DMSPK Model
Flame Modulating Safety Pilot Kit

(Burner not included)

Installation & Operating Instructions

INSTALLER: Please leave these instructions with the consumer.
CONSUMER: Please retain instructions for future reference.

WARNING: If the information in this manual is not followed, an explosion or fire could result causing property damage, personal injury, or loss of life.
IF YOU SMELL GAS: Shut off gas to appliance immediately. If odor continues, call gas supplier or Fire Department immediately.

We recommend that our products be installed and serviced by professionals who are certified in the U.S. by NFI (National Fireplace Institute) or in Canada by WETT (Wood Energy Technical Training). Installer must follow all instructions carefully to ensure proper performance and safety.

IMPORTANT
READ AND UNDERSTAND THESE INSTRUCTIONS BEFORE INSTALLING
These instructions must be used as a supplement to the instructions supplied with your gas log set. Follow the Gas Log Set instructions. Gas supply must be 2” minimum I.D. and with appropriate pressure.
DMSPK Parts List

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<tr>
<th>ITEM #</th>
<th>Part #</th>
<th>Description</th>
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<tr>
<td>1</td>
<td>102</td>
<td>Pilot Assembly</td>
</tr>
<tr>
<td>2</td>
<td>109-DM</td>
<td>Dexen Manual Modulating Valve</td>
</tr>
<tr>
<td>3</td>
<td>120</td>
<td>Mounting Bracket for Pilot Assy.</td>
</tr>
<tr>
<td>4</td>
<td>123</td>
<td>Heat Shield for Valve.</td>
</tr>
<tr>
<td>5</td>
<td>232</td>
<td>Heat Shield for Dexen Receiver</td>
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<tr>
<td>6</td>
<td>295</td>
<td>Dexen On/Off &amp; High/Low RF Transmitter</td>
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<tr>
<td>7</td>
<td>296</td>
<td>Dexen RF Receiver</td>
</tr>
<tr>
<td>8</td>
<td>101</td>
<td>Stem Extension (1)</td>
</tr>
<tr>
<td>9</td>
<td>405</td>
<td>3/8&quot; x 3/8&quot; FIP Elbow (2)</td>
</tr>
<tr>
<td>10</td>
<td>426</td>
<td>3/8&quot; x 3&quot; Swivel Connector (1)</td>
</tr>
<tr>
<td>11</td>
<td>500</td>
<td>3/8&quot; Close Nipple (1)</td>
</tr>
<tr>
<td>12</td>
<td>505</td>
<td>½&quot; x 3/8&quot; FIP Reducer (1)</td>
</tr>
<tr>
<td>13</td>
<td>410</td>
<td>3/8&quot; Flare x 3/8&quot; Fitting</td>
</tr>
<tr>
<td>14</td>
<td>509</td>
<td>3/8&quot; FIP Coupler (1)</td>
</tr>
<tr>
<td>15</td>
<td>504</td>
<td>3/8&quot; x 1.5&quot; Nipple</td>
</tr>
<tr>
<td>16</td>
<td>660</td>
<td>Parts Bag</td>
</tr>
</tbody>
</table>

Installation Steps:

**WARNING:** Check gas type: For **NATURAL GAS**: Minimum inlet pressure should be 5 inches W/C, maximum inlet is 10.5 inches W/C. For **PROPANE GAS**: Minimum inlet pressure should be 8 inches W/C, maximum inlet is 13 inches W/C.

**WARNING:** Gas Plumbing Connections: Use only joint compound 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.

- The DMSPK Kit must be disconnected for pressure testing for systems over ½ psi.
- The DMSPK Kit should be installed so it can be removed for any future service.

**IMPORTANT:** Apply joint compound to all male pipe fittings only- DO NOT use on FLARED fittings.

**Step 1:** Check the parts you received against the parts list.
**Step 2:** Apply joint compound to 3/8" Flare x 3/8" fitting (#13)- attach and tighten to inlet of valve (#2).
**Step 3:** Apply joint compound to one end of 3/8"x1.5" nipple (#15), attach to outlet of valve (#2).
**Step 4:** Apply joint compound to other end of 3/8"x1.5" nipple (#15), then attach 3/8" x3/8" FIP elbow (#9).
**Step 5:** Tighten both #9 and #15 simultaneously- flared end of #9 should point towards back of fireplace.
**Step 6:** If your burner pan has ½" external thread, attach and tighten ½" x 3/8" Reducer (Part #12) to your burner. Afterwards attach and tighten 3/8" Close Nipple (Part #11) to Reducer, then 3/8" x 3/8" FIP Elbow (#9) to Close nipple (#11). Skip to Step 9.
**Step 7:** If burner pan has 3/8" external thread, attach and tighten 3/8" FIP Coupler (Part #14) to burner. Afterwards attach and tighten 3/8" Close Nipple (Part #11) to Coupler, then 3/8" x 3/8" FIP Elbow (#9) to Close nipple (#11). Skip to Step 9.

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Step 8: If burner pan has 3/8” internal thread, attach 3/8” Close Nipple (Part #11), then 3/8” x 3/8” FIP Elbow (#9) to Close nipple (#11) – tighten both simultaneously.

Step 9: Now connect outlet of valve to burner pan elbow with 3” swivel connector (Part #10) - tighten both ends.

Step 10: Assemble Pilot Assembly (#1) to bracket (#3) using screws provided in parts bag (#16).

Step 11: Attach and tighten pilot gas line and thermocouple line to valve. NOTE: Do not use tape or compound on thermocouple connection.

Step 12: Clip pilot assembly bracket (#3) to burner pan.

Step 13: Install 4 AA batteries in RF Receiver (#7). Push on connector to slide out battery compartment.

Step 14: Plug in valve connector to the RF Receiver (#7). Place receiver in front of fireplace for cooling.

Step 15: Attach and tighten gas flex line (not included) to inlet of valve.

Step 16: Turn on gas and test for leaks using soapy water. NEVER USE A FLAME TO CHECK FOR LEAKS.

Step 17: Apply heat shields over valve assembly and RF receiver.

Step 18: Install 12v battery in Remote - remove back cover on Remote to do so.

**COMPLETE DMSPK OPERATION:**

**WARNING:** BEFORE USE, BE SURE TO TEST ALL GAS CONNECTIONS FOR LEAKS. DO NOT USE FIRE PIT IF THERE IS ANY EVIDENCE OF LEAKING GAS. IF LEAKING GAS IS SUSPECTED, TURN OFF THE MAIN GAS SUPPLY AND REPAIR IMMEDIATELY.

**WARNING:** FIREPLACE DOORS MUST BE LEFT OPEN DURING OPERATION OF GAS LOGS. OPERATING GAS LOGS WITH DOORS CLOSED WILL OVERHEAT CONTROL UNIT AND VOID WARRANTY.

**WARNING:** FIREPLACE DAMPER MUST REMAIN FULLY OPEN AT ALL TIMES DURING OPERATION.

**Fireplace Start Up:**
1) Fully open fireplace doors and damper prior to lighting fireplace.
2) Turn “On” gas to fireplace.
3) Rotate gas valve knob CW to until stops.
4) Depress and hold the valve knob, light pilot. Release after ~ 15 seconds.
   
   NOTE: If fails to light, wait 5 minutes for gas to clear, repeat Steps 2 ~ 5.
   
   If goes out, repeat Steps 2 ~ 5.

**Remote Operation:**
1) Matching remote to receiver: Press small button on front (left) of receiver until beeps. Press “Up” button on remote, receiver will beep again when matched.
2) Depress the Up Arrow button to turn “ON” main burner and increase flame, Down Arrow button to reduce and turn “OFF” main burner.
3) The bottom button on remote is to lock out Up Arrow and Down Arrow buttons for safety.

**Manual Operation:**
1) Using knob on front of valve, turn CCW to turn “ON” main burner and increase flame; turn CW to reduce and turn “OFF” main burner.

**Fireplace Shutdown:**
1) Turn “off” fireplace by slightly pressing and turning valve knob CW to “OFF” position.

**Fireplace Maintenance:**
1) Keep any debris out of fire pit - clean as needed.
2) Clean thermocouple and igniter with emery cloth 1 x month during usage season.
**DMSPK Kit**  
**Trouble Shooting**

IT IS EXTREMELY RARE FOR A VALVE OR THERMOCOUPLE TO MALFUNCTION DUE TO A DEFECT. BEFORE ASSUMING A DEFECT, BE SURE UNIT IS INSTALLED CORRECTLY AND CHECK FOR THESE CONDITIONS.

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Possible Cause</th>
<th>Solution</th>
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</table>
| **Burner won’t light.** | 1) Gas line not bled to let gas reach burner.  
2) Stem on valve not being pushed in far enough.  
3) Pipe dope or tape used on thermocouple connections.  
4) Too much or not enough material in pan.  
5) Gas not reaching burner due to debris in gas line. | 1) Bleed lines.  
2) Push in about 1/4”.  
3) Remove pipe dope or tape.  
4) Add or remove material.  
5) Clear debris. |
| **Burner won’t stay lit when knob released.** | 1) Thermocouple is not hot enough and is hitting thermo-couple and is strong enough.  
1a) Make sure thermocouple is paint, carbon & rust free.  
1b) Be sure lead wire is properly tightened at both ends (finger tight + 1/4 turn). | 1) Make sure flame is strong and is hitting thermo-couple and is strong enough.  
1a) Make sure thermocouple is paint, carbon & rust free.  
1b) Be sure lead wire is properly tightened at both ends (finger tight + 1/4 turn). |
| **System lights, but goes out after a while.** | 1) Thermocouple over heating.  
2) Back log blocking flames.  
3) Thermocouple lead over heating.  
4) Glass doors shut.  
5) Grate too close to be resting on thermocouple. | 1) Relocate TC over burner per instructions.  
2) Relocate back log.  
3) Move away from flame.  
4) Open doors.  
5) Move grate or thermocouple |
| **Flames come out of holes on air/mixer Orifice (LP only).** | 1) Air mixer/orifice installed incorrectly. | 1) Install air mixer/orifice correctly- see 70LPK instructions. |
| **Whistling Sound** | 1) Seldom caused by orifice.  
2) Possibly a too small flex connector. | 1) Check log set burner, orifice (if used) and amount of material covering burner.  
2) Use minimum 2” OD connector. |
| **Soot on logs** | 1) Logs impinging flame.  
2) Air mixer needs adjusted (LP). | 1) Check for flame impingement on logs  
2) Adjust air mixer if using LP. |
| **Receiver won’t respond to remote.** | 1) Batteries weak.  
2) Remote not matched to receiver. | 1) Change batteries in both.  
2) Refer to “Remote Operation” section to match. |