

### Model: 1420TH-A

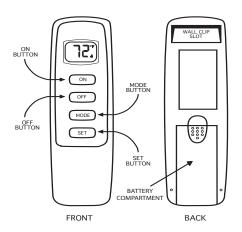
#### **INSTALLATION AND OPERATING INSTRUCTIONS**

## 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 products.

#### **TRANSMITTER**



The transmitter operates on (2) 1.5V AAA batteries. It is recommended that ALKALINE batteries always be used for this product. **Be sure the batteries are installed with the (+) and (-) ends facing the correct direction, and are fully charged.** 

#### **KEY SETTINGS**

- 1. ON - Turns appliance on
- 2. OFF - Turns appliance off
- 3. **MODE** Cycles control between manual and thermo mode.
- 4. **SET** - Sets temperature in thermo mode.

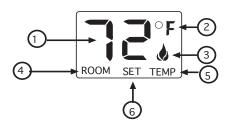








#### **LCD - LIQUID CRYSTAL DISPLAY**



- 1. Display - - Indicates current room temperature.
- 2. Fahrenheit or Celsius Indicates degrees Fahrenheit or Celsius.
- 3. Flame ----- Indicates appliance is ON.
- 4. Room ----- Indicates remote is in THERMO mode.
- 5. Temperature - - Appears during manual operation.
- Set ----- Appears when setting the desired temperature in THERMO mode.

#### SETTING °F / °C SCALE

The factory setting for temperature is  ${}^{\circ}F$ . To change the displayed temperature, press the **ON** and **OFF** keys at the same time. Follow this same procedure to return to  ${}^{\circ}F$ .

#### **MANUAL FUNCTION**

#### **ON OPERATION**

Press the ON key to turn the appliance **ON**. (The flame icon will appear on the LCD screen).

#### **OFF OPERATION**

Press the OFF key to turn the appliance **OFF**. (The flame icon will disappear from the LCD screen.)





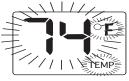


SCREEN WHILE DEPRESSING ON KEY



OFF KEY

SCREEN AFTER 3 SECOND DEFAULT



SCREEN AFTER 3 SECOND DEFAULT

#### THERMOSTAT FUNCTION

- Press the MODE key until the LCD screen shows the word "ROOM." (See Thermo Mode graphic)
- To adjust set temperature, press and hold the SET key until the desired temperature is reached. The temperature range is 99°F (32°C) to 45°F (6°C). (See Thermo Set graphic)
- The LCD screen will display the set temperature for 3 seconds, then it
  will flash the set temperature for 3 seconds. It will default to show the
  room temperature.
- The flame icon will appear when the control calls for heat. (See Thermo On graphic). The flame icon will disappear when the appliance reaches its set temperature. (See Thermo Off graphic).
- Press the MODE key to disengage the Thermo Mode. "ROOM" will disappear from the LCD screen.







THERMO MODE





THERMO ON

THERMO OFF

**NOTE**: The thermo feature operates the appliance whenever the room temperature varies a certain number of degrees from the set temperature. This variation is called the "swing" or temperature differential. This feature lets the appliance turn off and on 2 °F (1 °C) above or below the set temperature of the room. This is to cushion the number of times the appliance is turned ON and OFF.

#### THERMO UPDATING FEATURE - TRANSMITTER

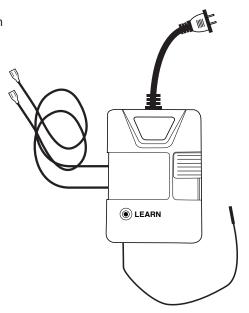
When in thermo mode, the transmitter reads the ROOM temperature every 2 minutes, checks the room temperature against the SET temperature then sends a signal to the receiver.

#### **RECEIVER**

When plugged into a standard 110-120 VAC receptacle, the remote receiver operates on commands from the transmitter or from the slide switch on the face of the receiver (This switch is to be used during a power outage to operate the appliance manually).

- **ON**: will manually turn on the appliance.
- REMOTE: will allow use of handheld transmitter. If the system does not respond to
  the transmitter on initial use, check the battery positions in the remote. If that does
  not work, see the LEARNING TRANSMITTER TO RECEIVER section.
- OFF: will disable the remote receiver.
- If you are going to be away from the gas appliance for an extended period of time (i.e. 72 hours or more) where the gas appliance will be left unattended then slide the switch on the receiver to the OFF position. Placing the switch in the OFF position serves as a safety "lock-out" rendering the system and the remote receiver inoperative. Most gas appliances are considered supplemental heat and should not be used as a primary heat source.

The remote receiver is manufactured with a "dry contact" relay in its circuitry that operates like an on/off switch. However, no power or current passes from the 110-120VAC input side to the wires leading from the output side of the remote receiver.



**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.

#### **INSTALLATION**

<u>Protection from extreme heat is very important</u>. The remote receiver should be kept away from temperatures exceeding 130°F. Extreme heat can cause damage, which is not covered under warranty.

- Before installation, make sure you turn the slide switch to OFF. After installation, make sure you turn the slide switch to REMOTE.
- · The remote receiver can be placed on the fireplace hearth or under the fireplace behind the control access panel.
- Use the wires attached to the remote receiver to connect to the gas valve or the electric module (piggyback connectors have both male & female terminals for flexibility).
- Be sure that the connectors do not touch each other or other bare metal surfaces; this will cause the appliance to turn ON. The connectors may be wrapped with electrical tape to prevent this.

#### WARNING

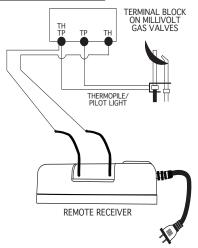
This remote control system must be installed exactly as outlined in these instructions. Read all instructions completely before attempting installation. Follow instructions carefully during installation. Any modifications of this remote control or any of its components will void the warranty and may pose a fire hazard.

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.

#### WIRING INSTRUCTIONS

**MILLIVOLT VALVES** A qualified electrician should install the remote control system.

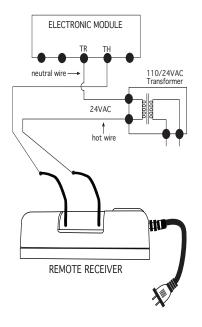


- Connect one wire from the remote receiver to the TH terminal on the gas valve.
- Connect the other wire from the remote receiver to the TH/TP terminal on the gas valve.

#### MILLIVOLT SYSTEM CHECK

- Ensure that the pilot flame is lit.
- 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 main flame should extinguish (the pilot flame will remain on).
- Slide the button to REMOTE, then press the ON button on the transmitter to change the system to on. The main gas flame should ignite.

#### **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 wires on the remote receiver. Connect the other wire from the receiver to the TH (thermostat) terminal on the ELECTRONIC MODULE.

#### ELECTRONIC SPARK 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. 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, then press the ON button on the transmitter to
  change 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.

#### **CP (CHILDPROOF) FEATURE**

This remote control includes a childproof feature that allows the user to "lock-out" operations from the Transmitter.

- To activate and de-activate the childproof feature, press and hold the **ON** button and the **MODE** button at the same time for 5-seconds. The letters "CP" will appear in the TEMP frame on the LCD screen.
- "CP" will appear on the LCD screen if any button is pressed while childproof mode is engaged.
- When this mode is engaged, all auto settings go on without interruption (like thermostat). Only manual functions are prevented.

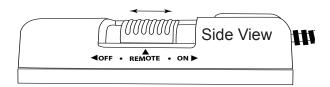
#### COMMUNICATION - SAFETY - TRANSMITTER - (C/S - T/X)

This remote control has a COMMUNICATION –SAFETY function built into its software to ensure the transmitter and receiver are communicating normally.

In all operating modes, the transmitter sends an RF signal every fifteen minutes to the receiver indicating that the transmitter is within the normal operating range of 20-feet. Should the receiver NOT receive this signal, the RECEIVER will begin a 2 hour countdown. If the RECEIVER does not receive a signal from the transmitter in 2 hours, the RECEIVER will shut off the appliance. The RECEIVER will then emit a series of rapid "beeps" for a period of 10 seconds. Then after 10 seconds of rapid beeping, the RECEIVER will continue to emit a single "beep" every 4 seconds until a transmitter **ON**, **OFF** or **MODE** Button is pressed to reset the receiver.

#### LEARNING TRANSMITTER TO RECEIVER

- Each transmitter uses a unique security code. It will be necessary to press the LEARN button on the receiver to accept the transmitter security code upon initial use, if batteries are replaced, 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 in located on the front face of the receiver; inside the small hole labeled LEARN. Using a small screwdriver or end of a paperclip gently press and release the black LEARN button inside the hole. When you release the LEARN button the receiver will emit an audible "beep". After the receiver emits the beep press the transmitter ON button and release. The receiver will emit several beeps indicating that the transmitter's code has been accepted into the receiver.
- To delete all of the transmitter codes on your receiver, press and hold the **LEARN** button for 10 seconds. Then you will hear a series of beeps, indicating that the receiver's memory has been cleared.





#### TRANSMITTER WALL CLIP

The transmitter can be hung on a wall using the clip provided.

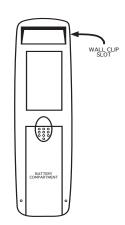
- Wood Drill 1/8" pilot holes and install with screws provided.
- Plaster/Wallboard Drill 1/4" holes, then install with the screws provided.

#### **BATTERY LIFE**

Life expectancy of the alkaline batteries in the transmitter should be at least 12 months. Check and replace all batteries:

- Annually.
- When operating range becomes reduced.
- When transmissions are not received by the remote receiver.
- If the hand held transmitter batteries measure less than 2.5 volts. (Both batteries in combination)





#### TROUBLE SHOOTING

If you encounter problems with your fireplace system, the problem may be with either the fireplace itself or 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 there is a 110 volt power source to the transmitter.
- Check batteries in transmitter to ensure contacts are touching (+) and (-) ends of battery. Bend metal contacts in for tighter fit.
- · Check if the transmitter batteries are fully charged.
- Be sure receiver and transmitter is within 20 to 25-foot operating range.
- · Keep receiver from temperatures exceeding 130 degrees F.
- If receiver is installed in a tightly enclosed metal surrounding, the operating distance will be shortened.
- Make sure the hand-held transmitter and remote receiver are communicating properly (see LEARNING TRANSMITTER TO RECEIVER section).

#### **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.

FOR TECHNICAL SERVICE, CALL:

<u>U.S. INQUIRIES</u> (855) 498-8324 OR (260) 459-1703 **CANADIAN INQUIRIES** 

(877) 472-3923

For Sales: (888) 672-8929 WEB SITE: 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 non-conformity, 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 Customer on an "as is" basis. In addition, each System and Skytech's obligations are and remain subject to all additional disclaimers, limitations, reservations of rights, exclusions, and qualifications set forth on Skytech's website, 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 Way, 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

REV. 2-24-17

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

# Santa's Helper Exclusive offer to Skytech Remote Control Owners

This special offer is only provided to customers of Skytech that have purchased a remote control for their Hearth Product. This remote control system can be used for any 120VAC 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!



The list price of **\$48.00** for the Santa's Helper has been cut almost in half to **\$20.00 USD** for this exclusive offer. Shipping and handling of **\$5.00 \$USD** should be added. Send us your check, money order or call us with your credit card number, along with the warranty information from your remote control of your Hearth Product. You can also send it via mail, fax, or e-mail.

#### **Skytech Products Group**

9230 Conservation Way Fort Wayne, IN 46809 1-(888) 672-8929 1-(888) 672-8024 Fax

E-mail: order@skytechpg.com