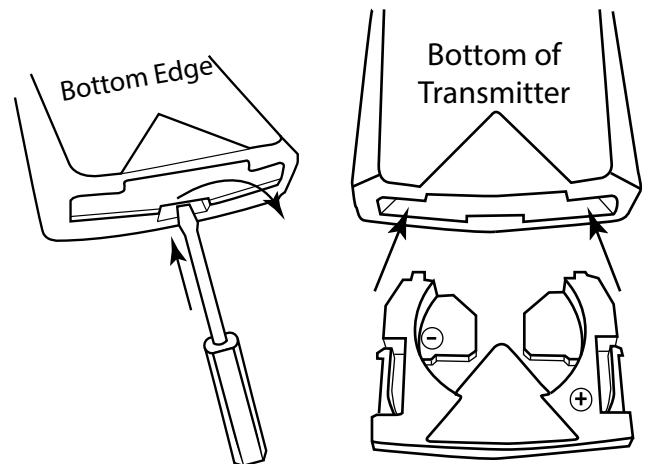


The transmitter has ON and OFF and THERMOSTAT functions. If the LCD screen is not working, check the position of the transmitter's battery.

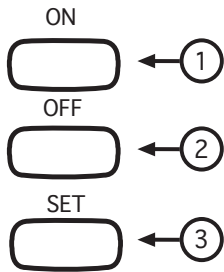
The transmitter operates on (1) 3V Button Cell (included) that powers the RF signal. Before using the transmitter, the 3V battery must be installed into the battery compartment.

**Tools Needed:** Small jewelers screwdriver  
To remove the battery holder from the bottom of the transmitter insert a small jewelers screwdriver into the notch at the bottom of the transmitter, then gently pry out the battery holder out. Once it is started, it will pull out with your fingers. Insert the 3-volt button cell battery in the battery holder with the plus (+) side up. See the drawings at the right.

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



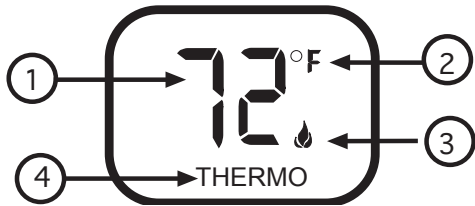
## BUTTON SETTINGS



### Key

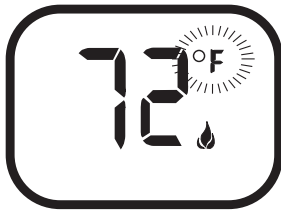
- 1 ON - Operates unit to ON position, Manually ON.
- 2 OFF - Operates unit to OFF position, Manually OFF.
- 3 SET - Places transmitter in thermo mode and adjusts SET temperature.

## LIQUID CRYSTAL DISPLAY (LCD)



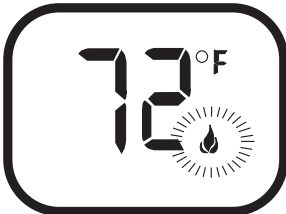
### Key

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



### SETTING °F / °C

- The factory setting for temperature is °F. To change this setting to °C, press the ON key and the OFF key on the transmitter at the same time. 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

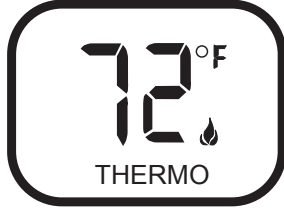
#### OFF OPERATION

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

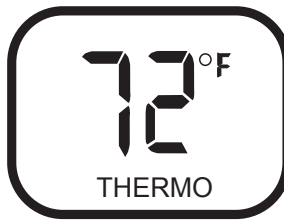




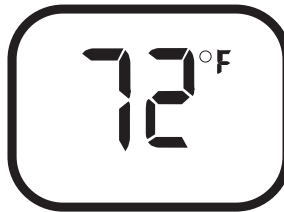
THERMO-SET



THERMO-ON



THERMO-OFF



## THERMOSTAT FUNCTION

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 button and the word THERMO will appear on the LCD screen; remote is now in the thermostatic mode.

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

### SETTING DESIRED ROOM TEMPERATURE

Press and hold the SET button until the desired set temperature is reached. (By pressing and holding the SET button the LCD screen numbers will increase from 45° to 99° then restart over at 45° again ) Next release the SET button. 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:

**NOTE:** The highest SET temperature is 99° Fahrenheit (37° Celsius) and the lowest temperature is 45° Fahrenheit (7° Celsius).

When THERMO is operating in the **ON** position, the LCD screen will read THERMO at the bottom with the flame icon. See THERMO-ON drawing.

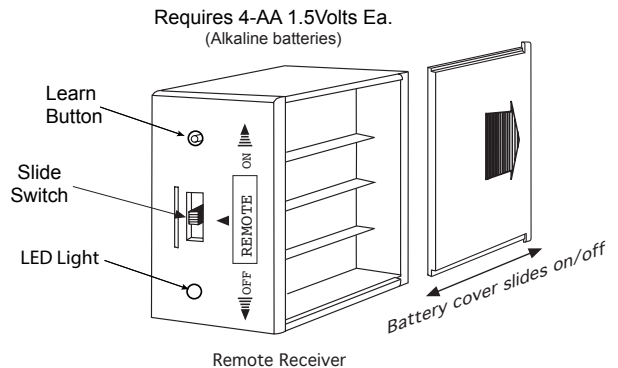
When THERMO is OFF, the flame icon will not be displayed. See THERMO-OFF drawing.

## 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. If the system does not work see LEARNING TRANSMITTER TO RECEIVER Section.
- 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 off and 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.

### 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-feet.

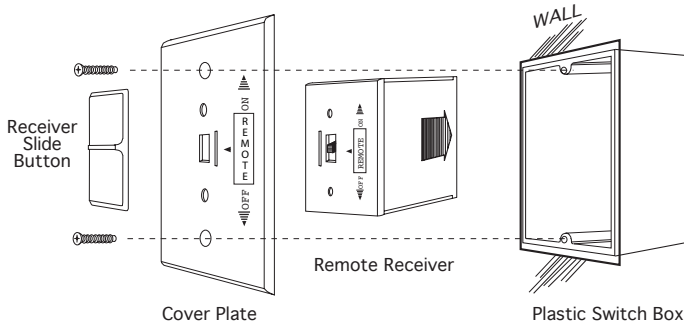
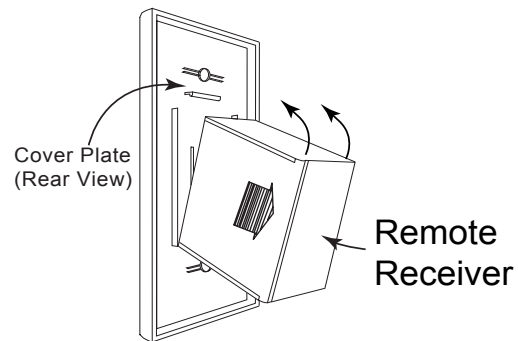
### WALL MOUNTING RECEIVER

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 total battery output is greater than 5.3 volts. Four new AA batteries should provide a total 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 LEARN hole on cover plate properly aligns with remote receiver) Pull Receiver up and snap into top tab of cover plate.

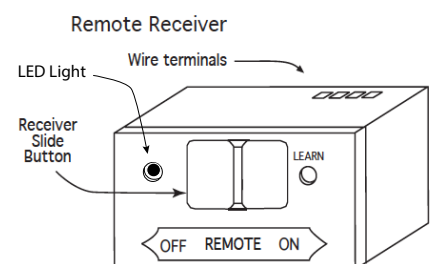
Position the cover plate so the word ON is facing up; then, install the remote receiver into the plastic switch box using the two long screws provided. Push the white slide button over the receiver slide switch.



**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 **LEARNING TRANSMITTER TO RECEIVER**, 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. **NOTE:** Black slide button (accessory pack) is used on Hearth Mount Applications.

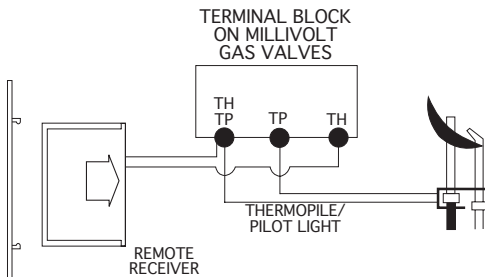


## **WIRING INSTRUCTIONS**

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 (TH & TH/TP) 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 valve ON and OFF based on input signals. A thermostat's input signals are different temperatures. The remote receiver's input signals come from the transmitter.

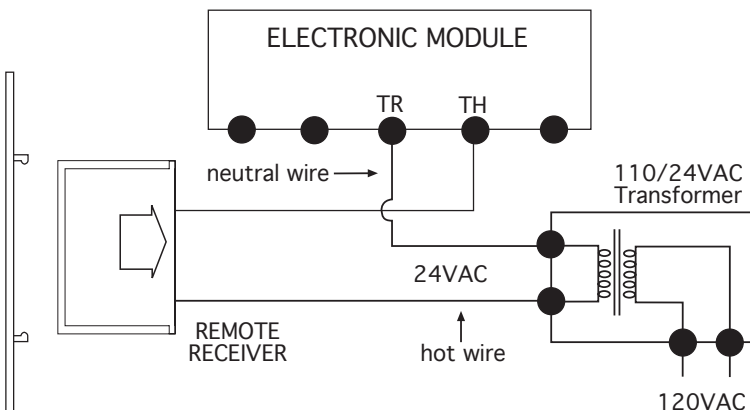
Connect each of the two wires leading from the TH terminals on the millivolt gas valve to either of the two wire terminals on the remote receiver. Normally it does not matter which wires go to which terminal. They are not polarity sensitive.

## **MILLIVOLT VALVES- SYSTEM CHECK**

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. The main gas flame (i.e., the fire) should ignite.
- Slide the button to OFF. The flame should extinguish (the pilot flame will remain ON).
- Slide the button to REMOTE (the center position), and then press the ON button on the transmitter to turn the system to ON. The main gas flame should ignite.
- Press the OFF button on the transmitter to turn the system to OFF. The flame should extinguish (the pilot flame will remain on).
- Press the MODE button on the transmitter to change the system to THERMO. Advance the SET temperature on the transmitter to a temperature of at least 1°F (1°C) above the ROOM temperature displayed on the LCD screen. Flame icon will appear and fireplace should light.
- Set the SET temperature to at least 1°F (1°C) below the room temperature and the system flame will extinguish in a few seconds. Thereafter, it should continue to cycle ON and OFF thermostatically as the ROOM temperature changes, but only when the temperature differential between ROOM and SET temperatures differ at least 1°F (1°C). The 1° F differential is the factory setting.

## **WIRING ELECTRONIC SPARK IGNITIONS**



The remote control receiver can be connected, in series, to a 24VAC transformer to the TR (transformer) terminal on the ELECTRONIC MODULE. Connect the hot wire from the 24VAC transformer to either of the wire terminals on the remote receiver. Connect another wire (not included) between the other receiver wire terminal and the TH (thermostat) terminal on the ELECTRONIC MODULE.

## **ELECTRONIC IGNITION - SYSTEM CHECK**

- Slide the 3-position button on the remote receiver to the ON position. 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. 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 turn the system to ON. The spark electrode should begin sparking to ignite the pilot. After the pilot is lit, the main gas valve should open and the main gas flame should ignite.
- Press the OFF button on the transmitter to OFF. The main gas flame and pilot flame should BOTH extinguish.
- Press the MODE button on the transmitter to change the system to THERMO. Advance the SET temperature on the transmitter to a temperature of at least 1°F (1°C) above the ROOM temperature displayed on the LCD screen. Flame icon will appear and fireplace should light.
- Set the SET temperature to at least 1°F (1°C) below the room temperature and the system flame will extinguish in a few seconds. Thereafter, it should continue to cycle 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 1°F (1°C). (The 1°F differential is the factory setting).

## **LEARNING TRANSMITTER TO RECEIVER**

Each transmitter uses a unique security code. The receiver will LEARN up to three (3) security codes. It will be necessary to press and release the LEARN button on the receiver to accept the transmitter security code upon initial use or if a replacement transmitter is purchased from your dealer or the factory. In order for the receiver to accept the transmitter security code, be sure the slide button on the receiver is in the REMOTE position; the receiver will not LEARN if the slide switch is in the ON or OFF position. The LEARN button is located on the front face of the receiver; inside the small hole labeled LEARN. Using a small screwdriver or a tip of a pencil gently press and release the LEARN button inside the hole. When you release the LEARN button the LED light on the receiver will begin flashing every 1-second. Press ANY button on the transmitter and release. The LED light will flash quickly, indicating that the transmitter's code has been accepted into the receiver. To "clear" the LEARN memory, press and hold the LEARN button for 10-seconds. The LED light will flash three (3) times to indicate the memory is cleared.

## **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. 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 at least 5.3 volts. 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.
- See LEARNING TRANSMITTER TO RECEIVER section.
- 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.
- Ensure the transmitter is within 20-25 feet of the receiver for proper operating range.

## **FCC REQUIREMENTS**

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

### **Federal Communication Commission Interference Statement**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.

**Note:** The Grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. such modifications could void the user's authority to operate the equipment.

#### **RF Warning**

The device has been evaluated to meet general RF exposure requirement. This equipment complies with FCC's RF radiation exposure limits set forth for an uncontrolled environment. This device and its antenna(s) must not be co-located or conjunction with any other antenna or transmitter.

#### **IC Warning**

This device complies with Industry Canada license-exempt RSS standard(s).

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

### **SPECIFICATIONS**

BATTERIES: Transmitter 3V button cell (CR2032)

Remote Receiver 6V – 4ea. AA 1.5 Alkaline

FCC ID No's. Transmitter: K9L-4001THATX Canadian IC ID No.'s: Transmitter: 2439A-4001THATX

Operating Frequency: 433.92MHZ

#### **For Technical Service, call:**

#### **U.S. INQUIRIES**

(855) 498-8324 or (260) 459-1703

#### **CANADIAN INQUIRIES**

(877) 472-3923

Skytech Products Group

9230 Conservation Way

Fort Wayne, IN 46809

Sales: (888) 699-6167

Web site: [www.skytechpg.com](http://www.skytechpg.com)

**MANUFACTURED EXCLUSIVELY FOR SKYTECH II, INC**



## LIMITED WARRANTY

1. **Limited Warranty.** Skytech II, Inc. ("Skytech") warrants that each new Skytech Control System, including all hardware, parts and components (the "System"), when used in accordance with the instructions furnished by Skytech provided with each System, shall be free in all material respects, of defects in materials and any workmanship under normal use, subject to proper installation ("Limited Warranty"). This Limited Warranty is non-transferrable and sets forth our sole and exclusive liability and the sole and exclusive remedies available in relationship to any nonconformity, defect or similar claim. This Limited Warranty only extends to the original retail purchaser of the System (the "Customer") and expires upon any sale or transfer of the home where the System is installed by the Customer.
2. **System Sold As Is.** Subject to this Warranty and any applicable state law, each System is sold by Skytech to a Customers, limitations, reservations of rights, exclusions, and qualifications set forth on Skytech's website, [www.skytechpg.com](http://www.skytechpg.com), all of which are considered part of the Warranty and are incorporated herein (collectively, the "Additional Terms"). Each Customer, by purchasing and/or using any System or any portion thereof, does so subject to the Warranty and the Additional Terms.
3. **Installation and Use of System.** Improper Installation, adjustment, alteration, service, or maintenance can cause property damage, personal injury, or loss of life. Thoroughly read the installation and operating instructions of this Control as well as the appliance it will be used in conjunction with as a system. If applicable, read the maintenance instructions before installing this control. This product is designed for use with an attended hearth appliance or fire feature. Adults must be present when the Control System is operating. DO NOT program or thermostatically set this Control to operate a hearth appliance or fire feature when Adults are not physically present. Furthermore, DO NOT leave the hearth appliance or fire feature burning unattended; it may cause damage or serious injury. If an Adult is going to be away from the hearth appliance or fire feature for any length of time, then the handheld/wall mount, receiver/control module and application should be in the "OFF" position.
4. **Repair or Replacement of System or Parts.** Should any System, or any hardware, components and/or parts contained therein fail due to a defect in workmanship or material provided by Skytech after the purchase of a System by a Customer, Skytech shall repair or, at its option, replace the defective System or part, hardware or component, subject to the Customer's compliance with all terms and conditions contained herein governing service and claims under the Warranty. Skytech shall provide replacement parts at no charge for the first (5) five years of this warranty, and at market cost for the Lifetime of the product to the original Customer. Gas valve and gas valve components will be available at no charge for one (1) year. If Skytech does not have the parts for an individual model, then a comparable replacement System will be provided at no charge within the first (5) five years after purchase, and then at market cost for the Lifetime of that product to the Customer.
5. **Warranty Claims; Skytech Service.** To submit a valid claim under the Warranty (each, a "Valid Claim"), a Customer must comply with the following:
  - a) Obtain a Return Material Authorization ("RMA") number from Skytech by calling (855) 498-8324; and
  - b) Provide written notice to a Skytech or an Authorized Dealer ("Dealer") and provide the Name, House Address, Email Address and Telephone Number of the Customer;
  - c) Describe the System model number and nature of the defect, nonconformity, or other problem with the System;
  - d) Provide such notice within thirty (30) days of discovery of such defect, nonconformity, or problem;
  - e) securely pack and ship the defective Skytech Product to Skytech II, Inc. ATTN: Warranty Department at 9230 Conservation, Fort Wayne, IN 46809. Customer assumes all costs and risks associated with transportation to Skytech (i) the RMA number is only valid for thirty (30) days from the date the RMA was issued, (ii) the RMA number should be clearly marked on the outside of each box being returned. Skytech may refuse shipments that DO NOT meet all of the Valid Claim requirements. Skytech is not responsible for any refused shipments or any damage caused due to shipping, whether or not it was a Valid Claim. Skytech shall be responsible for return shipment charges. Compliance with these requirements is a condition to coverage under this Limited Warranty.

Skytech may refuse any shipment(s) that does not meet all of the Valid Claim requirements. Skytech is not responsible for any refused shipments or any damage caused due to shipping, whether or not it was a Valid Claim. Skytech shall be responsible for reasonable return shipment charges for any Skytech System returned whether or not Skytech determines there is no defect with the System, reject for failure of the Customer to submit a Valid Claim, or otherwise determine is not eligible for service under the Warranty.

Upon receipt of a Valid Claim and the properly-returned System, Skytech shall, at its option, either (a) repair the System, at no charge to the Customer, or (b) replace the returned System with a new comparable System, at no charge to the Customer, or (c) provide the Customer with a refund in an amount equal to the price paid by the Customer for the defective System not including any service or labor cost associated with the installation or otherwise. Any System or hardware, component or part repaired by Skytech hereunder, or any replacement System, hardware, component or part shall be shipped to the Customer by Skytech at Skytech's cost and the Warranty, the Additional Terms, and all other terms and conditions set forth herein shall extend to such repaired or replacement System, hardware, component or part. Skytech shall pay no refund before Skytech from the Customer receives the defective System, hardware, component and/or parts. Any obligation of Skytech under this Section 4 shall be and remain subject to Skytech's right to physically inspect the defective System, hardware, component and/or part returned to Skytech by the Customer. 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, province, or nation. To the extent allowable under any law, the liability of Skytech is limited to the express terms of this warranty, and Skytech expressly disclaims any and all implied warranties, including any warranties of fitness for a particular purpose or merchantability.



Print information and detach at dotted line and return to: Skytech Products Group, Attn. Warranty Dept.,  
9230 Conservation Way, Fort Wayne, IN 46809 Phone: (855) 498-8224

**Warranty Information**

Purchase Date: \_\_\_\_\_ Model: \_\_\_\_\_ Date Code: \_\_\_\_\_ (4-digit number on product)

Purchased From: \_\_\_\_\_

Customer Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Address: \_\_\_\_\_

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

E-mail Address: \_\_\_\_\_

***Please send a Proof of Purchase (original receipt) copy along with your warranty form.***