REMOTE RECEIVER

The remote receiver operates on power from the thermopile. It is recommended that the thermopile voltage with the main burner OFF be no less than 450 millivolts for proper microprocessor performance. IMPORTANT: It is essential that proper voltage from the thermopile be maintained for proper operation of the remote receiver.

The remote receiver houses the microprocessor that responds to commands from the transmitter to control system operation. It emits one beep when it receives an ON or OFF command manually, but no beep when cycling on and off automatically in THERMO mode. The remote receiver has a 3-position slide switch for selecting the MODE of operation: ON/REMOTE/OFF

- With the slide switch in the ON position (toward the LEARN button), 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 (away from the LEARN button), 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. If the remote receiver is mounted out of children's reach, 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.

THERMO- SAFETY FEATURE - RECEIVER (T/S -RX)

This SKYTECH remote control has a THERMO- SAFETY feature that is built into the system's RECEIVER. This feature is temperature- activated and provides an extra margin of safety when the RECEIVER is operating where ambient temperatures exceed 160 ** degrees inside the receiver case.

The THERMO-SAFETY feature, in the RECEIVER, operates in the following manner, when the appliance is in operation.

The receiver is thermally protected from extreme heat conditions. Heat can have negative effect on the operation of the receiver's microprocessors.

When the ambient temperature at the THERMISTOR, *inside the receiver case*, reaches $160^{\circ}F$, the THERMISTOR will automatically shut the appliance down and the RECEIVER will begin emitting a series of 2 "beeps", every 4 seconds. When the ambient temperature, at the RECEIVER, drops between $150^{\circ}F$ and $160^{\circ}F$, the user can reactivate the appliance by pushing the MODE button on the transmitter. The word ON must display on the LCD screen. When the MODE button is pressed to ON, the THERMISTOR "resets" itself and the fireplace will begin operating again. However, the "beeping" will continue, if the ambient temperature remains between $150^{\circ}F$ and $160^{\circ}F$. This "beeping" alerts the user that the RECEIVER should be repositioned so the ambient temperature drops below $150^{\circ}F$.

When the temperature drops below 150 $^{\circ}$ F, the "beeping" will cease, providing the user has "reset" the THERMISTOR by pushing the MODE button to ON to operate the appliance, either manually or thermally. Allow sufficient time for the receiver to cool below 150 $^{\circ}$ F, and then press MODE button to stop beeping.

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 SKYTECH remote control or any of its components will void the warranty and may be pose a fire hazard.

Do not connect any gas valve to 110-120VAC power. Consult gas appliance manufacturer's instructions and wiring schematics for proper placement of all wires.

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 gas valve and remote receiver.

HEARTH MOUNT INSTALLATION

The remote receiver is be placed on the fireplace hearth or under the fireplace, behind the control access panel due to the connections to the TH, TP, & TH/TP terminals on the gas valve. PROTECTION FROM EXTREME HEAT IS VERY IMPORTANT. Position where the ambient temperature inside the receiver case does not exceed $160^{\circ}F$.

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 MATCHING SECURITY CODES.

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 and may also damage the remote receiver.

WIRING MILLIVOLT VALVES ONLY (WILL NOT OPERATE ON ELECTRONIC SPARK IGNITION SYSTEMS)

The remote receiver is connected to the TH, TP, & TH/TP terminals on the millivolt gas valve. Connect the (3) 18" gauge stranded wires from the remote receiver to the gas valve. These (3) wires are marked TH, (Black Wire) TP, (Red Wire) and TH/TP (White Wire)

Note: The RED wire from the thermopile must match up with the RED wire from the 3301BE on the (TP) terminal of the gas valve. The WHITE/YELLOW wire from the thermopile must match up with the WHITE wire from the 3301BE on the (TH/TP) terminal of the gas valve. The reason for this is the 3301BE is polarity based. These changes will make the gas valve and the thermopile match the 3301BE.

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 three (3) wires leading from the receiver to the TH, TP, and TH/TP terminals on the millivolt gas. These (3) wires are marked TH, (Black Wire) TP, (Red Wire) and TH/TP (White Wire)

SYSTEM CHECK

MILLIVOLT VALVES

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.

Note: Always check for any gas leaks and follow all the instructions from the manufacturer of the appliance on the start up procedures of the appliance.

- 1. Allow the thermopile to completely heat up, for at least 5 minutes. (Note: If you have a Ventfree product, you may want to allow a longer heat up time, up to 10 minutes.
- 2. Once the thermopile has heated up, turn the main valve knob from the PILOT position to the ON position.
- 3. To activate the power going to the remote control receiver from the thermopile you will need to PUSH and HOLD the **System Energize** button on the receiver for a minimum of 60 seconds before releasing the button. This will start the process of converting millivolts from the thermopile into DC volts required to operate the receiver. This will continue for as long as the thermopile is in operation.
- 4. Use the transmitter of the remote control to activate the main burner of the appliance.

Note: The 3301 BEsystem will need to be re-energizer if the remote receiver has been turned to the manual ON or OFF position. This is done by depressing and holding the SYSTEM ENERGIZER BUTTON for minimum of 60 seconds.

Note: The 3301 BEsystem will need to be re-energized every time the pilot light is turned to the OFF position or the pilot light goes out for any reason. This is done by depressing and holding the SYSTEM ENERGIZER BUTTON for minimum of 60 seconds.

Note: The Energizer Button must be held in for minimum of 60 seconds

- 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), then press the MODE button on the transmitter to change the system to ON. The main gas flame should ignite.
- Press the MODE button on the transmitter to change 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 a least $2^{\circ}F$ ($1^{\circ}C$) 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 $2^{\circ}F$ ($1^{\circ}C$) 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 $2^{\circ}F$ ($1^{\circ}C$). The $2^{\circ}F$ differential is the factory setting.

TIMER

The countdown timer will operate in either the manual ON or THERMO mode. Once the appliance is in an operating mode, set the countdown timer to turn off in 15 minutes. The timer function will allow operation to continue until the countdown "time" on the LCD screen expires. After 15 minutes elapses, the system should turn OFF.

If you have any problems with operation, recheck you connections and ensure transmitter batteries are fully charged. If no problem is found, contact the dealer where you purchased your appliance/remote control.

GENERAL INFORMATION

MATCHING SECURITY CODES

Each transmitter can use one of 1,048,576 unique security codes. It may be necessary to program the remote receiver to LEARN the security code of the transmitter upon initial use, if batteries are replaced, or if a replacement transmitter is purchased from your dealer or the factory. When matching security codes, be sure slide button on the receiver is in the REMOTE position; the code will NOT "LEARN" if the slide switch is in the ON or OFF position. Program the remote receiver to LEARN a new security code by pushing in the LEARN button on the top of the remote receiver and then pressing the MODE button on the transmitter. A change in the beeping pattern, at the receiver, indicates the transmitter's code has been programmed into the receiver. When an existing receiver is matched to a new transmitter, the new security code will override the old one.

The microprocessor that controls the security code matching procedure is controlled by a timing function. If you are unsuccessful in matching the security code on the first attempt, wait 1-2 minutes before trying again – this delay allows the microprocessor to reset its timer circuitry – and try up to two or three more times.

TRANSMITTER WALL BRACKET

The transmitter can be hung on a wall using the bracket provided. Locate the bracket on an inside wall sufficiently far away from direct sources of heat such as a fireplace, incandescent lighting, or sunlight so it detects ambient room temperatures, not a single heat source. If the bracket is installed on a solid wood wall, drill 1/8" pilot holes and install with the screws provided. If it is installed on a plaster/wallboard wall, first drill two 1/4" holes into the wall, then use a hammer to tap in the two plastic wall anchors flush with the wall, then install the screws provided. Place hole cover label over the center holes.

THERMO FUNCTION

When the transmitter is in the THERMO mode, it should be kept away from direct sources of heat such as fireplaces, incandescent lighting, and direct sunlight. Leaving the transmitter in direct sunlight, for example, will cause its heat-sensing diode to read the room temperature higher than it actually is; if in THERMO mode, it may not turn on the appliance even if the ambient ROOM temperature is below the SET temperature.

TROUBLE SHOOTING

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

- 1. Check connections from the receiver to the control valve for good positive connections. (Move the slide switch on the receiver to the ON position if the appliance operates this will confirm that the wiring connections should be good).
- 2. Check for power from the thermopile to the receiver the voltage with the main burner OFF be no less than 450 millivolts. (Press the learn button on the receiver if there is a beep sound from the receiver this will confirm there is power to the receiver from the thermopile).
- 3. Be sure the transmitter's batteries are properly installed and that the battery output is 2.5 V or more.
- 4. Check to make sure the transmitter is communicating with the receiver.
- If the receiver beeps when the MODE button is depressed on the transmitter they are communicating.
- If the receiver does not beep when the MODE button is depressed on the transmitter, you will need to teach the receiver the code of the transmitter. This is done by holding the LEARN button down on the receiver and at the same time depress the MODE button on the transmitter. A change in the beeping pattern, at the receiver indicates the transmitter's code has been programmed into the receiver.
- 5. Make sure the transmitter is within the 15'-20' range of the receiver.
- 6. Positioning of the receiver is important. If the receiver is "enclosed" in a metal surround, the operation of the receiver may be affected as noted below. Reposition the receiver to improve operating range. If the receiver is "enclosed" in a metal surround, this can:
- Cause the RF signal to get lost and not communicate with the receiver.
- Cause the working distance to be shorter than normal.

NOTE: A receiver located in an area, where the ambient temperature inside the case exceeds $160^{\circ}F$, will cause THERMOSAFETY feature to cut in, requiring you to reposition the receiver to stop the warning beeps, and to "reset" the receiver's operation.

7. Due to handling and shipping of the unit, handling or dropping of the transmitter by the customer, and heat conditions to the receiver, some units may need an occasional frequency adjustment. This adjustment is made to improve the communication and operating distance between the transmitter and the receiver. See RECEIVER ADJUSTMENT.

RECEIVER ADJUSTMENT & RECOMMENDED ADJUSTMENT

A. To adjust at the receiver, use a small slotted screwdriver. Turn the adjustment screw counter-clockwise about 5 degrees or a maximum of 1/8 turn. This should correct the distance problem.

B. If that does not correct the problem, return adjustment screw to original position and then turn adjustment screw clockwise.

This adjustment is like tuning your radio. If you keep turning the adjustment screw, in either direction, you will go past the proper setting (tuning).

BATTERY LIFE

Life expectancy of alkaline batteries in the SKYTECH 3301 BE should be at least 12 months. Replace all batteries annually. When the Transmitter no longer operates the 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 in the transmitter. The Transmitter should operate with as little as 2.5 volts of battery power, measuring at the (2) 1.5 volt batteries.

SPECIFICATIONS

BATTERIES: Transmitter 3V- 2 ea. AAA 1.5V, Alkaline

Remote Receiver (NO BATTERIES)

FCC ID No.'s:

Operating Frequency: 303.8MHZ

Canadian IC ID No.'s:

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.

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, province, 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.

FCC Notice

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: 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.

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.

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. 9230 Conservation Way Fort Wayne, IN 46809 1 (888) 672-8929 1 (888) 672-8024 Fax skytechsystem@fwin.net e-mail