INTRODUCTION

SKYTECH’S remote control system was developed to provide a safe, reliable and user-friendly remote control system for gas heating appliances. Its battery operation allows the system to operate independently of household current. The system operates on radio frequencies with non-directional signals. The SYSTEMS operating range is approximately 20 feet. The system operates on one of 255 security codes programmed at the factory.

COMPONENTS

WALL TRANSMITTER

The transmitter operate on a 12V battery (included) made specifically for remote controls and electronic lighters. To replace the battery on the Wall Transmitter, you must remove the four screws on the face of the Wall Transmitter to gain access to the battery compartment. (These screws are directly behind the Decora Wall Plate)

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

The Wall Transmitter has ON and OFF functions that are activated by pressing the ON/OFF rocker switch on the Wall Transmitter. Before using the Wall Transmitter, remove the insulation tab protecting one end of the battery in the battery compartment. When the ON/OFF rocker switch on the Wall Transmitter is pressed, a signal light on the Wall Transmitter illuminates briefly to verify that a signal has been sent. Upon initial use, there may be a delay of three seconds before the remote receiver will respond to the transmitter. This is part of the system’s design. If the signal light does not illuminate, check the position of the transmitters’ battery.

REMOTE RECEIVER

IMPORTANT: THE REMOTE RECEIVER SHOULD BE POSITIONED WHERE AMBIENT TEMPERATURE WILL NOT EXCEED 130 DEGREE F.

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

NOTE: The remote receiver will only respond to the Wall Transmitter when the 3-position slide button on the remote receiver is in the REMOTE (center) position.

The remote receiver houses the microprocessor that responds to commands from the Wall Transmitter to control system operation. The remote receiver has a 3-position slide switch (see figure at right) for selecting the mode of operation: ON/REMOTE/OFF.
REMOTE RECEIVER  (Continued)

• With the slide switch in the ON position (toward the word TOP), 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 Wall Transmitter. **Upon initial use or after an extended period of no use the ON button must be pressed for up to five seconds.**
• With the slide switch in the OFF position (away from the word TOP), 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 safely “lock out” by both turning the system off and rendering the transmitter inoperative.

INSTALLATION

NOTE: When the remote receiver is installed as a wall switch, it is recommended that it be installed in a PLASTIC switch box. Remote functions may not operate properly if the remote Receiver is installed in a steel switch box.

Make sure the remote receiver switch is in the OFF position (toward the small hole on the receiver’s face). It is recommended that 18 gauge, stranded wires (not included) be used for wire installation between the terminal wiring block on the millivolt gas valve or electronic ignition system and the wire terminals on the remote receiver. For best results, use 18 gauge stranded wire, with no splices, and measuring no longer than 20 ft.

WALL MOUNT

Install four 1.5V AA-size ALKALINE batteries (included) 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 turned to operate best when battery output is greater than 5.3 volts. For new AA batteries should provide an output voltage of 6.0 to 6.2 volts.

Position the remote receiver so the word TOP is facing up, then install the remote receiver into the plastic switch box using the two long screws provided. Install the cover plate using the two short screws provided. Push the remote receiver slide button over the remote receiver slide switch. Reverse installation of the slide button if it appears off center.

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 does not exceed 130 degrees F. With the battery compartment on bottom, install the slide-on cover and receiver slide button. Reverse installation of the slide button if it appears off center.

PROTECTION FROM EXTREME HEAT IS VERY IMPORTANT. Like any piece of electronic equipment, the remote receiver should be kept away from temperatures exceeding 130 degrees F. Battery life is also significantly shortened if batteries are exposed to high temperatures.

WALL TRANSMITTER INSTALLATION

The Wall Transmitter should only be mounted in a PLASTIC switch box. Steel switch boxes will “absorb” the RF signal reducing the operating distance of the Wall Transmitter’s signal to the receiver. Mount the receiver into the switch box using #6-32X1” long screws. Purchase a designer switch plate from your hardware or electrical store that matches your room décor. Mount switch plate over the Wall Transmitter as shown to the right.

WIRING TERMINALS

This remote control system should be installed by a qualified electrician or a gas technician who is familiar with the gas appliance and gas valves that will be operated by this remote. Incorrect wiring connections WILL cause damage to the gas valve or electronic module operating the gas appliance and may also damage the remote receiver.
WARNING
DO NOT CONNECT REMOTE RECEIVER DIRECTLY TO 110-120 VAC POWER. THIS WILL BURN OUT THE REMOTE RECEIVER AND THE ELECTRONIC MODULE. CONSULT GAS APPLIANCE MANUFACTURER’S INSTRUCTIONS AND WIRING SCHEMATICS FOR PROPER PLACEMENT OF ALL WIRES. ALL ELECTRONIC MODULES ARE TO BE WIRE TO MANUFACTURER’S SPECIFICATIONS.

THE DIAGRAMS THAT FOLLOW ARE FOR ILLUSTRATION PURPOSES 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 MILLIVOLT VALVES**

Installer must connect two 18 gauge wires from the remote receiver to the TH and TH/TP terminals on the millivolt gas valve. (It does not matter which receiver wires are connected to the designated terminals listed above.)

Operation of the remote receiver is similar to a wall switch in that both turn the gas valve on and off. The remote receiver’s input signals come from the ON/OFF buttons on the transmitter.

**WIRING ELECTRONIC SPARK IGINITIONS**

Connect the neutral wire from the 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 (included) between the other receiver wire terminal and the TH (thermostat) terminal on the ELECTRONIC MODULE.

**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.

1. Slide the 3-position button on the remote receiver to the ON position. The main gas flame (i.e., the fire) should ignite.
2. Slide the button to OFF. The flame should extinguish (the pilot flame will remain on).
3. Slide the button to REMOTE (the center position), then press the ON button on the Transmitter or Wall Transmitter. NOTE: upon initial operation and after an extended period of non-use, the ON button must be pressed for up to three seconds.
4. Press the OFF button on the Transmitter or Wall Transmitter. The flame should extinguish (the pilot flame will remain on).

**ELECTRONIC SPARK IGNITION VALVES**

1. 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.
2. Slide the button to OFF. The main gas flame and pilot flame should BOTH extinguish.
3. Slide the button to REMOTE (the center position), the press the ON button on the Wall Transmitter. 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. NOTE: Upon initial operation and after an extended period of non-use, the ON button must be pressed for up to three seconds.
4. Press the OFF button on the Wall Transmitter. The main gas flame and pilot flame should both extinguish.

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

BATTERY LIFE

Life expectancy of alkaline batteries in the SKYTECH 1001D should be at least 12 months. Replace all batteries annually. When the Transmitter or Wall 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. It is important that the remote receiver batteries are fully charged, providing a combined output voltage of at least 5.3 volts. The length of the wire between the remote receiver and the 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. The Transmitter or Wall Transmitter should operate with as little as 9.0 volts battery power, measuring at the 12 volt battery.

TROUBLE SHOOTING

If you encounter problems with your fireplace system, the problem may be with the fireplace itself or it could be with the SKYTECH remote. 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:

- Make sure the batteries are correctly installed in the RECEIVER. One reversed battery will keep receiver from operating properly.
- Check battery in Wall Transmitter to make sure contacts are touching (+) and (-) ends of battery. Bend metal contacts in for tighter fit.
- Be sure RECEIVER and Transmitter / Wall Transmitter are within 20'-25' operating range.
- Keep RECEIVER from temperatures exceeding 130 degrees F. Battery life shortened when ambient temperatures are above 130 degrees F.
- If RECEIVER is installed in tightly enclosed metal surround, the operating distance will be shortened. Reposition RECEIVER into “free air” space.

FREQUENCY (DISTANCE) ADJUSTMENT PROCEDURE (Wall Transmitter)

Due to handling/shipping of remote control, especially the WALL TRANSMITTER, the WALL TRANSMITTER may require a frequency (distance) adjustment to return the normal operating distance of 20'-25'. Follow instructions below to make the adjustment: Check battery level, replace battery if low.

1. Remove four corner screws on front of the transmitter.
2. Using a small screwdriver, (eyeglass screwdriver works best) turn the adjustment screw (screw left of battery) clockwise, no more than 1 degree –2 degrees. Just a slight movement of this screw should improve the operating distance. If turning clockwise does not fix the problem, return screw to original position and turn 1 degree- 2 degrees counter-clockwise. This procedure is like turning your radio, too much adjustment will cause complete loss of frequency match between the transmitter and receiver. You should not have to turn the adjustment screw more than 5 degrees, 1/8 turn, in either direction to improve operating distance.
3. Replace front cover and screws.

SPECIFICATIONS

Batteries: Wall Transmitter 12V (a23)
Batteries: Remote Receiver 6V-4 ea AA 1.5V ALKALINE
Operating Frequency: 303.875MHz
FCC ID No’s: TRANSMITTER -K9L2001T; RECEIVER K9L2001R
Canadian ISC No.'s: TRANSMITTER –2439-101-521; RECEIVER- 2439-101-521A

WARRANTY

All warranty information is listed on the warranty sheet packed with this product. If you did not receive this warranty sheet, please contact Skytech Systems, Inc. at the following:
9230 Conservation Way, Fort Wayne, IN 46809
(888) 672-8929 or (260) 459-1703

FOR TECHNICAL SERVICE, CALL:  U.S. INQUIRIES CANADIAN INQUIRIES
888/672-8929 or 877/472-3923
260/459-1703
Website: skytechsystem.com

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