

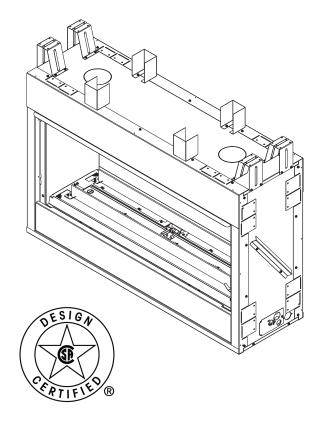
# AVFLST Vent Free See Through Fireplace System Installation & Operating Instructions

Models: AVFLST42NIP and AVFLST42PIP

WARNING! If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- WHAT TO DO IF YOU SMELL GAS – Do not try to light any appliance.
  - Do not touch any electrical switch; do not use any phone in your building.
  - Leave the building immediately.
  - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
  - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

This is an unvented fireplace. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. Refer to *Page 8.* 



INSTALLER: Leave this manual with the appliance. CONSUMER: Retain this manual for future reference. Thank you and congratulations on your purchase of a Monessen fireplace. PLEASE READ THE INSTALLATION AND OPERATION INSTRUCTIONS BEFORE USING THE APPLIANCE! IMPORTANT: Read all instructions and warnings carefully before starting installation. Failure to follow these instructions may result in a possible fire hazard and will void the warranty.

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Follow this Standar         This standard work checklist is to be used by the installer in corinstallation manual.         Customer:         Lot/Address:	
WARNING! Risk of Fire or Explosion! Failure to lead to a fire or explosion.	o install appliance according to these instructions could
Appliance Install (Pg. 7-12) Verified that the chase is insulated and sealed. Required non-combustible board is installed. Fireplace is leveled and secured. Adequate provisions for combustion and ventilation air have b Verified clearances to combustibles.	YES IF NO, WHY?
<u>Gas</u> (Pg 13-14) Proper appliance for fuel type. Leak check performed and inlet pressure verified. Verified proper air shutter setting for installation type.	
Electrical (Pg 15) Unswitched power (110-120 VAC) provided to the appliance. Switch wires properly installed.	
Media & Accessories (Pg 18) All packaging and protective materials removed (inside & outside appliance). Media installed correctly. Accessories installed properly.	e of
<b>Finishing (Pg 10 &amp; 12)</b> Verified all clearances meet installation manual requirements. Mantels and wall projections comply with installation manual re	
Manual bag and all of its contents are removed from inside/ under the appliance and given to party responsible for use and Started appliance and verified no gas leaks exist.	d operation.

#### Hearth & Home Technologies recommends the following:

• Photographing the installation and copying this checklist for your file.

• That this checklist remain visible at all times on the appliance until the installation is complete.

Comments: Further description of the issues, who is responsible (Installer/ Builder/ Other Trades, etc) and corrective action needed

Comments Communicated to party responsible	by		on
→ = Contains updated information.	(Builder / Gen. Contractor/)	(Installer)	(Date)

## INSTALLER

Please leave these instructions with the appliance.

## OWNER

Please retain these instructions for future reference.

# 

- Any change to this heater or its controls can be dangerous.
- Improper installation or use of the heater can cause serious injury or death from fire, burns, explosion or carbon monoxide poisoning.
- Do not allow fans to blow directly into the fireplace. Avoid any drafts that alter burner flame patterns.
- Do not use a blower insert, heat exchanger insert or other accessory, not approved for use with this heater where applicable.
- 1. Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.
- 2. Children and adults should be alerted to the hazard of high surface temperature and should stay away to avoid burns or clothing ignition.
- 3. Young children should be carefully supervised when they are in the same room with the appliance.
- 4. Do not place clothing or other flammable material on or near the appliance.
- 5. Any safety screen or guard removed for servicing an appliance, must be replaced prior to operating the heater.
- 6. Installation and repair should be done by a qualified service person. To prevent malfunction and/or sooting, an unvented fireplace should be cleaned before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding materials, etc. It is imperative that control compartments, burners and circulating air passageways be kept clean.
- 7. WARNING! Any change to this heater or its controls can be dangerous.
- 8. Unvented fireplaces are a supplemental zone heater. They are not intended to be the primary heating appliance.
- 9. CARBON MONOXIDE POISONING: Early signs of carbon monoxide poisoning are similar to the flu with headaches, dizziness and/or nausea. If you have these signs, obtain fresh air immediately. Have the heater serviced as it may not be operating properly.
- 10. The installation must conform with local codes or, in the absence of local codes, with the **National Fuel Gas Code, ANSI Z223.I/NFPA54.**
- 11. This unit complies with ANSI Z21.11.2:19 Unvented Heaters.

- 12. Do not install the heaters in a bathroom or bedroom.
- Proper location of the heater, and annual cleaning are necessary to avoid potential problems with sooting. Sooting, resulting from improper installation or operation, can settle on surfaces outside the fireplace.
- 14. Avoid any drafts that alter burner flame patterns. Do not allow fans to blow directly into fireplace. Do not place a blower inside burn area of firebox. Ceiling fans may create drafts that alter burner flame patterns. Sooting and improper burning will occur.
- 15. **Caution:** Candles, incense, oil lamps, etc. produce combustion byproducts including soot. Vent-free appliances will not filter or clean soot produced by these types of products. In addition, the smoke and/or aromatics (scents) may be re-burned in the vent-free appliance which can produce odors. It is recommended to minimize the use of candles, incense, etc. while the vent-free appliance is in operation.
- 16. This is an unvented fireplace. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. Refer to *Page 8.*
- 17. This heater shall not be installed in a room or space unless the required volume of indoor combustion air is provided by the method described in the *National Fuel Gas Code, ANSI Z223.1/NFPA 54*, the *International Fuel Gas Code* or applicable local codes.
- 18. Keep room area clear and free from combustible materials, gasoline and other flammable vapors and liquids.
- Unvented fireplaces emit moisture into the living area. In most homes of average construction, this does not pose a problem. In houses of extremely tight construction, additional mechanical ventilation is recommended.
- 20. During manufacturing, fabricating and shipping, various components of this appliance are treated with certain oils, films or bonding agents. These chemicals are not harmful but may produce annoying smoke and smells

as they are burned off during the initial operation of the appliance; possibly causing headaches or eye or lung irritation. This is a normal and temporary occurrence.

The initial break-in operation should last two to three hours with the burner at the highest setting. Provide maximum ventilation by opening windows or doors to allow odors to dissipate. Any odors remaining after this initial break-in period will be slight and will disappear with continued use.

- 21. Input ratings are shown in BTU per hour and are for elevations up to 2,000 feet. For elevations above 2,000 feet, input ratings should be reduced 4 percent for each 1,000 feet above sea level. Refer to the National Fuel Gas Code.
- 22. The appliance and its appliance main gas valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of ½ psig (3.5 kPa).
- 23. The appliance must be isolated from gas supply piping system by closing its equipment shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than ½ psig (3.5 kPa).
- 24. Do not use this room heater if any part has been under water. Immediately call a qualified service technician to inspect the room heater and to replace any part of the control system and any gas control which has been under water.
- 25. Never burn solid fuels in a fireplace where a unvented room heater is installed.

This appliance may be installed in an aftermarket, permanently located, manufactured (mobile) home, where not prohibited by local codes.

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.

#### **BUILDING CODE INFORMATION**

Adhere to all local codes or, in their absence, the latest edition of THE NATIONAL FUEL GAS CODE ANSI Z223.1 or NFPA54 which can be obtained from:

American National Standards Institute, Inc. 1430 Broadway New York, NY 10018

or

National Fire Protection Association, Inc. Batterymarch Park Quincy, MA 02269

WARNING: This product and the fuels used to operate this product (liquid propane or natural gas), and the products of combustion of such fuels, can expose you to chemicals including benzene, which is known to the State of California to cause cancer and reproductive harm. For more information go to: www.P65Warnings. ca.gov.

## **AVFLST42 CONTROLS**

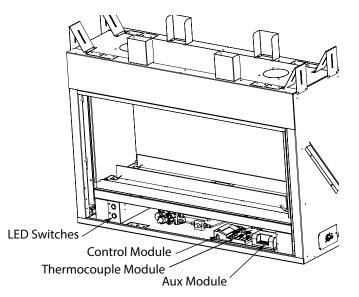


Figure 1. AVFLST42 Controls (Control Access Door Shown Open)

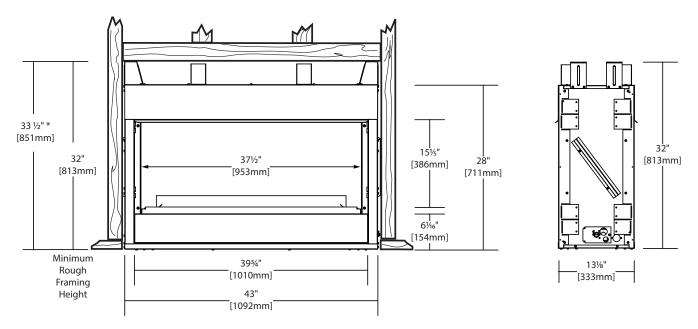
### **GAS SPECIFICATIONS & ORIFICE SIZE**

MODEL	FUEL	MAX. INPUT (BTU/h)	MIN. INPUT (BTU/h)	ORIFICE SIZE
AVFLST42NIP	NAT.	37,000	24,500	2.20 mm
AVFLST42PIP	LP.	36,000	28,500	#55

**NOTE:** For LP models an external regulator is required to reduce supply pressure to a maximum of 13" w.c.

#### **GAS PRESSURES**

	NATURAL	PROPANE (LP)
Inlet Minimum	5.0" w.c.	11.0" w.c.
Inlet Maximum	10.5" w.c.	13.0" w.c.
Regulator Pressure Setting	3.5" w.c.	10" w.c.
Pilot Regulator	3.5" w.c.	—



\*NOTE: The AVFLST42 unit must be raised at least 1.5 inches above the top surface of the finished floor when using the AVFL42WFBT-A or AVFL42WCSS-A wide contemporary face.

Figure 2. Fireplace dimensions

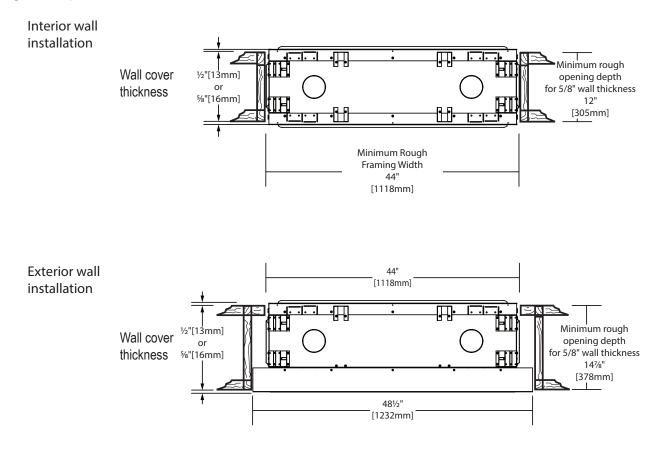


Figure 3. Framing dimensions with outdoor kit installed (AVFLSTSSODK)

## **GETTING STARTED**

Check to verify that all listed parts have been received. You should have the following:

- One (1) Unvented fireplace
- Two (2) Anchoring screws
- One (1)Installation/operating instructions
- Two (2) 5" noncombustible board
- Two (2) 2" x 32" deflector glass
- Two (2) Bags fireglass
- One (1) 90 watt bulb
- One (1) RC300 remote control

Carefully inspect the contents for shipping damage. If any parts are missing or damaged, immediately inform the dealer from whom you purchased the appliance. **Do not attempt to install any part of the appliance unless you have all parts in good condition.** 

## WHAT YOU WILL NEED FOR INSTALLATION

You must have the following items available before proceeding with installation:

- · External regulator (for propane/LPG only)
- · Manual shutoff valve
- · Piping which complies with local codes
- Sediment trap
- · Phillips head screwdriver
- Tee joint.
- Pipe sealant approved for use with propane/LPG (Resistant to sulfur compounds)
- Pipe wrench

# AWARNING!

Do not install the heater:

- Where curtains, furniture, clothing, or other flammable objects are less than 36" from the front of the heater.
- In high traffic areas.
- In windy or drafty areas.

## PLANNING THE INSTALLATION

In planning the installation for the fireplace it is necessary to determine where the unit is to be installed and whether optional accessories are desired. Gas supply piping should also be planned. The following steps represent the normal sequence of installation. Each installation is unique, however, and might require a different sequence.

1. Position fireplace in desired location. Refer to the Fireplace and Framing Dimensions (page 7, Figures 2 and 3,) Fireplace Location (page 9, Figure 5) and Clearances and Height Requirements (page 10, Figures 6 and 7.)

**NOTE:** Be sure all cardboard packing material has been removed from under the unit.

- 2. Install following the instructions found in this manual.
- 3. Field wire main power supply to junction box. Refer to the Electrical Installation section (page 15). (Electrical connections should only be performed by an experienced, licensed certified service person).
- 4. Plumb gas line. Refer to the Connect the Gas (page 13, Figure 10) section found in this manual. (Gas connections should only be performed by an experienced, licensed/certified service person).
- 5. Complete finish wall material and/or surround.

# ADEQUATE COMBUSTION AND VENTILATION AIR

This heater shall not be installed in a confined space or unusually tight construction unless provisions are provided for adequate combustion and ventilation air.

The National Fuel Gas Code, (ANSI Z223.1/NFPA54), defines a confined space as a space whose volume is less than 50 cubic feet per 1,000 BTU per hour (4.8m<sup>3</sup> per kw) of the aggregate input rating of all appliances installed in that space, and an unconfined space as a space whose volume is not less than 50 cubic feet per 1,000 BTU per hour (4.8 m<sup>3</sup> per kw) of the aggregate input rating of all appliances installed in that space in that space. Rooms communicating directly with the space in which the appliances are installed, through openings not furnished with doors, are considered a part of a confined space.

Unusually tight construction is defined as construction where:

- a. Walls and ceilings exposed to the outside atmosphere have a continuous water vapor retarder with a rating of 1 perm (6 x 10<sup>11</sup> kg per pa/sec-m<sup>2</sup>) or less with openings gasketed or sealed, and
- b. Weather stripping has been added on openable windows and doors, and

c. Caulking or sealants are applied to areas such as joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical and gas lines and other openings.

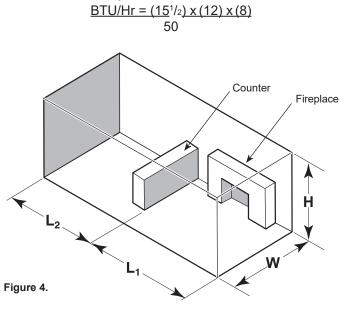
The following formula can be used to determine the maximum heater rating per the definition of unconfined space:

$$\frac{\text{BTU/Hr} = (L_1 + L_2) \text{ Ft x (W) Ft x (H) Ft}}{50}$$

Consider two connecting rooms with an open area between, with the following dimensions:

L<sub>1</sub> = 
$$15^{1}/_{2}$$
 Ft., L<sub>2</sub> = 12 Ft., W = 12 Ft., H = 8 Ft.  
BTU/Hr =  $(15^{1}/_{2} + 12) x (12) x (8)$   
50

If there were a door between the two rooms the calculation would be based only on the room with the heater.



## FIREPLACE LOCATION

This unvented fireplace requires no outside venting and burns cleanly and efficiency. As a zero-clearance unvented fireplace, it can be installed recessed into any wall that is accessible to a gas line, except in a bedroom or bathroom.

Carefully select the best location for installation of your unvented fireplace. The following factors should be taken into consideration.

- Clearance to side wall, ceiling, woodwork and window or other combustibles. Refer to *Clearance and Height Requirements* section on *Page 10*. Minimum clearances to combustibles **must be maintained**.
- Location must not be affected by drafts caused by kitchen exhaust fans, ceiling fans, return air registers for forced air furnaces / air conditioners, windows or doors.
- Installation must provide adequate ventilation and combustion air.
- DO NOT INSTALL THIS MODEL IN A BEDROOM OR BATHROOM.
- Location should be out of high traffic areas and away from furniture and draperies due to heat from firebox.
- Never obstruct the front opening of the unvented fireplace or restrict the flow of combustion and ventilation air.
- Minimize modifications to existing construction. Refer to Figure 5 below for location suggestions.
- Do not install in the vicinity where gasoline or other flammable liquids may be stored. The unvented firebox must be kept clear and free from the combustible materials.

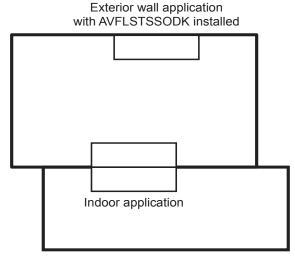


Figure 5. Possible Fireplace Locations

FP3029

# AWARNING!

If the area in which the heater may be operated does not meet the required volume for indoor combustion air, combustion and ventilation air shall be provided by one of the methods described in the *National Fuel Gas Code, ANSI Z223.1/NFPA 54*, the *International Fuel Gas Code* or applicable local codes.

## CLEARANCES AND HEIGHT REQUIREMENTS

Ensure that minimum clearances shown in Figures 6 and 7 are maintained. Left and right clearances are determined when facing the front of the firebox.

Follow these instructions carefully to ensure safe installation. Failure to follow these requirements may create a fire hazard.

**Sidewall Clearances** — The clearance from the inside of the appliance to any combustible adjacent wall should not be less than 6". Figure 6

**Ceiling Clearance** — The ceiling must be at least 36" from the firebox opening. Figure 6

# 

The dimensions shown in Figures 6 and 7 are minimum clearances to maintain when installing this heater. Left and right clearances are determined when facing the front of the heater.

Follow these instructions carefully to ensure safe installation. Failure to follow instructions exactly can create a fire hazard.

**Floor Clearance** — The fireplace may be installed directly on a combustible floor or a raised platform of an appropriate height. Do not place fireplace on carpeting, vinyl, tile or other soft floor coverings. It may, however, be placed on flat wood, plywood, particle board or other hard surfaces. Be sure fireplace rests on a solid continuous floor or platform with appropriate framing for support so that no cold air can enter from under the firebox. See note below regarding floor installation with wide contemporary faces.

**Mantel clearances** — Must meet the clearance requirements detailed in Figures 6 and 7.

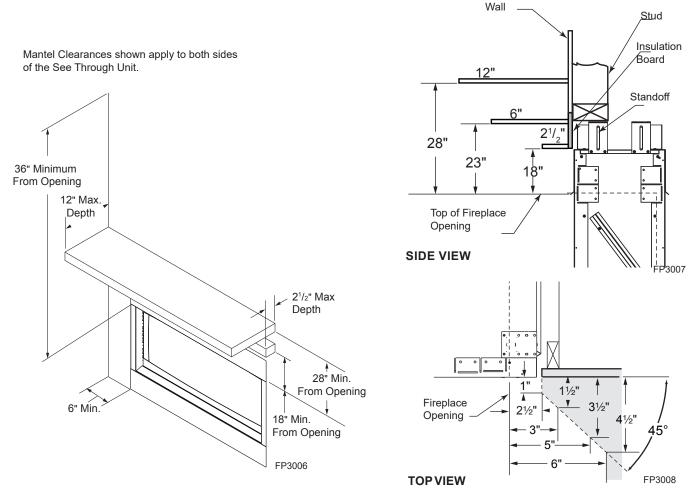
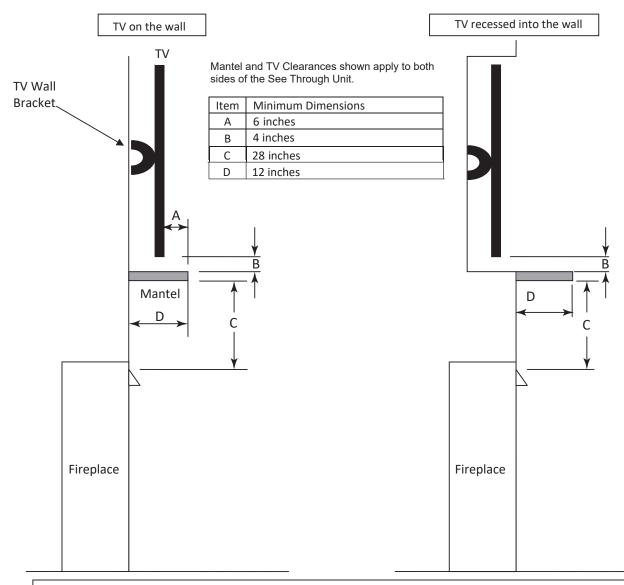


Figure 6. Sidewall and Ceiling Clearances

Figure 7. Mantel Clearances

#### Good Faith Guidelines for TV Installations above a Typical Gas Fireplace



#### Notes:

- 1. These are good faith recommended clearances only and not a guarantee of compliance with all TV manufacturers' maximum allowable operating temperatures.
- 2. Since every home has unique air flow characteristics and maximum allowable operating temperatures can vary from manufacturer to manufacturer and from model to model, actual TV temperatures should be validated at the time of each installation. TVs should not be used in situations where the actual TV temperature exceeds the manufacturers' maximum allowable operating temperatures identified in the TV's technical specifications. Contact the TV's manufacturer directly if you cannot locate this information or have questions regarding the information.
- 3. Mantel height and depth must conform to mantle requirements specified in the fireplace installation manual.
- 4. "C" dimension taken from the top of the hood or fireplace opening.
- 5. Suggestions on how to further reduce TV temperatures:
  - a. Increase "A" dimension.
  - b. Increase "C" dimension, however, increasing "B" dimension beyond maximum recommended typically results in higher temperatures.

## SECURE FIREPLACE TO FRAMING

The fireplace must be secured to the framing studs as shown in Figure 8. Use eight (8) screws to attach fireplace to framing. The side nailing flanges are  $\frac{1}{2}$  or  $\frac{5}{10}$  to accommodate different wall thickness.

WARNING! Never install combustible materials over front face of fireplace.

#### **FINISHING MATERIAL**

**NOTE:** Any remote wiring (i.e. remote control, wall switch), must be done prior to final finishing to avoid costly reconstruction.

Only noncombustible materials (i.e. brick, tile, slate, steel, or other materials with a UL fire rating of Zero) may be used to cover the black painted face of the appliance. It is permissible to bring combustible wall board to the top of the standoffs on the top and to the wall board stand-offs on the sides of the unit. A 300°F minimum adhesive may be used to attach facing materials to the black surface. If joints between the finished wall and the fireplace surround are sealed, a 300°F minimum sealant material (General Electric RTV103 or equivalent) must be used.

**NOTE:** Fireplace may be installed on top of framing or platform constructed of combustible materials which do not protrude beyond the face.

## NONCOMBUSTIBLE FACING INSTALLATION

**CAUTION**: The noncombustible wall board supplied with this unit can be damaged if dropped or struck. Handle with care.

- 1. Using drywall screws, secure the noncombustible board to the two brackets on top of the unit. **IMPORTANT**: To avoid cracking the board, pre-drill holes prior to securing to the unit/framing.
- 2. Wipe any debris or dust from the noncombustible board and drywall.
- 3.It is highly recommended to prime the facing using a quality primer prior to taping and mudding. This will ensure proper adhesion of both the tape and mud. The supplied board is very porous.
- 4. Tape the seams using a mesh type tape.
- 5.Mud seams as normal. We recommend using a product called Durabond high strength compound for the first coat. This product can be purchased at any hardware store. Follow manufacturer's recommendations for curing the mud. NOTE: Depending upon the final finishing method, use a minimum rated 300 degree sealant, drywall compound or thin set to seal the side and top joints.
- 6. Prime wall for a second time for proper adhesion of paint.



AVFLST Vent Free Fireplace

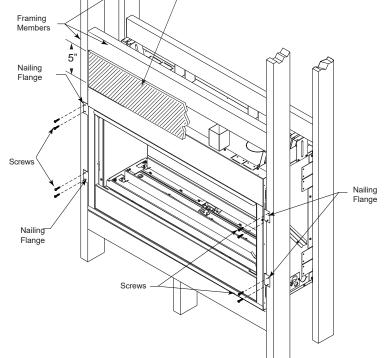


Figure 8. Secure Fireplace to Framing Studs

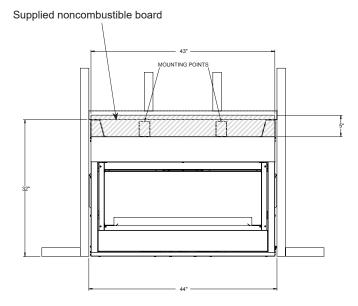


Figure 9. Noncombustible board installation

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## CONNECT THE GAS

**NOTICE:** A qualified gas appliance installer must connect the heater to the gas supply. Consult all local codes.

Note: Gas line may be installed on the left or right side of the appliance.

## WARNING!

This appliance is equipped for either natural or propane gas. Field conversion is not permitted.

# A WARNING!

Use new black iron or steel pipe. Internally tinned copper or copper tubing can be used per National Fuel Code, section 2.6.3, providing gas meets hydrogen sulfide limits, and where permitted by local codes. Gas piping system must be sized to provide minimum inlet pressure (Listed on Data Plate) at the maximum flow rate (BTU/hr). Undue pressure loss will occur if the pipe is too small.

A manual shutoff valve must be installed upstream of the appliance. Union tee and plugged <sup>1</sup>/<sub>8</sub>" NPT pressure tapping point should be installed upstream of the appliance. Figure 10

A sediment trap should be installed upstream to prevent moisture and contaminants from passing through the pipe to appliance controls and burners. Failure to do so could prevent the appliance from operating reliably. Figure 10

# AWARNING!

CHECK GAS TYPE: The gas supply must be the same as stated on the heater's rating plate. If the gas supply is different, DO NOT INSTALL THE HEATER. Contact your dealer for the correct model.

**IMPORTANT:** Loosen the pipe adapter on the flex tube before installing to the system piping.

Always use an external regulator for all propane/LPG heaters only, to reduce the supply tank pressure to a maximum of 13" w.c. This is in addition to the internal regulator in the heater valve.

When tightening the joint to the valve, hold the valve securely to prevent movement.

Test all gas joints from the gas meter to the heater valve for leaks using a gas analyzer or soap and water solution after completing connection. **DO NOT USE AN OPEN FLAME**.

## 

Connecting directly to an unregulated propane/LP tank can cause an explosion.

## WARNING! DO NOT USE OPEN FLAME TO CHECK FOR GAS LEAKS.

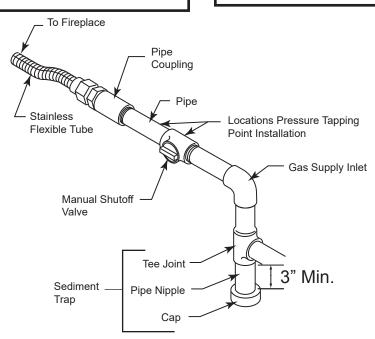


Figure 10. Gas Connection

## **CHECK GAS PRESSURE**

#### Figure 11

Check the gas pressure with the appliance burning and the control set to **HIGH**.

The valve regulator controls the burner pressure which should be checked at the pressure test point.

Open control access door at bottom front of unit to find valve and regulator.

Turn captured screw counterclockwise two or three turns and then place tubing to pressure gauge over test point. Use test point "A" closest to gas inlet. If the pressure is not within the range listed for your gas type turn the valve regulator until it is within range. After taking pressure reading, be sure and turn captured screw clockwise firmly to reseal. Do not over torque. Check for gas leaks.

## GAS PRESSURES

	NATURAL	PROPANE (LP)
Inlet Minimum	5.0" w.c.	11.0" w.c.
Inlet Maximum	10.5" w.c.	13.0" w.c.
Regulator Pressure Setting	3.5" w.c.	10" w.c.
Pilot Regulator	3.5" w.c.	

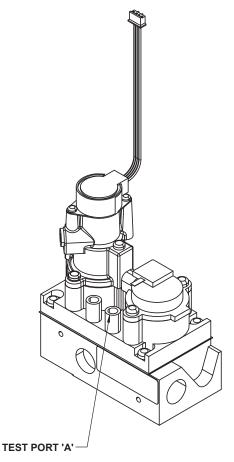


Figure 11. Pressure Test Point Location

#### WIRING JUNCTION BOX

- Before installing, wire the receptacle into an electrical circuit. This should be done before framing the fireplace. Wire with minimum 60° C wire in accordance with prevailing codes.
- 2. Remove the cover plate located on the outer shell-right side.
- 3. Loosen two screws on the Romex connector, feed the necessary length of wire through the connector and tighten the screws.
- 4. Make all necessary wire connections and reattach the cover plate to the outer shell.

# AWARNING!

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

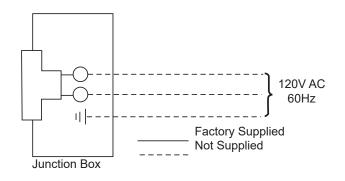


Figure 12. Junction Box Wiring Diagram

## A WARNING!

Electrical connections should only be performed by a qualified licensed electrician. Main power supply must be turned off before connecting to the main electrical power supply or performing service.

# AWARNING!

**Electrical Grounding Instructions:** 

This appliance is equipped with a three-prong (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three prong receptacle.

**IMPORTANT:** Always check local building codes. This installation must comply with local regulations as well as the National Electric Code.

## Wiring Requirements Intellifire™ Plus ODS Ignition System Wiring

• Wire the appliance junction box to 110-120 VAC for proper operation of the appliance.

**WARNING! Risk of Shock or Explosion! DO NOT** wire IFP ODS controlled appliance junction box to a switched circuit. Incorrect wiring will override IFP ODS safety lockout.

- Refer to Figure 13 and 14, IFP ODS Wiring Diagram.
- This appliance is equipped with an Intellifire<sup>™</sup> Plus control valve which operates on a 6 volt/1.5 AMP system.
- Plug the 6 volt transformer plug into the appliance junction box to supply power to the unit OR install 4 AA cell batteries (not included) into the battery pack before use.

**NOTICE:** Batteries should only be used as a power source in the event of an emergency power outage. Batteries should not be used as a primary long-term power source. Battery polarity must be correct when installing batteries. When using batteries as a power source, the 6-volt transformer must be unplugged from the receptacle.

Do not store batteries in the battery pack when the appliance is powered by the 6 volt transformer connected to permanent electrical service.

#### **Accessories Requirements**

• This appliance ships standard with a remote control.

Wiring for optional Hearth & Home Technologies approved accessories should be done now to avoid reconstruction. Follow instructions that come with those accessories.

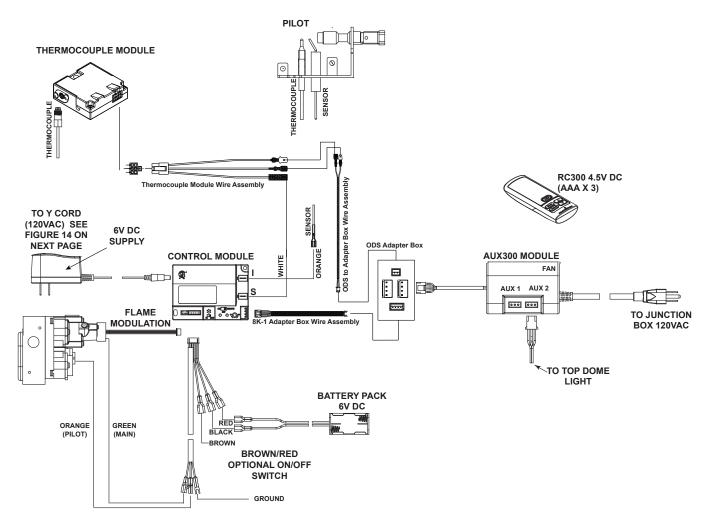


Figure 13. IntelliFire™ Plus ODS Wiring Diagram

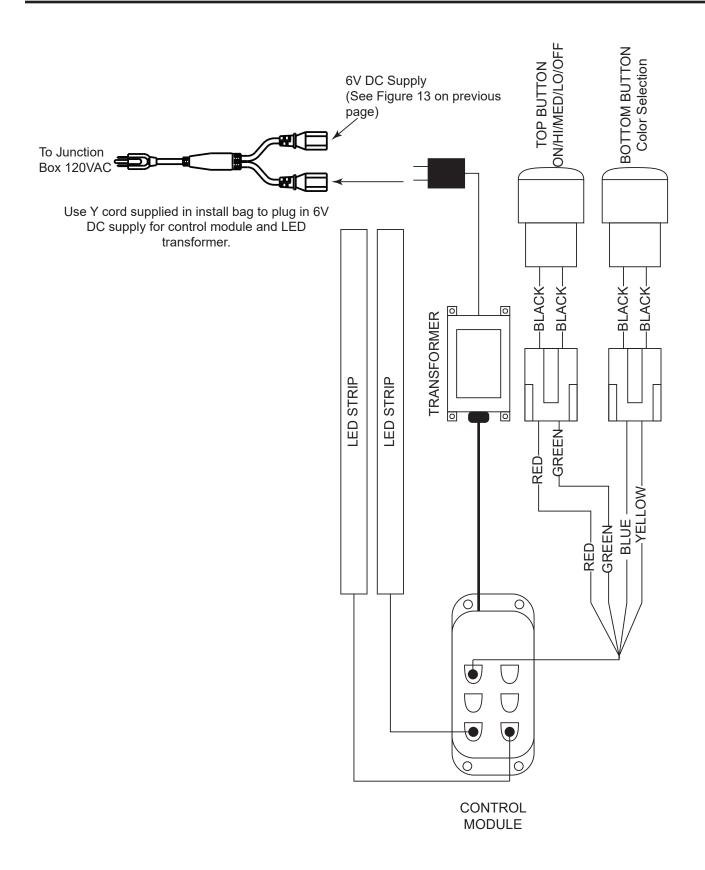


Figure 14. LED Wiring Diagram

# INSTALLATION OF AIR DEFLECTION GLASS

**NOTE**: The 32" deflector glass must be installed prior to placing any fireglass or stone media on the burner. To install the air deflection glass simply place the tabs (located at the bottom of the glass) into the slots at either end of the burner floor, in front of the burner ports. The glass should stand upright, neither leaning forward nor backward. Repeat for the second glass deflector installation.

## FIREGLASS ONLY PLACEMENT

**NOTE:** Two (2) bags of fireglass are supplied with the fireplace. Both bags may be used to cover the entire floor and burner. We advise against using additional fireglass as too much can cut off the proper amount of air the burner needs to burn cleanly. This may cause sooting.

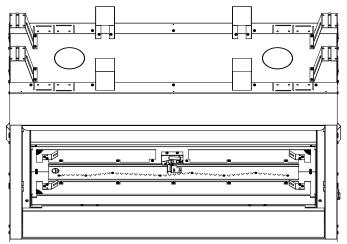


Figure 15. Air Deflection Glass Placement (before)

- Spread fireglass evenly in one layer over the entire floor and burner. It is important to not have the fireglass too thick on ported area (single layer only).
- 2. Turn burner on and adjust fireglass over ported areas to achieve an even, clean flame.

## GLASS AND OPTIONAL STONE KIT PLACEMENT

- 1. For best results, spread fireglass evenly over the entire floor and burner making sure the fireglass is not too thick over the burner ports (single layer only).
- 2. Place the stones randomly in front of and behind the air deflection glass. CAUTION: Do not allow stones to sit directly on burner or in flame. Figure 17.
- 3. Turn burner on and adjust fireglass over the ported area to achieve an even, clean flame. (page 28, Figure 22.)

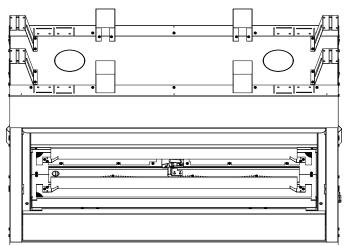
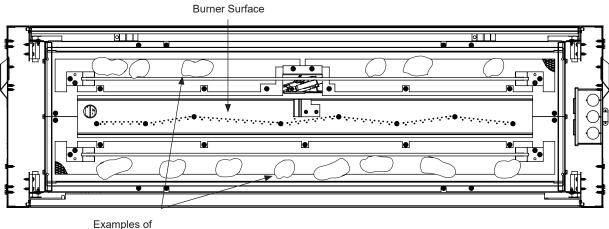


Figure 16. Air Deflection Glass Placement (after)



Stone Placement

Figure 17. Air Deflection Glass and Stone Placement

#### FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- A. This appliance is equipped with an intermittent pilot ignition (IPI) device which automatically lights the burner. DO NOT try to light the burner by hand.
- B. **BEFORE LIGHTING**, smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

#### WHAT TO DO IF YOU SMELL GAS

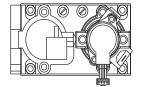
- DO NOT try to light any appliance.
- DO NOT touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
  If you cannot reach your gas supplier, call the fire department.
- C. **DO NOT** use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

#### LIGHTING INSTRUCTIONS (IPI)

3.

1. This appliance is equipped with an ignition device which automatically lights the burner. DO NOT try to light the burner by hand.





- Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the Safety Information located on the top of this label. If you do not smell gas, go to next step.
  - To light the burner: Equipped with wall switch: Turn ON/OFF switch to ON. Equipped with remote or wall control: Press ON or FLAME button. Equipped with thermostat: Set temperature to desired setting.
- If the appliance does not light after three tries, call your service technician or gas supplier.

#### TO TURN OFF GAS TO APPLIANCE

- Equipped with wall switch: Turn ON/OFF switch to OFF. Equipped with remote or wall control: Press OFF button. Equipped with thermostat: Set temperature to lowest setting.
- Service technician should turn off electric power to the control when performing service.

4604-200

# WARNING:

# DO NOT CONNECT LINE VOLTAGE (110/120 VAC OR 220/240 VAC) TO THE CONTROL VALVE.

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with this appliance. For assistance or additional information, consult a qualified installer, service agency or the gas supplier.

This appliance needs fresh air for safe operation and must be installed so there are provisions for adequate combustion and ventilation air.

# CAUTION:

Keep burner and control compartment clean. See installation and operating instructions accompanying appliance.

Hot while in operation. DO NOT touch. Keep children, clothing, furniture, gasoline and other liquids having flammable vapors away.

#### NOT FOR USE WITH SOLID FUEL

This appliance must be installed in accordance with local codes, if any; if none, follow the National Fuel Gas Code, ANSIZ223.1/ NFPA 54, or the National Gas and Propane Installation code, CSA B149.1.

For additional information on operating your Hearth & Home Technologies fireplace, please refer to www.fireplaces.com.

4604-201

## **OPERATING INSTRUCTIONS**

#### **Initial Use**

Initial Break-in Procedure

- The fireplace should run three to four hours continuously on high.
- Turn the fireplace off and allow it to completely cool.

This cures the materials used to manufacture the fireplace.

- Some people may be sensitive to smoke and odors.
- Smoke detectors may activate.

#### **Heat Management**

#### **Burn Rate**

The Artisan model has a variable burn rate which is controlled by the remote control. Therefore the flame height is adjustable.

The flame height may be adjusted as desired by locating the flame option on the remote control and adjusting up or down to desired flame height.

#### **Operation During A Power Outage**

The IntelliFire<sup>™</sup> Plus ODS intermittent pilot ignition system comes with a battery backup system that enables the system to operate in a power outage. The system offers seamless transition from household AC power to battery backup. A factory-installed battery pack is located in the control cavity of the appliance. See Figure 18. Battery longevity and performance will be affected by long term exposure to the service temperatures of this appliance.

**NOTICE:** Batteries should only be used as a power source in the event of an emergency power outage. Batteries should not be used as a primary long-term power source.

#### To Operate Fireplace Using Battery Power (DC):

- 1. Access the control cavity of the appliance. See Figure 18 for location. Lift the barrier screen off of the appliance.
- Locate the battery tray and insert four AA cell batteries. See Figure 18. Battery polarity must be correct or module damage will occur. A complete wiring diagram is included in the electrical section of the appliance installation manual.
- 3. Turn the appliance on according to the instructions below for the appropriate type of control:

Standard Wall Switch or Factory-Installed ON/OFF Switch:

• Toggle the switch as you would under normal circumstances.

#### • Remote receiver is integrated into the ignition module

- Use the remote to turn the appliance on.
- To preserve battery life, do not use the HI/LO flame or THERMOSTAT options.

#### **Ignition Module:**

- · Locate the ignition module in the control cavity.
- Slide the ON/REMOTE/OFF switch to the ON position.

**NOTICE:** Some functionality will be lost when using battery backup including remote control, lights, or any other auxiliary functions that require household 110-120 VAC power.

To Return to Operation Using Electrical (AC) Power Standard Wall Switch or Factory-Installed ON/OFF Switch:

- Toggle the switch to OFF.
- · Remove the batteries from the battery tray.

#### Wireless Remote:

- Slide the ON/REMOTE/OFF switch to the REMOTE position.
- · Remove the batteries from the battery tray.

#### **Ignition Module:**

- Slide the ON/REMOTE/OFF switch to the REMOTE position.
- Remove the batteries from the battery tray.

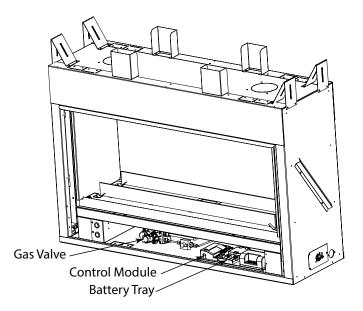


Figure 18. Control Cavity Location

#### Wireless Remote:

Hearth & Home Technologies disclaims any responsibility for, and the warranty will be voided by, the following actions:

- · Installation and use of any damaged system component.
- Modification of the system component.
- Installation other than as instructed by Hearth & Home Technologies.
- Installation and/or use of any component part not approved by Hearth & Home Technologies.

Any such action may cause a fire hazard.

• Read, understand and follow these instructions for safe installation and operation.

#### Introduction

The RC300 multifunctional remote control is designed to control light, flame height and interior dome lighting. The RC300 is equipped with thermostat functions which can automatically control the temperature in the room in which it is installed. The control is only for use with the Hearth & Home Technologies IntelliFire Plus<sup>™</sup> system (IPI). The AUX300 module is rated for 120 VAC, 60 Hz, and is required for operation of this remote control device.

#### Installation Precautions

This remote control is tested and safe when installed in accordance with this installation manual. Do not install any components that may be damaged.

Do not modify, disassemble, or substitute any of the components included with this kit. Installation of this unit must be done by a qualified service technician.

Placement of this remote control may affect performance. An assessment of the space should be done prior to installation for optimum performance.

#### **Determine Location**

Determine the location for the remote control. The selected location should be in the same space as the gas fireplace. Never place this unit in a separate room. The remote control must be placed within 30 feet (9.14 m) of the fireplace but should not be exposed to extreme heat.

The RC300 is approved for interior installation and should not be used in exterior applications.

· Keep remote control out of reach of children.

#### FCC Requirements

**Warning! Risk of Fire!** Changes or modification to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Contact the dealer or an experienced radio TV technician for help.

## **Changing Temperature Scale**

To change the temperature display between Celsius and Fahrenheit, remove the battery cover from the back of the remote control and slide the switch to your desired temperature scale (see Figure 1). The screen will automatically change the indicators on the room temperature and set temperature portion.



Figure 1. Temperature scale

#### Installation of Remote Control Housing

**Caution! Risk of Fire! DO NOT** install damaged or modified components. Warranty will be voided if damaged or modified components are installed.

**Kit components**: One remote control, two #6 screws, two wall anchors, 3 AAA batteries and one AUX300 module. If batteries are properly installed the remote will turn on

- 1. Remove remote control components from packaging.
- 2. Remove battery cover from the back of the remote by sliding it down and install 3 AAA batteries.

To prevent unintended operation when not using your fireplace for an extended period of time (summer months, vacation, trips, etc):

- Remove batteries from remote control.
- Unplug switching adapter and remove back-up batteries.
- Secure the remote control housing on a flat wall surface using the two screws and wall anchors provided. See Figure 2.

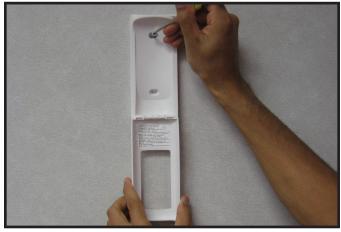


Figure 2. Mounting Remote Control Housing

4. Place remote control inside housing. See Figure 3.



Figure 3. Remote in Housing



Figure 4. Mounting Remote Control Housing

5. Close the housing door. See Figure 4.

#### Programming the RC300 to the Control Module

**Caution! Risk of burns! DO NOT** program the remote control to the control module when fireplace is hot.

- Verify the ON/OFF/REMOTE switch is in the REMOTE position. Green LED light will blink three times and wall switch will beep once 5 seconds later when ready. See Figure 5.
- Using a small item (such as a paper clip) press and release the LEARN button located near the ON/OFF/ REMOTE switch. See Figure 5.
- Control module will beep once and LED will blink green for 10 seconds.
- While the LED is blinking, press the POWER button on the remote control. A double beep will come out of the control module to indicate that it has been programmed successfully.

**NOTICE:** Up to three remote controls can be programmed into the control module. Simply press a button on the other remote controls during the 10 second programming process to add another remote into the system. It is recommended to program only one RC300 remote control.

To clear memory in the control module, use a small item (such as a paper clip) to press and release the LEARN button. Control module will beep once and LED will blink green for 10 seconds **DO NOT** press any buttons on the remote during the ten seconds that the green LED blinks. The memory will be cleared. Note that the RC300 will not be programmed if it's in STANDBY mode. Press the ON/ OFF button twice to switch to IDLE mode.

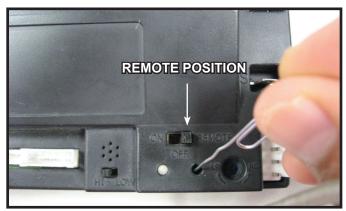
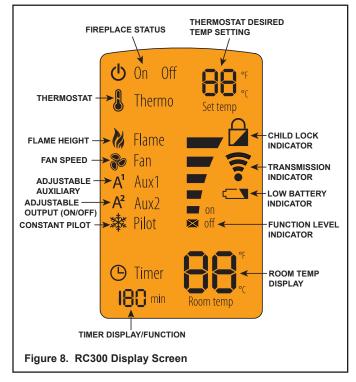


Figure 5. Programming RC300 (Control Module is located under unit.)

#### **Display Screen**



#### **Function Buttons**



Use POWER button to turn the unit on and off.

- Menu Use MENU button to display the menu functions. Only functions that can be activated will be displayed. For example: Flame Height will not be displayed when the remote status is OFF.
- Select

Use the SELECT button to select the current feature.



Use the UP and DOWN arrows to toggle through the menu functions and value selections in the submenus.

## Idle When Remote is in ON Mode

The remote control will go into an idle mode if no buttons are pressed within 5 seconds. Press any button to resume full functionality. In idle mode, only active functions will show on the screen.

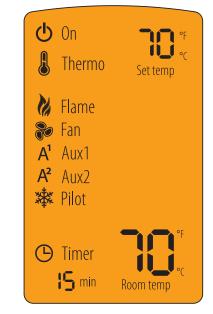


Figure 9. RC300 Idle Mode

#### Standby mode

The remote control will go into a standby mode if no buttons are pressed within 5 minutes. Press the POWER button to reactivate the remote control to ON mode. Active functions will be displayed

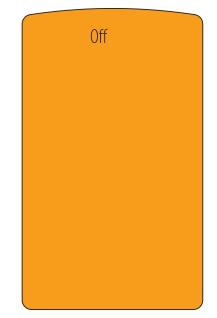


Figure 10. RC300 Standby Mode

#### About ON Mode

- All functions can be accessed when the remote control is in the ON mode.
- Only active functions will be displayed when the remote control is in the ON mode.

#### About OFF Mode

Only the following functions can be accessed in the OFF mode:

- AUX1
- AUX2-Top Dome Light

Only active functions will be displayed when the remote control is in the OFF mode.

#### **Turning On the Fireplace**

• Press the POWER button to turn the fireplace ON. The fireplace will first ignite the pilot. Once the pilot flame is established the main burner will be lit.

**NOTICE:** Whenever the fireplace is cycled from OFF to ON, the main burner will light on high for 10 seconds before returning to the previous user setting.

## **Adjusting Flame Height**

- Press the **MENU** button to activate the menu.
- Using the **UP** and **DOWN** arrows highlight the **FLAME** icon and press **SELECT**.
- Use the **UP** and **DOWN** arrows to adjust the **FLAME HEIGHT**, then press **SELECT**. The **FLAME HEIGHT** can be adjusted to 5 different settings.

**NOTICE:** FLAME HEIGHT will not be adjustable for first ten seconds when fireplace is turned on.

**NOTICE:** The system will remember the previous FLAME HEIGHT setting and will automatically adjust after 10 seconds.

**NOTICE:** Some models use fixed valves, which cannot be adjusted.

## AUX2 Function (Top Dome Light)

- Press the **MENU** button to activate the menu.
- Using the UP and DOWN arrows highlight the AUX1 icon and press SELECT.
- Use the UP and DOWN arrows to adjust the AUX1 output, then press SELECT. The AUX1 function can be adjusted to 4 different settings: HI, MED, LOW and OFF.

#### Adjusting Thermostat

- Press the **MENU** button to activate the menu.
- Using the **UP** and **DOWN** arrows highlight the **THERMO** icon and press **SELECT**.
- Use the UP and DOWN arrows to turn the THERMO ON or OFF, then press SELECT (the SET TEMP will start blinking). Using the UP and DOWN arrows select the desired temperature and press SELECT.

**NOTICE:** If the THERMO function is on, the SET TEMP can be adjusted at any time by pressing the UP and DOWN arrows.

**NOTICE:** As the ROOM TEMP (RT) approaches SET TEMP (ST), the remote system will automatically adjust the flame height. If the RT rises above ST, the fireplace will shut down the main burner. After this, the fireplace will turn back on after the RT drops below the ST.

**NOTICE:** The system requires a two degree Fahrenheit or higher temperature difference between RT and ST for the fireplace to turn on.

**NOTICE:** The system will remember the previous TEM-PERATURE setting when THERMOSTAT mode is cycled ON or OFF.

**NOTICE:** If your installation includes an optional wired ON/OFF wall switch, it should be in the OFF position when using the RC300 in thermostat mode.

#### **Adjusting Timer**

- Press the **MENU** button to activate the menu.
- Using the **UP** and **DOWN** arrows highlight the **TIMER** icon and press **SELECT**.
- Use the **UP** and **DOWN** arrows to turn the **TIMER ON** or **OFF**, then press **SELECT**. Using the **UP** and **DOWN** arrows select the desired set time and press **SELECT**. Timer operates in increments of 15, 30, 45, 60, 90, 120 and 180 minutes.

#### Setting the Child Lock

• Press and hold the **MENU** and **UP** arrow buttons simultaneously for 4 seconds to enable or disable the child lock feature.

**NOTICE:** No functions will be usable until child lock feature is disabled.

#### **Power Outage**

- If fireplace battery backup system IS installed at time of power outage, fireplace operation will not be interrupted.
- If fireplace battery backup system IS NOT installed at time of power outage, fireplace will shut off. To resume fireplace operation, install battery backup.

**NOTICE:** Battery polarity must be correct or module damage will occur.

#### **Manual Fireplace Shutoff**

In the unlikely event that the remote wall switch malfunctions and will not turn off the fireplace, call your dealer for service assistance. In the meantime, you may choose one of the following actions to turn off the fireplace:

**CAUTION! Risk of burns!** Fireplace surfaces are hot when operating and during cool down. Use care and wear gloves when opening the front and accessing components inside the fireplace.

Check remote screen for battery level indicator, replace the batteries if low battery is indicated (See Figure 8, page 24).

The fireplace may be manually shut down by one of the following methods:

#### Turn off the control module:

- Open or remove the decorative front to access the control module.
- Move switch to OFF (See Figure 19, page 27).

#### Disconnect power to the control module:

- Open or remove the decorative front to access power cord to the junction box and/or back-up batteries.
- Unplug the control module and/or remove back-up batteries.

#### Shut off gas to the control:

- Open or remove the decorative front and locate the gas shut-off valve to the left of the gas control.
- Rotate the valve 90 degrees to turn off gas supply.

# Turn off power to the fireplace (if back-up batteries are not installed):

- Unplug unit from electrical source, if you cannot unplug then:
- Locate house circuit breaker for fireplace.
- Turn off the circuit breaker.

#### Detailed Component Operating Instructions— Intellifire™ Plus ODS

#### **Control Module Operation**

1. The control module has an ON/OFF/REMOTE selector switch that must be set. See Figure 19.

OFF Position: Appliance will ignore all power inputs and will not respond to any commands from a wall switch or remote. The unit should be in the OFF position during installation, service, battery installation, fuel conversion, and in the event that the control goes into LOCK-OUT mode as a result of an error code.

ON Position: Appliance will ignite and run continuously in the HI flame setting, with no adjustment in flame output. This mode of operation is primarily used for initial installation or power outage operation with battery backup.

REMOTE Position: Appliance will initiate commands from an optional wired wall switch and/or the wireless remote (RC300).

- 2. If using a wired wall switch with the module in REMOTE mode, the flame output can be adjusted with the HI/LO selector switch on the module. See Figure 19. Note that the flame HI/LO selector switch will become inactive once a remote control (RC300) is programmed to the control module. Note that the control module will always ignite the fireplace on HI and remain so for the initial 10 seconds of operation. If the HI/LO is switched to the LO position, the flame output will automatically drop to the lowest setting after the flame has been established for 10 sec. After this 10 second period, the flame can be adjusted from HI to LO with the switch.
- 3. The control module has safety feature that automatically shuts down the fireplace after 9 hours of continuous operation without receiving a command from the RC300 remote.
- 4. If you intend to use both an optional wired wall switch and the RC300 remote control to operate your fireplace, the wall switch will override any commands given by the remote.

#### 5. Module Reset

This module may lock-out under certain conditions. When this occurs, the appliance will not ignite or respond to commands. The module will go into lock-out mode by emitting three audible beeps, then continuously displaying a RED/GREEN error code at its status indicator LED.

- Check battery tray. Remove batteries if installed. Batteries should only be installed for use during power outages.
- Locate the module selector switch. (See Figure 19).

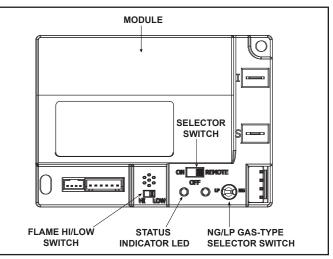


Figure 19. Control Module

- Set the module selector switch to the OFF position.
- Wait five (5) minutes to allow possible accumulated gas to clear.
- Set the module selector switch to ON or REMOTE position.
- · Start the appliance.

**WARNING! Risk of Explosion! DO NOT** press the module reset switch more than one time within a five minute time period. Gas could accumulate in firebox. Call a qualified service technician.

#### Nine Hour Safety Shutdown Feature

The appliance has a safety feature that automatically shuts down the fireplace after nine hours of continuous operation without receiving a command from the wall switch or optional remote.

## **Appliance ON/OFF**

Use the IntelliFire<sup>™</sup> Plus Remote Control to control the ON/ OFF function of the appliance. Follow instructions included with the remote control. If desired, a wall switch may be installed to control the ON/OFF function of the appliance.

## FLAME APPEARANCE

Flames from the pilot, front and rear burner should be visually checked as soon as the heater is installed. In addition, periodically check the flames visually during operation.

## CHECK THE PILOT FLAME

The pilot flame must always be present when the heater is in operation. It should just touch the top of the thermocouple tip for natural gas. Refer to Figure 20 for correct pilot flame.

If the pilot flame does not touch the thermocouple, then the main burner cannot function reliably. Refer to Figure 21 for incorrect shape of pilot flame.

## CHECK THE BURNER FLAME

In normal operation, at full rate after 15 minutes, the flames should appear as shown in Figure 22.

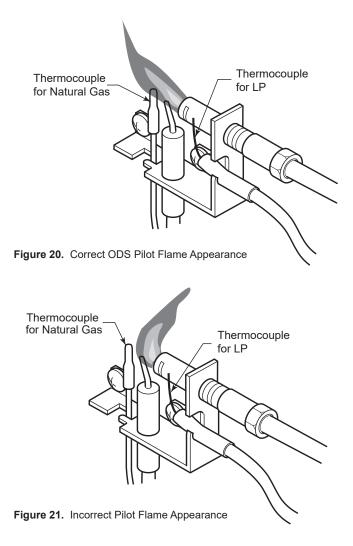




Figure 22. AVFLST42 Burner Flame Appearance (Shown with fireglass only)

## LED CONTROL

 Multi-colored LED lights — Two buttons turn LEDs On (Hi/Med/Lo) and Off and cycles through the color selection.

 Color selection options — Using the color selection button, you can choose from ten (10) different lighting options.

- 1. Color fade This selection will cycle through the range of colors listed below.
- 2. Color fade (slow) This selection is the same as the previous selection; only at a slower rate.
- Pause color This selection will allow the user to choose a custom color through the hues of colors of the slow fade.
  - Blue
  - Violet
  - Red
  - Yellow
  - Green
  - Cyan
- White
- 4. Pushing the color selection button again cycles back to the first color fade selection.

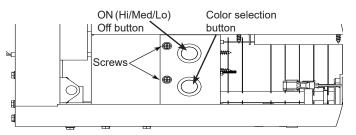


Figure 23. LED Controls

#### MAINTENANCE AND CLEANING

#### **CLEANING AND SERVICING**

Annual inspection and cleaning by your dealer or qualified service technician is recommended to prevent malfunction and/or sooting.

# 

Turn off heater and allow to cool before cleaning. Disconnect electrical power before cleaning or servicing.

Remove fireglass and/or stones as applicable.

# **PERIODIC CLEANING – Refer to parts diagram for** location of items discussed below.

- Do not use cleaning fluid to clean any part of heater.
- Brush stones with soft bristle brush or vacuum with brush attachment.
- Remove glass media and rinse with clean water. Spread media out on paper towel or equivalent and allow to dry completely.
- Vacuum loose particles and dust from the burner, controls.
- Inspect and clean burner air intake holes. Remove lint or particles with vacuum, brush, or pipe cleaners.
   Failure to keep air intake holes clean will result in sooting and poor combustion.
- The fireplace face should be dusted and wiped with a wet soapy cloth.

# ANNUAL CLEANING/INSPECTION – Refer to parts diagram for location of items discussed below.

- Inspect and clean burner air intake holes. Remove lint or particles with vacuum, brush or pipe cleaners.
   Failure to keep air intake holes clean will result in sooting and poor combustion.
- Inspect and clean all burner ports.
- Inspect ODS pilot for operation and accumulation of lint at air intake holes. (Figure 20)
- Verify flame pattern for proper operation.
- Verify smooth and responsive ignition of main burner and rear burner.
- Replace batteries in remote control device.

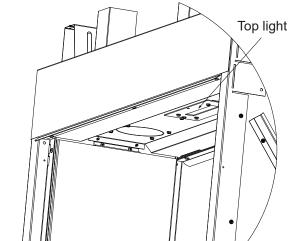


Figure 24. Top Light Position; Porcelain Panel Screw Location

#### **REPLACING TOP LIGHT BULB**

#### TOP LIGHT BULB INSTALLATION

- 1. Remove three screws holding light cover in place (as shown in Figure 25.)
- 2. Insert (1) 90W bulb provided into socket.
- 3. Replace top light cover with three screws.

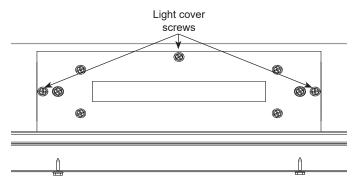


Figure 25. Top Light Screws

**REPLACING LED STRIPS** 

- 1. Remove two air deflection glass pieces.
- 2. Remove glass media from hearth and burner area.
- 3. Remove nineteen (19) screws holding front and rear hearth. Remove both and set aside. See Figure 29.

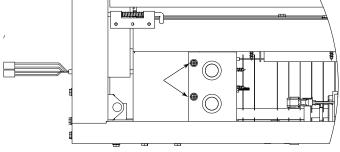


Figure 26. LED Control Assembly Screws

## MAINTENANCE AND CLEANING

- 4. Remove two screws holding LED control assembly in place. See Figure 26. Turn flat and pull forward.
- 5. Remove the two black LED connectors.
- 6. From inside unit, start at one end of the strip and begin to peel from base.
- 7. Repeat with second strip.
- 8. Peel paper from adhesive back on new LED strip and place in track. Feed wire through hole on left end of unit.
- 9. Reconnect strips to control module and replace control module with two screws.
- 10. Reinstall front and rear hearth with nineteen (19) screws.
- 11. Install two (2) air deflection glass panels and glass media.

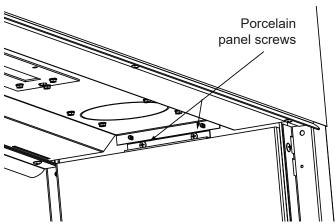


Figure 27. Porcelain Panel Screw Location

## PORCELAIN PANEL REMOVAL

- 1. Remove two (2) air deflection glass panels.
- 2. Remove glass media from hearth and burner area.
- 3. Remove two (2) screws holding top of panel in place. See Figure 27.
- 4. Remove single retainer clip at base of panel. See Figure 28.
- 5. Tilt panel out from top and remove.
- 6. To reinstall panel, insert at an angle with bottom first. Tilt top in aligning holes at top and install two retainer screws.
- 7. Install retainer bracket at base.

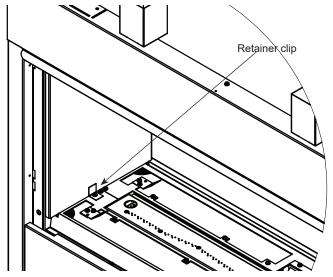
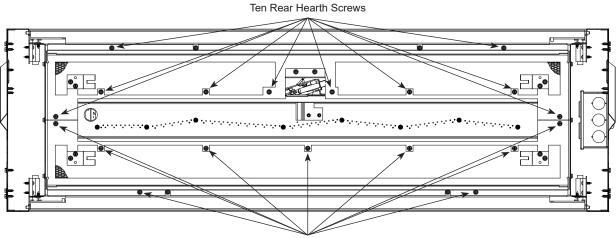


Figure 28. Porcelain Panel Clip Location



Nine Front Hearth Screws

Figure 29. Hearth Screw Locations

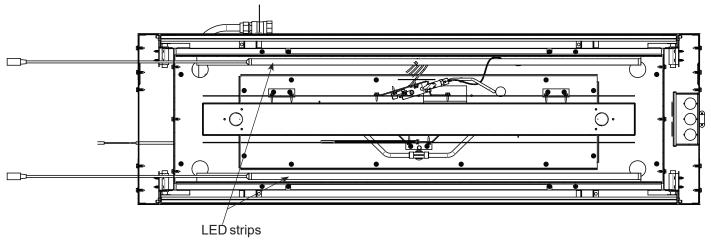


Figure 30. LED Strip Location

## **OPERATING INFORMATION**

Avoid any drafts that alter burner flame patterns. Do not allow fans to blow directly into the fireplace. Do not place a blower inside the burn area of the firebox. Ceiling fans may create drafts that alter flame patterns. Sooting and improper burning will result.

During manufacturing, fabricating and shipping, various components of this appliance are treated with certain oils, films, or bonding agents. These chemicals are not harmful, but may produce annoying smoke and smells as they are burned off during the initial operation of the appliance possibly causing headaches or eye or lung irritation. *This is a normal and temporary occurrence.* 

The initial break-in operation should last two to three hours with the burner at the highest setting. Provide maximum ventilation by opening windows or doors to allow odors to dissipate. Any odors remaining after this initial break-in period will be slight and will disappear with continued use.

This appliance must not be used with glass doors.

## **OPTIONAL ACCESSORIES**

There are a wide range of optional accessories available for the AVFL Vent Free Fireplace. A variety of face and trim kits can change the appearance of the fireplace. The outdoor kit brings the outdoors inside.

Choose the stylish rustic stone kit or go minimalist with just a coating of glass media and transform the fireplace to suit your space.

#### Faces and Trim Kits

Wide Contemporary Textured Black Face Wide Contemporary Stainless Steel Face Black Textured Inside Fit Trim Kit	
Stone Kit	SKAVFL42
Glass Kits	
Glass Kit Bronze	GKB
Glass Kit Diamond	GKD
Glass Kit Onyx	GKO
Glass Kit Sapphire	GKS
Outdoor Kit	AVFLSTSSODK

# AWARNING!

- Turn appliance OFF and allow to cool before servicing.
- Only a qualified service person should service and repair the heater.

With proper installation, operation, and maintenance your gas appliance will provide years of trouble-free service. If you do experience a problem, this troubleshooting guide will assist a qualified service technician in the diagnosis of a problem and the corrective action to be taken. This troubleshooting guide can only be used by a qualified service technician. Contact your dealer to arrange a service call by a qualified service technician.

**NOTE:** All troubleshooting items are listed in order of operation.

PROBLEM	POSSIBLE CAUSE	SOLUTION
Appliance produces unwanted odors.	Appliance burning vapors from paint, hair spray, glues, etc.	Ventilate room. Stop using odor causing products while heater is running.
	Gas leak.	Locate and correct all leaks.
	Initial burn off.	Ventilate room and turn unit on high until odor is gone. Odor should be gone after six hours of continuous use.
Appliance shuts off during use.	Not enough fresh air is available for ODS/pilot to operate.	Open window and/or door for ventilation.
	Low line pressure.	Contact local gas company.
	ODS/pilot is partially clogged.	Clean ODS/pilot.
	Burner orifice is clogged.	Burner orifice is clogged.
Burner does not light after ODS/pilot is lit.	Burner orifice diameter is too small.	Burner orifice diameter is too small.
	Inlet gas pressure is too low.	Inlet gas pressure is too low.
Burner backfires during combustion.	Manifold gas pressure is too low.	Contact local gas company.
	Burner orifice is clogged.	Clean burner or replace burner orifice.
Slight smoke or odor combustion.	Burner orifice is clogged or damaged.	Clean burner or replace burner orifice.
	Burner is damaged.	Replace burner.
	Gas regulator defective.	Replace gas regulator.
Heater produces a whistling noise when burner is lit.	Air in gas line.	Operate burner until air is removed from line. Have gas line checked by local gas company.
	Dirty of partially clogged burner orifices.	Clean burner or replace burner orifice.
No gas to pilot.	LP regulator shut down due to inlet pressure too high.	Verify LP tank regulator is installed and set at 11" to 13" w.c. Replace regulator on heater.

Problem	Possible cause	Solution
LED lights will not turn on	No AC power to appliance	Check that GFCI breaker is operating as intended and is not tripped. Verify that AC power has been connected to the appliance. Ensure that both the 6V IPI control module power supply as well as the LED power supply are securely plugged into the appliance junction box.
	Faulty wiring	Check appliance for loose/corroded connections or shorted wires.
	LED failure	Check for 12VDC from power supply. If 12VDC is present, LED strip is bad.
	Power supply failure	Check for 12VDC. If no 12VDC is present, power supply is bad

## Troubleshooting

# IntelliFire<sup>™</sup> Plus ODS Ignition System

Symptom	Possible Cause	Corrective Action
1. Pilot won't light. The ignitor/module makes noise, but no	A. Incorrect wiring.	Verify "S" wire (white) for sensor and "I" wire (orange) for ignitor are connected to correct terminals on module and pilot assembly.
spark.	B. Loose connections or electri- cal shorts in the wiring.	Verify no loose connections or electrical shorts in wiring from mod- ule to pilot assembly. Verify connections underneath pilot assembly are tight; also verify igniter and flame sense wires are not grounding out to metal chassis, pilot burner, pilot enclosure, mesh screen if present, or any other metal object.
	C. Ignitor gap is too large.	Verify gap of igniter to right side of pilot hood. The gap should be approximately .095 in. (2.41 mm) to .135 in. (3.43 mm).
2. Pilot won't light, there is no noise or spark.	A. No power, transformer in- stalled incorrectly, or depleted batteries.	Verify that transformer is installed and plugged into module. Check voltage of transformer at connection to module. Acceptable readings of a good transformer are between 6.4 and 6.6 volts DC. Battery power supply voltage must be at least 4 volts. If less than 4 volts, replace batteries.
	B. A shorted or loose connection in wiring configuration or wiring harness.Remove and reinstall the wiring harness that plugs Verify there is a tight fit. Verify pilot assembly wiring to move and verify continuity of each wire in wiring harnes any damaged components.	
	C. Improper wall switch wiring.	Verify that 110-120 VAC power is "ON" to junction box.
	D. Module not grounded.	Verify black ground wire from module wire harness is grounded to metal chassis of appliance.
<ol> <li>Pilot sparks, but pilot will not light.</li> </ol>	A. Gas supply is off or lacking pressure.	Verify that incoming gas line ball valve is "open." Verify that inlet pressure reading is within acceptable limits.
	B. Ignitor gap is too large.	Verify gap of igniter to right side of pilot hood. The gap should be approximately .095 in. (2.41 mm) to .135 in. (3.43 mm).
	C. Module is not grounded.	Verify module is securely grounded to metal chassis of appliance.
	D. Pilot valve solenoid voltage is out of spec.	Verify that 1.5 to 1.8 VDC is supplied to pilot solenoid from module. If below 1.5 volts, replace module. If 1.5 volts or greater, replace valve.

# Intellifire<sup>™</sup> Plus Ignition System - (continued)

Symptom	Possible Cause	Corrective Action
4. Pilot lights but contin- ues to spark, and main burner will not ignite. (If the pilot continues	<ul> <li>A shorted or loose connection in flame sensing rod.</li> </ul>	Verify all connections to wiring diagram in manual. Verify connections underneath pilot assembly are tight. Verify flame sense or igniter wires are not grounding out to metal chassis, pilot burner, pilot enclosure or screen if present, or any other metal object.
to spark after the pilot flame has been lit, flame rectification has not occurred.)	B. Poor flame rectification or contami- nated flame sensing rod.	With fixed glass assembly in place, verify that flame is en- gulfing flame sensing rod on left side of pilot hood. Flame sensing rod should glow shortly after ignition. With a multi-meter, verify that current in series between module and sense lead is at least 0.14 microamps. Verify correct pilot orifice is installed and gas inlet is set to pressure spec- ifications. Polish flame sensing rod with fine steel wool to remove any contaminants that may have accumulated on flame sensing rod.
	C. Module is not grounded.	Verify module is securely grounded to metal chassis of ap- pliance. Verify that wire harness is firmly connected to the module.
	D. Damaged pilot assembly or con- taminated flame sensing rod.	Verify that ceramic insulator around the flame sensing rod is not cracked, damaged, or loose. Verify connection from flame sensing rod to white sensor wire. Polish flame sens- ing rod with fine steel wool to remove any contaminants that may have accumulated on flame sensing rod. Verify continuity with a multi-meter with ohms set at lowest range. Replace pilot if any damage is detected.
5. Appliance lights and runs for a few minutes and then shuts down and/or appliance cycles on and off.	A. A shorted or loose connection in flame sensing rod.	Verify all connections to wiring diagram in manual. Verify connections underneath pilot assembly are tight. Verify flame sense or igniter wires are not grounding out to metal chassis, pilot burner, pilot enclosure or screen if present, or any other metal object.
	B. Poor flame rectification or contami- nated flame sensing rod.	Verify that flame is engulfing flame sensing rod on left side of pilot hood. Flame sensing rod should glow shortly after ignition. With a multi-meter, verify that current in series be- tween module and sense lead is at least 0.14 microamps. Verify correct pilot orifice is installed and gas inlet is set to pressure specifications. Polish flame sensing rod with fine steel wool to remove any contaminants that may have accu- mulated on flame sensing rod.
	C. Logs are set up incorrectly.	Remove and reinstall logs per the log placement instructions.
	D. Damaged pilot assembly or con- taminated flame sensing rod.	Verify that ceramic insulator around the flame sensing rod is not cracked, damaged, or loose. Verify connection from flame sensing rod to white sensor wire. Polish flame sens- ing rod with fine steel wool to remove any contaminants that may have accumulated on flame sensing rod. Verify continuity with a multi-meter with ohms set at lowest range. Replace pilot if any damage is detected.

#### Hearth & Home Technologies LLC LIMITED LIFETIME WARRANTY

Hearth & Home Technologies LLC ("HHT") extends the following warranty for HHT gas, wood, pellet and electric hearth appliances (each a "Product" and collectively, the "Product(s)") and certain component parts set forth in the table below ("Component Part(s)") that are purchased from a HHT authorized dealer or distributor.

#### WARRANTY COVERAGE:

HHT warrants that the Products and their Component Parts will be free from defects in materials and workmanship for the applicable period of Warranty coverage set forth in the table below ("Warranty Period"). If a Product or Component Parts are found to be defective in materials or workmanship during the applicable Warranty Period, HHT will, at its option, repair the applicable Component Part(s), replace the applicable Component Part(s), or refund the purchase price of the applicable Product(s). The maximum amount recoverable under this Warranty is limited to the purchase price of the Product. This Warranty is transferable from the original purchaser to subsequent owners, but the Warranty Period will not be extended in duration or expanded in coverage for any such transfer. This Warranty is subject to conditions, exclusions, and limitations as described below.

#### WARRANTY PERIOD:

Warranty coverage begins at the date of installation. In the case of new home constructions, Warranty coverage begins on the date of first occupancy of the dwelling or six months after the sale of the Product(s) by an independent, authorized HHT dealer or distributor, whichever occurs earlier. However, the Warranty coverage shall commence no later than 24 months following the date of Product shipment from HHT, regardless of the installation or occupancy date.

The term "Lifetime" in the table below is defined as: 20 years from the beginning date of warranty coverage for gas appliances, and 10 years from the beginning date of warranty coverage for wood and pellet appliances. These time periods reflect the minimum expected useful lives of the designated Component Parts under normal operating conditions.

Warranty Period		HHT Manufactured Appliances and Venting					
Component Parts	Labor	Gas	Pellet	Wood	Electric	Venting	Component Parts Covered by this Warranty
1 Year		x	x	х		x	All parts including handles, external enameled components and other material except as covered by Warranty Conditions, Warranty Exclusions, and Warranty Limitations listed
2 Years					x		All parts except as covered by Warranty Conditions, Warranty Exclusions, and Warranty Limitations listed
2 years			х	х			Igniters, Auger Motors, Electronic Components, and Glass
		x					Electrical components limited to modules, remotes/wall switches, valves, pilots, blowers, junction boxes, wire harnesses, transformers and lights (excluding light bulbs)
		х		х			Molded Refractory Panels, Glass Liners
3 years			х				Firepots, burnpots, mechanical feeders/auger assemblies
5 years	1 year	х					Vent Free Burners, Vent Free Logs
			х	Х			Castings, Medallions and Baffles
6 years	3 years			х			Catalysts
7 years	3 years		x	х			Manifold tubes, HHT Chimney and Terminations
10 years	1 year	x					Burners, logs and refractory
Limited Lifetime	3 years	x	x	x			Firebox and heat exchanger, FlexBurn® System (engine, inner cover, access cover and fireback)
1 Year	None	х	х	х	х	х	All purchased replacement parts

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#### WARRANTY CONDITIONS:

- Because HHT cannot control the quality of any Products sold by unauthorized sellers, this Warranty only covers Products that are purchased through an HHT authorized dealer or distributor unless otherwise prohibited by law; a list of HHT authorized dealers is available on the HHT branded websites.
- This Warranty is only valid while the applicable Product remains at the site of original installation.
- This Warranty is only valid in the country in which the HHT authorized dealer or distributor that sold the applicable Product is authorized to sell applicable Product.
- Contact your installing distributor or dealer for Warranty service. If the installing dealer or distributor is unable to provide necessary parts, contact the nearest HHT authorized dealer or supplier. Additional service fees may apply if you are seeking Warranty service from a dealer other than the dealer from whom you originally purchased the applicable Product.
- No HHT consumer should bear cost of warranty service or costs incurred while servicing warranty claims (i.e., travel, gas, or mileage) when the service is performed within the terms of this Warranty. Check with your dealer or distributor in advance for any costs to you when arranging a warranty call. Travel and shipping charges for parts are not covered by this Warranty.

#### WARRANTY EXCLUSIONS:

This Warranty does not cover the following:

- Changes in surface finishes as a result of normal use. As a heating appliance, some changes in color of interior and exterior surface finishes may occur. This is not a flaw and is not covered under the Warranty.
- Damage to printed, plated, or enameled surfaces caused by fingerprints, accidents, misuse, scratches, melted items or other external sources and residues left on the plated surfaces from the use of abrasive cleaners or polishes.
- Repair or replacement of parts that are subject to normal wear and tear during the Warranty Period are not covered. These parts include: paint, wood and pellet gaskets, firebricks, grates, flame guides, batteries and the discoloration of glass.
- Minor expansion, contraction, or movement of certain parts causing noise. These conditions are normal and complaints related to this noise are not covered by this Warranty.
- Damages resulting from: (1) failure to install, operate, or maintain the applicable Product in accordance with the installation instructions, operating instructions, and listing agent identification label furnished with the applicable Product; (2) failure to install the applicable Product in accordance with local building codes; (3) shipping or improper handling; (4) improper operation, abuse, misuse, continued operation with damaged, corroded or failed components, accident, or improperly/incorrectly performed repairs; (5) environmental conditions, inadequate ventilation, negative pressure, or drafting caused by tightly sealed constructions, insufficient make-up air supply, or handling devices such as exhaust fans or forced air furnaces or other such causes; (6) use of fuels other than those specified in the operation instructions; (7) installation or use of components not supplied with the applicable Product or any other components not expressly authorized and approved by HHT; (8) modification of the appliance not expressly authorized and approved by HHT in writing; and/or (9) interruptions or fluctuations of electrical power supply to the applicable Product.
- Non-HHT venting components, hearth connections or other accessories used in conjunction with the applicable Product.
- Any part of a pre-existing fireplace system in which an insert or a decorative gas applicable Product is installed.
- HHT's obligation under this Warranty does not extend to the Product's capability to heat the desired space. Information is provided to assist the consumer and the dealer in selecting the proper Product for the application. Consideration must be given to the Product location and configuration, environmental conditions, insulation and air tightness of the structure.

#### This warranty is void if:

- The applicable Product has been over-fired, operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals. Over-firing can be identified by, but not limited to, warped plates or tubes, deformation/warping of interior cast iron structure or components, rust colored cast iron, bubbling, cracking and discoloration of steel or enamel finishes.
- The applicable Product is subjected to prolonged periods of dampness or condensation.
- There is any damage to the applicable Product due to water or weather damage which is the result of, but not limited to, improper chimney or venting installation.

#### LIMITATIONS OF REMEDIES AND LIABILITY:

• EXCEPT TO THE EXTENT PROVIDED BY LAW, HHT MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY SPECIFIED HEREIN. The owner's exclusive remedy and HHT's sole obligation under this Warranty or in contract, tort or otherwise, shall be limited to replacement of the Component Part(s), repair of the Component Part(s), or refund of the original purchase price of the applicable Product(s), as specified above; provided, however, that (i) if HHT is unable to provide replacement of the Component Part(s) and repair of the Component Part(s) is not commercially practicable or cannot be timely made, or (ii) the customer is willing to accept a refund of the purchase price of the applicable Product(s), HHT may discharge all such obligations by refunding the purchase price of the applicable Product. In no event will HHT be liable for any incidental or consequential damages caused by defects in the applicable Product. Some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This Warranty gives you specific legal rights and you may also have other rights which vary from State to State. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO DURATION OF THE EXPRESSED WARRANTY SPECIFIED ABOVE FOR THE APPLICABLE PRODUCT. Some States do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.



# LOVE AT FIRST LIGHT

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