



Model: FK-ESC (Electronic Speed Control) by SKYTECH



WARNING

RISK OF FIRE AND ELECTRICAL SHOCK!

TURN OFF THE GAS AND ELECTRICAL POWER BEFORE INSTALLING BLOWER!

When installed, make sure to contain any excess wire of the cord set; Preventing it from making contact with moving or hot objects.

Drywall dust or other fragments may be present in your fireplace's vent space, clean this area before you install the blower kit. Any bearing or motor damage resulting from this condition is not covered by the warranty policy.

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

INTRODUCTION

For use with Gas Burning Fireplaces - this module will turn the blower ON and OFF automatically at the set speed you select. The FK-ESC will not operate with a 24VAC gas valve system.

The FK-ESC is designed for Gas Burning Fireplaces by connecting to (IPI - SIT - Dexen) or Millivolt Valve Systems. *IPI (Intermittent Pilot Ignition) valve is a component of an Electronic Ignition System. SIT and DEXEN are brands which offer IPI Valves.*

Power must be provided through an approved factory installed junction box from the hearth product's manufacturer.

The FK-ESC (speed module) adjusts air output of the fan/blower. The speed control will turn ON the fan automatically 7 minutes after the main flame has been turned ON and turn the fan OFF 12 minutes after the main flame has been turned OFF. You can manually adjust the speed by pressing the FAN SPEED button. There are four speeds: Hi, Medium Hi, Medium Lo, Lo and OFF. The FK-ESC will remember the last setting used and remain on that setting until changed.

CONTENTS - Some parts may not be used.

- 1) Jumper Wire
See Diagram: 2

- 2) Jumper Wire & Ground Screw
See Diagram: 3

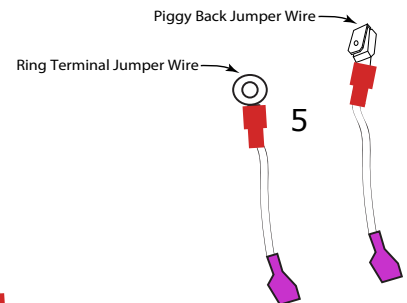
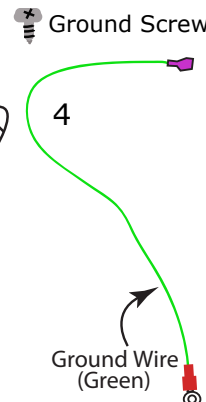
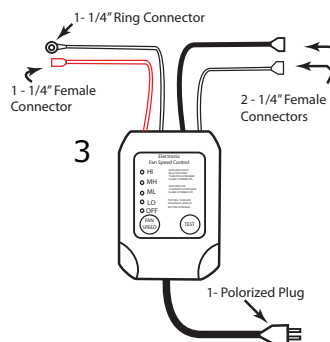
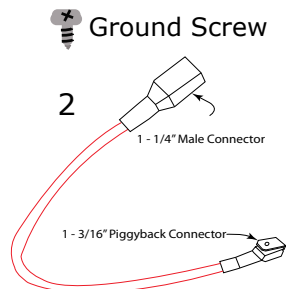
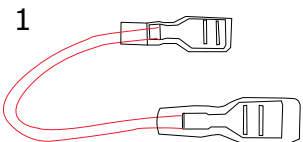
- 3) FK-ESC Speed Module

- 4) Ground Wire & Ground Screw

- 5) Jumper Wires for Millivolt Valve

Red Jumper Wire
Heatlator-Heat & Glo-Quadra-Fire
Power Strip Style Junction Boxes

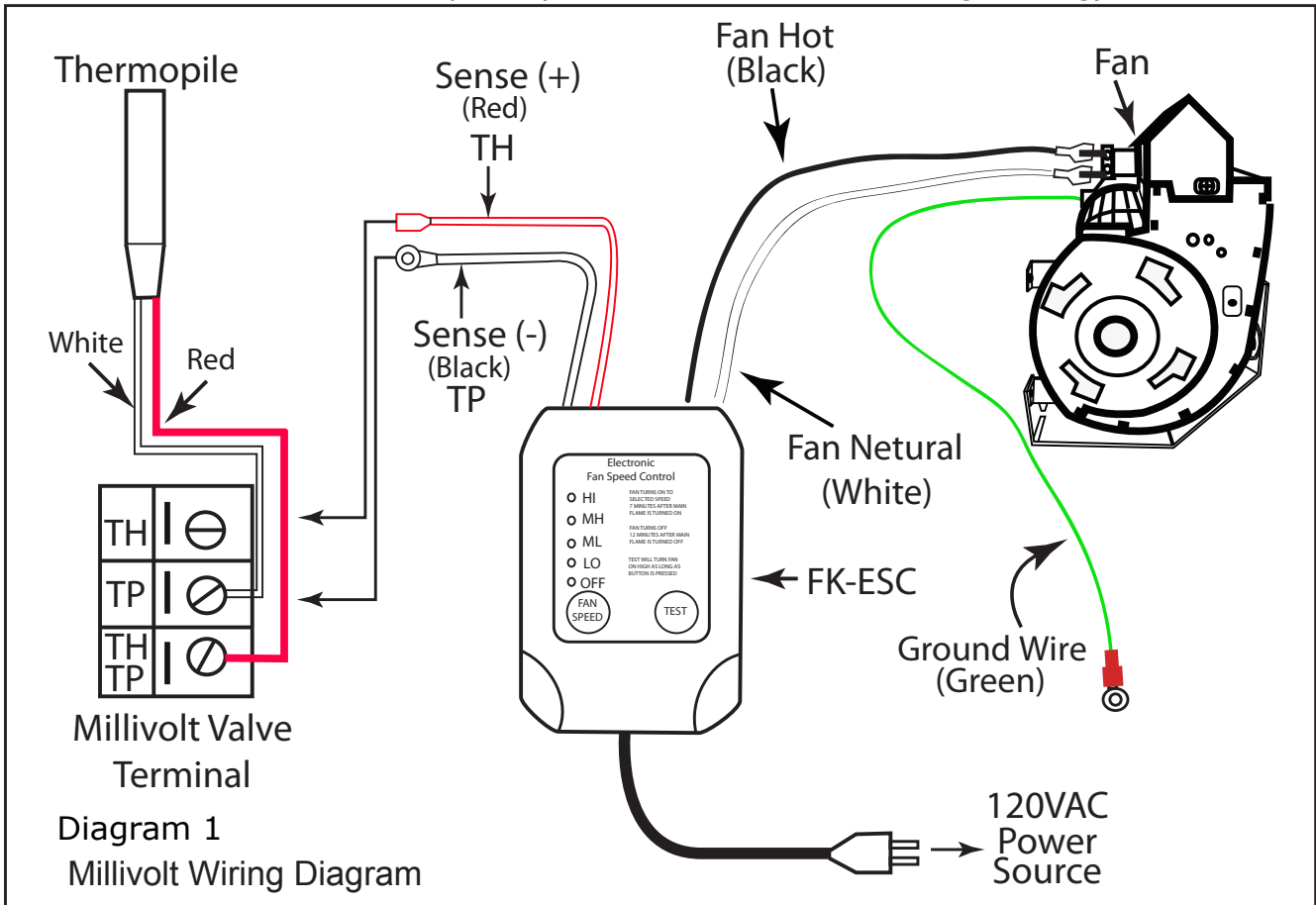
Red Jumper Wire
(For IPI - SIT - Dexen Valves)





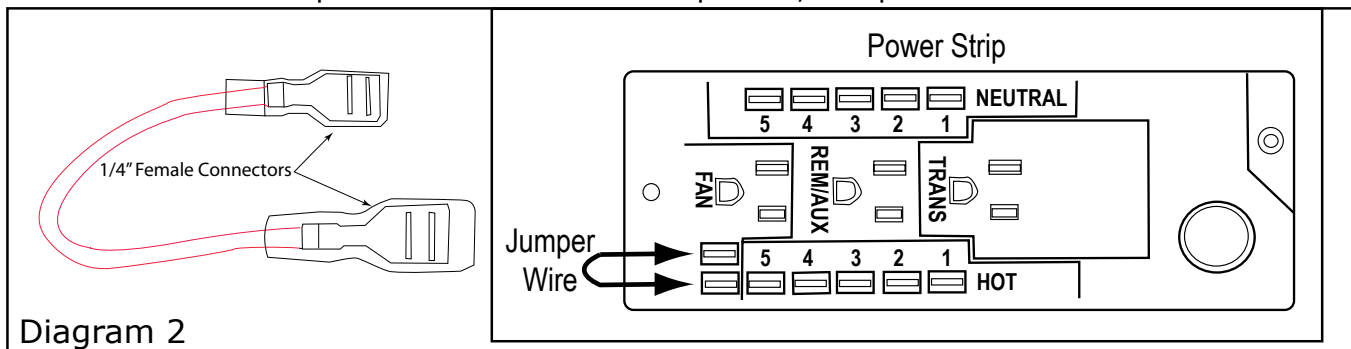
Steps for connecting FK-ESC to Millivolt gas valve

- 1) Connect Red (Sense +) wire to the TH spade and Black (Sense -) wire to the TP screw on the Millivolt gas valve. Use Jumper Wire if needed. (See our online instructions for additional information)
- 2) Connect the Black and White wires to either of the Spades on blower motor.
- 3) Plug in power cord into 120V junction box (power receptacle).
- 4) Ground Green wire to metal frame of fireplace. (See our online instructions for grounding)



WIRING NOTES: *This is a polarity sensitive system. Ensure you wire it exactly as shown in the diagram above. Thermopile wires must also be located with Red at TH/TP and White at TP on the gas valve.*

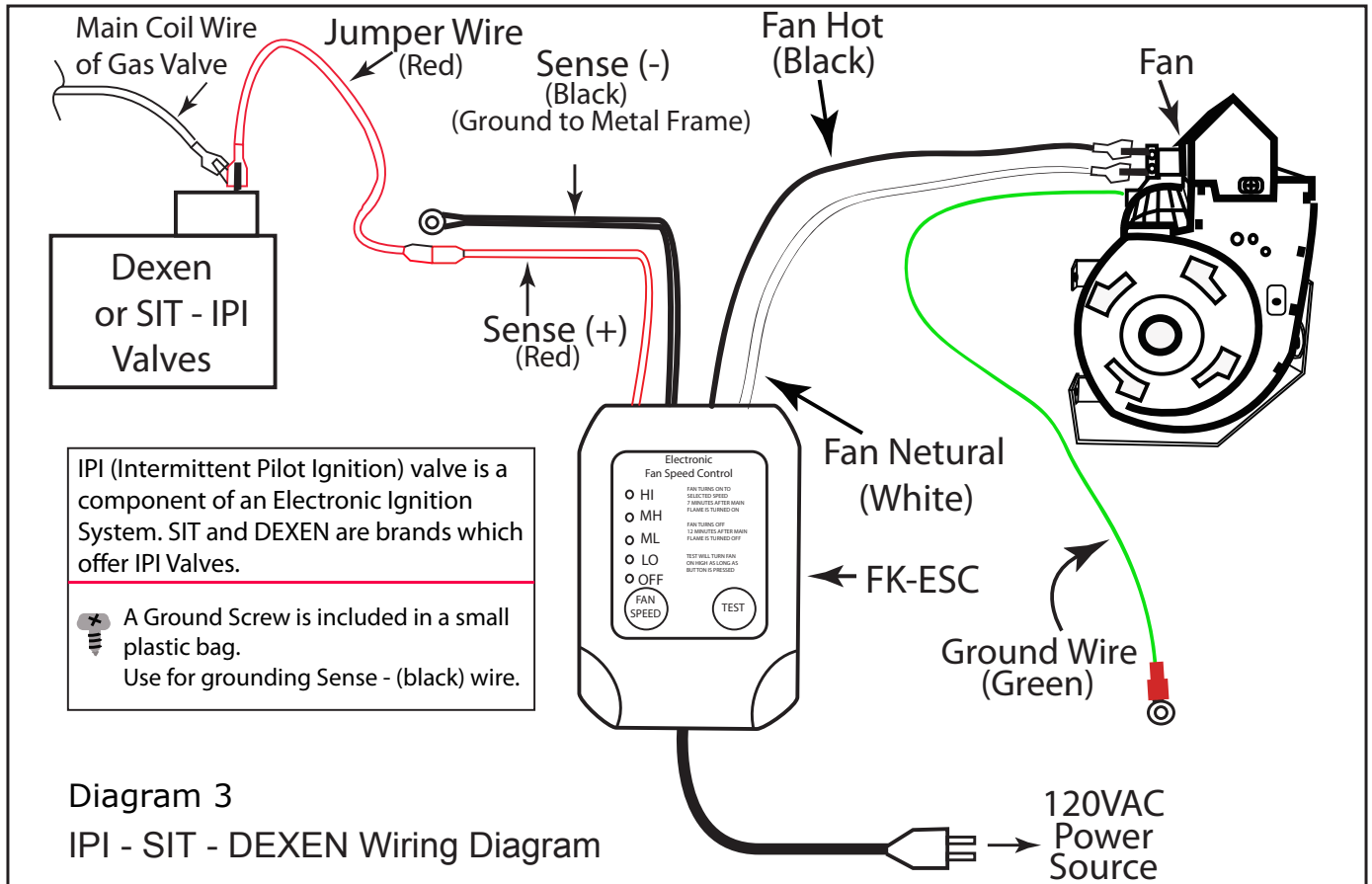
Power Strip Style Junction Box: When plugging the FK-ESC into a 120VAC power source, some fireplaces use a standard metal junction box and other fireplaces may use a power strip style. If your fireplace has a power strip style (as shown in diagram below), plug the red jumper wire with the 1/4" female connectors into the two small ports below where 'FAN' is printed, one port is above the other.





Steps for connecting FK-ESC to IPI - SIT - DEXEN gas valve

- 1) Disconnect the 3/16" connector from main coil of gas valve.
- 2) Place red jumper with piggyback connector to valve and reconnect the main coil wire removed from valve to piggy back connector.
- 3) Plug in power cord into 120V junction box (power receptacle).
- 4) Ground Green wire to metal frame of fireplace. (See our online instructions for grounding)



WIRING NOTES: When wiring an IPI system the Sense (-) Black wire must be secured to a ground point on the metal frame of the appliance for proper operation.

OPERATION

- To check the fan for proper wiring press the TEST button. This is a manual override that will operate the fan on HI as long as the button is depressed, it will return to normal operation after releasing the button.
- The FK-ESC speed control will turn the fan ON automatically 7-minutes after the main flame has been turned ON and turn the fan OFF 12-minutes after the main flame has been turn OFF. There are fou speeds, Hi, Medium Hi, Medium Lo, Lo and OFF. The factory default speed setting is HI upon initial use. You can manually adjust fan speed by pressing the FAN SPEED button; with each press of the button you can change the various fan speeds. The LED lights will allow you to visually see the fan speed you selected.
- The FK-ESC will remember the last setting used however it will always turn ON to the HI setting for 5-seconds then return to the last setting.



TROUBLE SHOOTING

• *FK-ESC Won't Turn ON in 7-Minutes*

a) Press the TEST button to ensure there is power to the fan.

If no power is present, check the 120VAC outlet the FK-ESC is plugged into. Use a lamp or radio to ensure power is present. If no power is present, check circuit breaker or find another power source.

b) If using the power strip jumper wire shown in Fig. 3 ensure the jumper is installed properly allowing power to be supplied to the power strip.

c) The FK-ESC is designed to operate with a Millivolt or IPI system. The operational specification for the Sense voltage is 50mVDC to 9VDC. It will not operate with a 24VAC gas valve system.

• *FK-ESC Won't Turn OFF in 12-Minutes*

a) Ensure ALL wires are properly secured and placed on the correct terminals of the gas valve (See: Diagrams 1 & 2) This is a polarity sensitive system; if wires are reversed it will not turn OFF the fan.

MAINTENANCE

Cleaning on a semi-annual basis is required to keep the warranty in place. Dust or dirt must be removed from the fan blades, air inlets and blower outlet for the fan kit to maintain the efficiency of the system. Carefully use a vacuum with a brush to remove any dust. If unable to reach fan with a vacuum remove the fan from the appliance for easier cleaning.

TWO YEAR LIMITED WARRANTY

SKYTECH II warrants this FK-ESC speed control is two years or 24 months from the date of purchase or installation to the original owner. This warranty is NOT transferable to another person.

Should any part fail because of defective workmanship or material from the original date of purchase SKYTECH II will repair or replace the part at SKYTECH II option.

Damage to the FK-ESC caused by accident, misuse, abuse, or installation error, whether by a contractor, service company, or owner is not covered by this warranty. Modification of the Fan System will void the warranty.

The owner must provide a bill of sale, cancelled check or a payment record should be kept to verify purchase date and establish warranty period. SKYTECH II is not responsible for: Travel expenses, Diagnostic costs, and Service labor to repair the defective Fan system. Freight charges will not be covered on warranty parts or Fan systems.

This warranty does not cover claims, which do not involve defective workmanship or materials.

IN NO EVENT SHALL SKYTECH II BE LIABLE FOR INCIDENTAL AND CONSEQUENTIAL OCCURRENCES, INCLUDING THE IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS, ARE LIMITED TO THE DURATION OF THE 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.

Warranty claims process will start with all information; SKYTECH II will reserve the right to physically inspect the product for defects, by authorized representatives.

FOR TECHNICAL INFORMATION CONTACT:

Skytech Products Group
9230 Conversation Way
Ft. Wayne, IN 46809

1-(888) 672-8929
www.skytechsystem.com

Installations in Canada must conform to the current CAN/CGAB-419.1 and .2 Gas Installation Code and local regulations. When installing the blower fan kit, it must be electrically grounded in accordance with CSA C22.1 Canadian Electrical Code Part 1 and/or Local Codes.

Installations in the USA must conform to local codes, or in absence of local codes or the National Fuel Gas Code, ANSI Z223.1-1988. When installing the blower fan kit, it must be grounded in accordance with local codes, or in absence of local codes, with the National Electrical Code, ANSI/NFPA 70-1987.