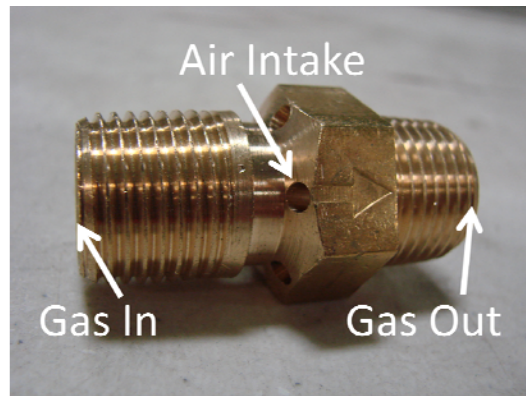




Hearth Products Controls Co

127 / 460 Air Mixer and all FPSLPK Kits Installation & Operation Instructions



Installation

We suggest that our products be installed by professionals that are locally licensed by the authority having jurisdiction in gas piping.

Service



We suggest that our products be serviced by a professional certified in the US by the National Fireplace Institute (NFI) as NFI Gas Specialists.

These are instructions for the air mixers and FPSLPK LP conversion kit designed to be used with match lit fire ring kits and log lighters.

▲ WARNING

•Improper installation, adjustment, alteration, service, or maintenance can cause injury or property damage. Read the installation, operating, and maintenance instructions thoroughly before installing or servicing this equipment.

▲ WARNING

•Do not store or use gasoline or other flammable vapors and liquids in vicinity of this or any other appliance.
•An LP-cylinder not connected for use shall not be stored in the vicinity of this or any other appliance.

▲ DANGER

If you smell gas:

- 1) Shut off gas to appliance.
- 2) Extinguish any open flame.
- 3) If odor continues, keep away from appliance and immediately call gas supplier or fire department.

INSTALLER: Leave this manual with the appliance.
CONSUMER: Retain this manual for future reference.

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1) General Information

Instructions are also available at HPCfire.com

Please carefully follow the instructions in this manual to prevent personal injury or property loss. Instructions are updated as needed. It is the installer's responsibility to periodically review instructions for applicable updates.

The steps listed as:

WARNINGS: Contains information critical to the safe installation and operation of the fire-pit.

WARRANTY REQUIREMENT: Must be strictly followed to qualify for product warranty.

Warranty will be void if not followed.

IMPORTANT: Are notes and insights to help ensure product satisfaction and serviceability.

WARNING: It is the installer's responsibility to ensure a safe installation and to educate the end user as to proper operation. Leave this manual with the end user.

WARNING: Never alter product or configuration in any way.

WARNING: FOR REMOTE CONTROL USE: For Electronic Ignition Models to prevent accidental start-up from unwanted RF signals it is the responsibility of the end user to turn off power to electric outlet for the remote control receiver when the fire-pit is not in use via wall switch or breaker.

WARNING: We suggest that our products be installed by professionals that are locally licensed by the authority having jurisdiction in gas piping. We suggest that our products be serviced annually by a professional certified in the US by the National Fireplace Institute (NFI) as NFI Gas Specialists or in Canada by WETT (Wood Energy Technical Training). Installer must follow all instructions carefully to ensure proper performance and safety. Hearth Products Controls Company is not responsible for your actions.

WARNING: Product is not intended to be a starter for wood or any other combustibles.

WARNING: It is the responsibility of the installer to follow ALL LOCAL CODES concerning the installation and operation of the fire pit. In the absence of local codes, please follow:

- Fixed piping system: The *National Fuel Gas Code, ANSI Z223.1/NFPA 54* or *International Fuel Gas Code*.
- Electrical ground: The *National Electrical Code, ANSI/NFPA 70*.

WARNING: Only use gas/fuel type specified for this fire pit see label on the fire pit control Box. Verify correct gas/fuel type and pressure. Never use an alternative fuel to include bio-fuel, ethanol, lighter fluid or any other fuel.

Gas pressure and type should be checked prior to use and installation.

- Natural Gas Fire Pit:
Supply Pressure: Minimum: 3.5" W.C.; Maximum: 7.0" W.C.
- LP Gas:
Supply Pressure: Minimum: 8.0" W.C.; Maximum: 11.0" W.C.

2) Selecting the Location

WARNING: These products have indoor and outdoor applications. It is the installers' responsibility to have a thorough understanding of each application, follow all codes and ensure a safe installation.

WARNING: For electronic ignition models there must be an electrical shut off (wall switch or breaker) on the exterior of the fire pit or on adjacent wall to allow for emergency shutdown and maintenance.

WARNING: All fire pits must have a gas shutoff on the outside of the exterior of the fire pit to allow for emergency shut off and maintenance.

WARNING: Select a location where the fire pit can be attended during operation. Never leave an operating fire pit unattended or by someone not familiar with its operation or emergency shut off locations.

WARNING: Both children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns and clothing ignition.

WARNING: Young children should be carefully supervised when they are in the area of fire pit.

WARNING: Clothing or other flammable materials should not be placed on or near fire pit.

WARNING: Fire pits create very high temperatures - Combustibles must be located far enough away that there is no risk of ignition.

IMPORTANT: It is recommended that material such as granite, marble or other dense stone be kept away from heat and especially flame due to risk of cracking. Manufacturer is not responsible for damage.

Fire Pit Clearances – When Applicable

Under Valve Box When Applicable	2” For Drainage
Sides Surrounding Fire Pit	48” From Structure or Combustibles
Overhead Clearance	Nothing Over Head

- Select a location with good drainage.
- Choose a location that allows easy access for installation and maintenance of the fire pit.
- Pick a location that allows sufficient horizontal room to enjoy the fire pit while allowing a safe distance from the heat and flame.

3) Construction of the Enclosure

WARNING: For electronic ignition models there must be an electrical shut off (wall switch or breaker) on the exterior of the fire pit or on adjacent wall to allow for emergency shutdown and maintenance. Verify correct 110VAC or 24VAC Supply.

WARNING: All fire pits must have a gas shutoff on the outside of the exterior of the fire pit to allow for emergency shut off and maintenance.

WARNING: Always use proper materials and construction for gas supply, power and enclosure.

WARNING: The enclosure must incorporate 1 vent on at least two opposing sides (2 vents total) at a minimum size of 18 sq. inches each (Example: 3”x 6” or larger). Installation of the vents in the mid to lower area of the enclosure is recommended. Ventilation allows for heat and or residual fuel to escape. Failure to properly vent enclosure may result in the fire-pit overheating or explosion. Overheating could lead to heat damage to internal components. Some enclosures may require more ventilation based on material, size, and extended use. The vent may work as a drain as well when installed at bottom sidewall to prevent water build up.



Vents- 2 Total

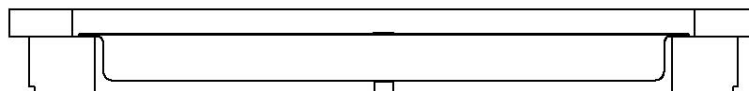
WARNING: The interior void space of the enclosure surrounding the valve box cannot be filled with any material (gravel, crushed rock, concrete, etc.)- It is a requirement to have a minimum of 2” under the valve box for proper ventilation and drainage.

WARNING: Select materials that are non-combustible in both initial installations as well as over time.

WARNING: The fire pit assembly should be recessed a minimum of 2.25” from the top of the enclosure to protect flame from being blown out. Some areas may require more- 4 to 6” is not uncommon.

WARRANTY REQUIREMENT: The enclosure must be constructed on a stable surface. The weight of the fire pit must be supported by the pan and not by any control/valve box. For electronic ignition models the control/valve box must be above grade with adequate drainage to prevent water damage to the controls inside the box.

- Make sure that the structure is level. We recommend the use of the installation collar (optional) that may be mortared into the surround.
- HPC recommends that the pan lip is recessed on trough (linear), and large round products as illustrated below. HPC cannot guarantee the lip on all of our products will be perfectly flat and will not warp due to heat.



4) Installation of a Fire Pit

Installation

We suggest that our products be installed by professionals that are locally licensed by the authority having jurisdiction in gas piping.

WARNING: We suggest that our products be installed by professionals that are locally licensed by the authority having jurisdiction in gas piping.

WARNING: We suggest that our products be serviced annually by a professional certified in the US by the National Fireplace Institute (NFI) as NFI Gas Specialists.

WARNING: Wind and gusty conditions will affect the flame in an unpredictable manner. If conditions exist that are not safe for patrons turn the fire pit off.

WARNING: Confirm this appliance is built for gas used – natural gas or LP. Do not use natural gas appliance with LP or LP appliance with natural gas. Refer to the label on the appliance.

WARNING: Fuel line sizing is the responsibility of the installer and must be able to supply the stated maximum btu for the product.

WARNING: To prevent damage, unhook fire pit from gas supply for pressure leak tests.

WARNING: Burn Testing- It is the responsibility of the qualified installer to test for gas leaks at all connections.

WARNING: When filling the pan with lava rock and/or decorative glass, the instructions in Section 5 must be followed.

WARNING: Gas Plumbing Connections: Use only joint compound or tape that is resistant to all gases. Apply joint compound to all male pipe fittings only- DO NOT use on FLARED fittings. Be sure to tighten every joint securely.

WARNING: For systems with an extended or detached valve box the area in which the valve box is installed must conform with all installation requirements to include but not limited to location, construction, venting and local codes. Failure to do so may result in personal injury property damage or explosion.

WARRANTY REQUIREMENT: Electronic Ignition fire pits come with a 13” x 13” sheet of insulation between pan and valve box to protect internal components from heat damage. This may need to be trimmed on smaller enclosures for proper fit. Please use insulation at all times.

WARRANTY REQUIREMENT: For Electronic Ignition Models the Warranty is void if valve box is opened.

- Purge gas lines of air.
- Perform all leak test with leak detector or leak reactant.
- Verify correct gas type and pressure.
- Perform leak test on main gas supply. Repair leaks as necessary.
- Shut Off Gas Supply and Power to fire-pit.
- Connect fire-pit to main gas supply. If using flex line avoid sharp bends with flex line to prevent whistling.
- Turn on gas supply and perform leak test on all inlet connections. Repair as needed.
- For electronic ignition models hook up proper 110VAC or 24VAC electrical power following all local codes.
- On electronic ignition models The 6’ power cord can be either tied into the main power supply for use with wall switch or plugged into remote receiver to use remotely.
- Position fire pit safely with access to all gas connections for testing.
- Light fire pit. It may take several cycles to purge air from the lines.
 - For electronic ignition models apply proper 110VAC or 24 VAC.
- Once fire pit is lit perform leak test on all gas connections. Repair as needed.
- Turn off fire pit and allow to cool.
- Apply media as described in (Section 5).
- Turn on fire pit again and perform leak test with media correctly installed. If gas leak is detected verify correct media application and repair as needed.
- If trimmer valve is installed adjust flame to desired height. Never alter the product configuration.
- Set fire pit in properly constructed enclosure (Section 3).
- Verify correct operation and lighting.
- Review safety manual with end user and instruct not to change/ modify fire pit or media.
- Leave manual with end user.



IMPORTANT: On electronic ignition models please apply the Start Up and Shutdown decal next to control switch in an obvious position.

5) Media

WARNING: FOR GLASS MEDIA USAGE WITH LP GAS- WHEN USING APPROVED DECORATIVE GLASS TO COVER BURNER APPLY ONLY ENOUGH TO HIDE BURNER. APPLYING OVER 1/2” MAY CREATE BACK PRESSURE AND GAS LEAKAGE FROM AIR MIXER RESULTING IN LP POOLING UNDER FIRE PIT.

WARNING: FOR GLASS MEDIA USAGE WITH LP GAS- THE UNIT MUST BE TESTED WITH MEDIA OVER BURNER FOR CONFIRMATION OF NO BACK PRESSURE CREATING GAS TO LEAK OUT OF AIR MIXER VENTURI HOLES. THIS MAY HAVE TO BE DONE PRIOR TO PLACING IN ENCLOSURE IF NO ACCESS DOOR.

WARNING: The fire pit is designed to use approved media correctly installed over the burner to achieve proper combustion.

WARRANTY REQUIREMENT: Never install a mesh or screen under the media.

IMPORTANT: Media affects flame pattern greatly. It is possible to create an unusual flame pattern that could damage your enclosure. Enclosure damage from an open flame fire feature is not covered under any warranty.

Lava Rock & Glass Application

Please follow the instructions below to add the finishing touch to your fire pit. Remember the deeper your lava rock or glass the more risk of reducing if not smothering the flame. Particular attention needs to be on the pilot assembly area. Incorrect media installation will cause the pilot flame to suffocate and turn off pit or delay main burner ignition.

Lava Rock Only Application

- 1) Install your fire pit per instructions.



- 2) Apply lava rock ONLY deep enough to cover ring and pan- less than 2" above fire ring.



For Electronic Ignition

- 3) Blow Out Box: Do not cover vents with lava rock- leave open. Do not allow any rock to block flame opening.



- 4) **Blowout Box:** Do not cover blowout box vents or opening with lava rock or glass. Incorrect media installation will cause the pilot flame to suffocate and turn off pit or delay main burner ignition.

Decorative Glass Application

- 1) Install your fire pit per instructions.



- 2) Fill Pan with glass. Cover Burner with 1/8 to 1/4" of glass. Do not over fill with glass. All LP installations must be checked for back pressure with media installed. Failure to do so may result in personal injury or property damage.



For Electronic Ignition

- 3) **Blowout Box:** Do not cover blowout box vents or opening with lava rock or glass. Incorrect media installation will cause the pilot flame to suffocate and turn off pit or delay main burner ignition.



DO NOT COVER VENTS!



DO NOT COVER PILOT OPENING!

6) Parts

This family of parts is available to qualified customer as just the air mixer (127, 127HC)
Or as a FPSLPK Kit.

<u>FPSLPK Series Parts List</u>	<u>Standard (1/2")</u>	<u>High Capacity (3/4")</u>
Air Mixer/Orifice	#127	#127-HC
Stainless Steel Coupler	#565	#594
Close Nipple	#561	#584

7) Installation of 127 /460

WARNING: Installer must have a thorough understanding of gas principles to use this product.

WARNING: Incorrect use or sizing of this product may result in personal injury, death, property damage, or explosion.

WARNING: Sizing recommendations is based on HPC burners only. Installer is responsible for correct sizing based on the application and must follow all instructions and local codes to include but not limited back pressure checks with media.

WARNING: Ensure tank and manual valve are shut off.

WARNING: Do not attach Air Mixer directly to burner. This may increase back pressure.

WARNING: Burrs or non-uniformities created from drilling out the air-mixer can increase back pressure.

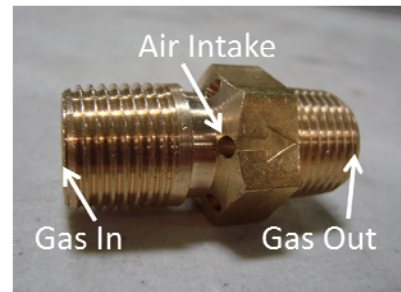
WARNING: Confirm "Gas In" is towards control valve or shutoff valve.

Installing backwards will result in severe gas leak and risk of explosion. If your air has an adjustment nut adjust to the desired flame condition.

WARNING: All LP installations must incorporate a pan to minimize fuel settling.

Installation

We suggest that our products be installed by professionals that are locally licensed by the authority having jurisdiction in gas piping.



to
mixer

Gas orifice capacity LP gas = 11" WC.

Guidelines for proper sizing of the Air Mixer. This information is a guideline only. Every system is different and has its own characteristics. Installer is responsible for proper sizing, leak test, and back pressure checks with media. Refer to catalog for burners not listed.

Burner Size (HPC Part#)	40K (460)	50K (460)	75K (460)	90K (127)	125K (127)	150K (127)	200K (127)	300K (127 or 127HC)	400K (127HC)
6" Round	X								
12" Round, Square & Rectangle				X					
18" Round, Square & Rectangle						X			
24" Round, Square & Rectangle						X			
30" Round								X	
36" Round								X	
48" Round									X
18" Open Center				X					
24" Open Center									
30" Open Center						X			
36" Open Center								X	
48" Open Center									X
24" T Burner		X							
36" T Burner			X						
48" T Burner				X					
60" T Burner					X				
72" T Burner						X			
96" T Burner							X		
18" Dual Burner				X					
24" Dual Burner				X					
30" Dual Burner						X			
36" Dual Burner						X			

- If using a HPC pan the installation will look like this.

Pan>Coupler>Air Mixer(Correctly Oriented)>Fuel Supply Not To Exceed Residential Pressure.



8) Warranty

Limited Warranty

Hearth Products Controls Company (HPC) warranties HWI fire pits against manufacturing defects that prevent safe and correct function as follows:

- **Electronics, Gas Valve, & Pilot Assembly: Commercial-6mos; Residential- 1 yr.**
- **Stainless Steel Pan, Fire Ring, & Valve Box: Commercial-1yr.; Residential 3yrs.**

This commences from the date of original sale / shipment from HPC FOB Dayton, Ohio.

This warranty is for parts and in-house (HPC) labor. The defective product must be sent back to HPC with a Return Merchandise Authorization (RMA) issued by HPC for that specific product and any other additional information for the nature of the defect or warranty claim.

The warranty does not cover items that have been damaged by overheating, modification, abuse, or improper storage. Also any labor involving installation or maintenance with the unit is not covered.

This warranty excludes claims for consequential, indirect-collateral expenses arising from product defects or warranty recovery.