

SKYTECH

Model: RCAF-1020-1

INSTALLATION AND OPERATING INSTRUCTIONS

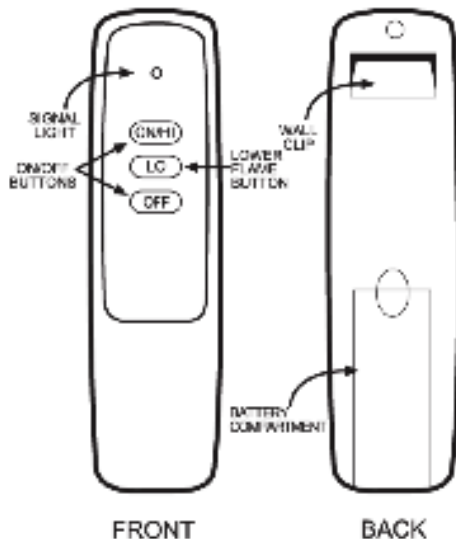
SINGLE-FUNCTION WIRELESS REMOTE CONTROL SYSTEM
FOR OPERATING HI/LOW SERVO MOTOR

**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. The system is operated manually from the transmitter. The system operates on radio frequencies (RF) within a 20-foot range using non-directional signals. The system operates on one of 65,536 security codes that are programmed into the transmitter at the factory; the remote receiver must learn the transmitter code prior to initial use.

TRANSMITTER



This remote control SYSTEM offers the user a battery-operated remote control to power a DC servo motor such as those used with gas valves used in some decorative gas logs, gas fireplaces and other gas heating appliances.

The servo motor circuit uses the battery power from the receiver to operate a servomotor. The circuit has reversing polarity software, which reverses the positive (+) and negative (-) output of the receiver's battery power to drive the servo motor forward/backward (HI/LO FLAME). The remote transmitter controls the SYSTEM.

The transmitter operates on a 12V battery (A-23). Before using the transmitter install the 12-volt battery in the battery compartment.

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

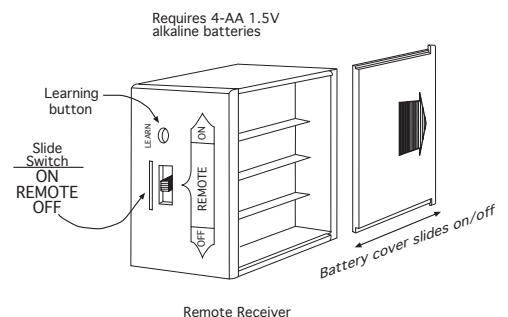
The transmitter has ON/HI, LO, and OFF functions that are activated by pressing the buttons on the face of the transmitter. When a button on the transmitter is pressed, a signal light on the transmitter illuminates to verify that a signal is being sent. Upon initial use, there may be a delay of three 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 transmitter's battery.

REMOTE RECEIVER

IMPORTANT
THE REMOTE RECEIVER SHOULD BE POSITIONED WHERE THE
AMBIENT TEMPERATURES DO NOT EXCEED 130° F.

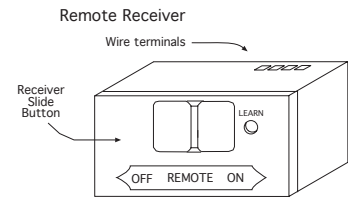
The remote receiver (right) operates on four 1.5V AA-size batteries. It is recommended that ALKALINE batteries be used for longer battery life and maximum microprocessor performance. **IMPORTANT:** New or fully charged batteries are essential to proper operation of the remote receiver as a servo motor's power consumption is substantially higher than standard remote control systems.

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. The remote receiver houses the microprocessor that responds to commands from the transmitter to control system operation.




FUNCTIONS:

- 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.**



INSTALLATION INSTRUCTIONS

	WARNING DO NOT CONNECT REMOTE RECEIVER DIRECTLY TO 110-120VAC POWER. THIS WILL BURN OUT THE RECEIVER. FOLLOW INSTRUCTIONS FROM MANUFACTURER OF GAS VALVE FOR CORRECT WIRING PROCEDURES. IMPROPER INSTALLATION OF ELECTRIC COMPONENTS CAN CAUSE DAMAGE TO GAS VALVE AND REMOTE RECEIVER.
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INSTALLATION

The remote receiver can be mounted on or near the fireplace 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.

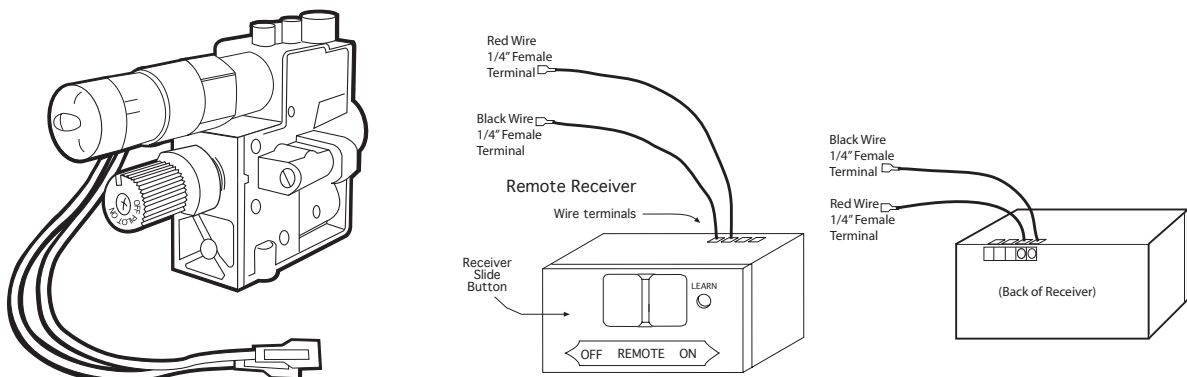
WIRING INSTRUCTION

CONNECTING THE RECEIVER TO THE GAS VALVE WITH THE ON/OFF SERVOMOTOR

1. Connect the Black 18 gage stranded wire with the 1/4" female terminal from the receiver to the 1/4" male terminal on the valve servomotor.
2. Connect the Red 18 gage stranded wire with the 1/4" female terminal from the receiver to the 1/4" male terminal on the valve servomotor.
3. After receiver wires are connected to the valve servo motor terminals make sure the receiver shield is located over the receiver and locate the receiver in an area that will not exceed 130° F.
4. Depending on the location of the remote receiver it may necessary to cut the Red and Black wires from the receiver to a shorter length. This can be done by removing the (2) wires from the receiver cutting them to the desired length then reinstalling them into the same connections on the receiver.

IMPORTANT NOTE: Operation of these controls is dependent on which wire is attached to which terminal. If operation of control does not correspond to operating buttons on transmitter, reverse wire installation at the receiver or at the control.

NOTE: Up to 6 VDC of power is provided at the receiver terminal.



GENERAL INFORMATION

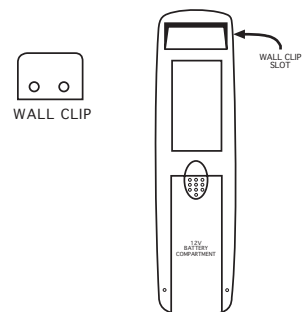
LEARNING TRANSMITTER TO RECEIVER

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 is 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 the black LEARN button inside the hole and release the button. When you release the LEARN button the receiver will emit a "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.

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

TRANSMITTER WALL CLIP

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



OPERATION

1. This remote control will operate the gas valves servomotor to turn the gas valve from full OFF to full ON.
2. When the ON button is depressed the transmitter is sending a continuous RF signal to the receiver. The receiver then sends a continuous 6 volts of power to the servomotor. The servomotor turns to open the gas flow to the burner then to full ON.
3. When the OFF button is depressed the transmitter sends a RF signal to the receiver. The receiver then sends a continuous 6 volts of power to the servomotor for a 5 second period of time. The servomotor turns to close the gas flow to the burner for full OFF condition.
4. The remote control will only work with the hand held transmitter. The receiver slide switch is only for positive OFF or REMOTE operation.

NOTE: Extensive operation ON-LOW-OFF of the SERVOMOTOR will reduce the receiver's battery life significantly.

BATTERY LIFE

Life expectancy of the alkaline batteries in the RCAF-1020 can be up to 12 months depending on use of the servomotor function. Check 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 does not function at all, the batteries should be checked. It is important that the remote receiver batteries are fully charged, providing combined output voltage of at least 5.0 volts. The transmitter should operate with as little as 9.0 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 RCAF-1020 remote system. 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:

1. Make sure the batteries are correctly installed in the RECEIVER. One reversed battery will keep receiver from operating properly.
2. Check battery in TRANSMITTER to ensure contacts are touching (+) and (-) ends of battery. Bend metal contacts in for tighter fit.
3. Be sure RECEIVER and TRANSMITTER is within 20 to 25-foot operating range.
4. Keep RECEIVER from temperatures exceeding 130° F. Battery life shortened when ambient temperatures are above 130° F.
5. If RECEIVER is installed in tightly enclosed metal surround, the operating distance will be shortened.

SPECIFICATIONS

BATTERIES: Transmitter 12V - (A23)
Remote Receiver 6V - 4 ea. AA 1.5 Alkaline
Operating Frequency: 303.8 MHZ

FCC ID No.'s: transmitter - K9L1001
Canadian ISC ID No.'s: transmitter – 2439A-1001

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:

SKYTECH
9230 Conservation Way
Fort Wayne, IN 46809
(855) 498-8324

Web Site: www.skytechpg.com

Limited Lifetime Warranty

SKYTECH 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 will repair or, at SKYTECH 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 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 or your SKYTECH Dealer direct with the following information:

- o Name, Address, Telephone Number of Owner
- o Date of Purchase, Proof of Purchase
- o Model Name, Date Code of Product and any relevant information or circumstances, concerning installation, mode of operation and/or 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.

Detach at this line for return to: Skytech 9230 Conservation Way, Fort Wayne, IN 46809 Telephone: (855) 498-8324

Purchase Date: _____ Model: _____ Date Code: _____

Purchased From: _____ Date: _____

Customer Name _____ Number of Santa's Helpers _____

Address _____

City _____ State/Prov. _____ Zip/Postal Code _____

Credit Card Number _____ Expiring Date _____
(Visa and MasterCard Only) See other side for a special offer for all Remote control Customers

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 120Volt 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 or 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.

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