Models

The manual covers the following models:

<table>
<thead>
<tr>
<th>Model</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>FusionFire 60</td>
<td>1</td>
</tr>
</tbody>
</table>

Contents

1.0 Introduction ................................................... 4
  1.1 General ...................................................... 4
  1.2 Technology ................................................ 4
    1.2.1 Specifications ..................................... 4
    1.2.2 Basic and Optional Features ....................... 4
    1.2.3 Controllable Features ................................ 4

2.0 User Instructions ........................................... 5
  2.1 Important Information .................................  5
  2.2 Operating Instructions ................................ 5
    2.2.1 Guidelines .......................................... 5
    2.2.2 Startup Using the Keypad Interface ............ 6
    2.2.3 Shutdown Using the Settings Pad................. 6
    2.2.4 Operational Status Indicators .................... 6

3.0 Installation Instructions .................................. 7
  3.1 General ...................................................... 7
    3.1.1 Unpacking the Fireplace .......................... 7
    3.1.2 Protective Film/Cardboard ........................ 7
  3.2 Fitting the Fireplace .................................... 7
    3.2.1 Location of the Fireplace ......................... 7
      3.2.1.1 Clearances .................................. 7
    3.2.2 Product Dimensions .................................. 7
      3.2.2.1 Product Drawing .............................. 8
    3.2.3 Centering ............................................. 8
  3.3 Preparation .................................................. 8
    3.3.1 Framing for Wall Build-In ......................... 10
      3.3.1.1 Framing Details ............................... 10

  3.3.2 Electrical Power Connections ...................... 11
    3.3.2.1 Connect: Flame Only (No Heater) ............... 11
    3.3.2.2 Connect: Flame & Heater ....................... 11
  3.3.3 Water Supply ............................................ 11
    3.3.3.1 Water purity ................................... 11
    3.3.3.2 Water line connection ......................... 11
    3.3.3.3 Manual fill option ............................ 11
  3.3.4 Venting .................................................. 11
    3.3.4.1 Optional venting requirements .............. 11
    3.3.4.2 Steam safety ..................................... 12
  3.4 Installation ............................................... 12
    3.4.1 Mat and Water Leak Sensor ....................... 12
    3.4.2 Fitting the Fireplace ............................ 12
      3.4.2.1 Fastening Tabs ............................... 12
    3.4.3 Connecting the Fireplace ....................... 13
      3.4.3.1 Water Connections ......................... 13
      3.4.3.2 Making Electrical Connections ............... 14
      3.4.3.3 Verifying Electrical Connections ........... 14
    3.4.4 Finishing the wall ............................... 17
      3.4.4.1 Drywall Stops ................................ 17
      3.4.4.2 Drywall Placement ........................... 17
      3.4.4.3 Construction Barrier ....................... 17
    3.4.5 Final start-up procedure ....................... 17
      3.4.5.1 Filling the Reservoir ...................... 17
      3.4.5.2 Power Up ...................................... 18
      3.4.5.3 Fire Bed Media Installation ............... 19
      3.4.5.4 Draining the Reservoir/Boiler .......... 19
Recycle in accordance with Code of Federal Regulations (CFR), Title 40, Part 273. This device is classified as electrical and electronic equipment. As such, it must not be disposed of with household waste.

At the end of its useful life please take this product to an appropriate recycling center or collection point. You can find your nearest recycling drop off point by contacting your locality’s waste management office.

NOTE: The advisories on this page will be updated with the appropriate information upon completion of U.L. compliance testing.

This product is guaranteed for 2 years from the date of installation, as set out in the terms and conditions of sale between Modern Flames and your local dealer. This guarantee will be invalid, to the extent permitted by law, if the appliance has not been installed and operated as detailed in the Installation and User Instructions. The guarantee will only be valid during the second year, to the extent permitted by law, if the appliance has been regularly maintained by the customer as detailed in the maintenance section of the Installation and User Guides.
1.0 Introduction

This document provides user operating information and installation instructions for the FusionFire™ electric fireplace product. It is intended to be installed as a built-in appliance in a new or existing site.

1.1 General
The Modern Flames FusionFire™ Steam Fireplace combines the natural, 3-dimensional flame appearance of a gas fireplace with the safety and ease of installation associated with an electric fireplace.

The Modern Flames FusionFire™ Steam Fireplace is designed to replace gas fireplaces without compromising the realism of the flames.

This product delivers a 3-dimensional natural random flame appearance similar to a gas fireplace, but without the associated installation restrictions and heat issues.

1.2 Technology

1.2.1 Specifications
- LCD User display: Displays settings, status, and user guidance.
- Keypad: Allows operation without a remote control.
- Remote Control: Wireless “TV” type remote (Infrared technology).
- Utilizes a standard dedicated 120 VAC @ 60Hz 20A circuit for the flame presentation function.
- Utilizes an additional standard dedicated 120 VAC @ 60Hz 20A circuit for the room heater function (heater included with each unit, hookup optional).
- Water Source: Standard ¼” water line (included) for plumbed installations allows automatic filling. If no water source available, manual water filling allows for 12 hours of continuous use.
- Integrated water filter system ensures clean operation and full rated product life.

- FauxFire® technology is a patented simulated flame system that utilizes steam and lighting techniques to create a realistic flame effect.

1.2.2 Basic and Optional Features
- Produces desirable humidity as a byproduct of steam production.
- Auxiliary heater unit (hookup is optional): Provides additional warmth for cold climate installations.
- Firebox Liner (sold separately): The inside of the firebox is designed to accept various decorator liners.
- Faux log set (sold separately)

1.2.3 Controllable Features
- Fireplace On/Off
- Flame Height: User may adjust the flame height in 6 flame settings.
- Flame intensity: User may adjust flame effect light source from low to high.
- Auxiliary Heat On/Off and Temperature Increase/Decrease in 6 settings
- User Display prompt when water filter replacement is required

During operation, the steam boiler heats a volume of water safely under controlled low pressure to create the proper conditions for a steady stream of steam that turns immediately into water vapor when it is released from a manifold. The shape of this vapor emission is very important to the realism of the fire simulation.

A lighting assembly is strategically located to illuminate the steam.
2.1 Important Information

WARNING: Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information, consult a qualified installer.

Fireplace internal components become hot when running. Keep children and adults away from hot surfaces to avoid burns. Internal components will remain hot for an extended period of time after shutdown. Allow these areas to cool before touching.

2.2 Operating Instructions

2.2.1 Guidelines
When using electrical heaters, basic precautions should always be followed to reduce the risk of fire, electric shock and injury to persons, including the following:

1. Read all instructions before installing or using this appliance.
2. Internal components are hot when in use. To avoid burns, do not let bare skin touch hot surfaces.
3. Extreme caution is necessary when any electrical appliance is used by or near children whenever it is left operating and unattended.
4. Do not use outdoors.
5. To disconnect, turn controls to OFF and turn OFF power at the main circuit breaker.
6. Do not block air intakes or exhaust in any manner.
7. Do not use in areas where gasoline, paint or flammable vapors or liquids are used or stored.
8. Use this appliance only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock or injury to persons.
9. Do not attempt to make electrical or mechanical adjustments, or repairs without the services of qualified personnel.
10. Do not make any electrical connections, even temporary, under carpeting, along baseboards, etc. All electrical connections to this appliance must be done within walls and in accordance with local electrical codes.
11. The appliance is hardwired and has no main switch. (Caution: If servicing this unit, turn off power at the main circuit breaker.)
12. SAVE THESE INSTRUCTIONS

WARNING! Do not operate this appliance if damaged or has malfunctioned. Call a qualified service technician to inspect it. Replace any part of the electrical system if necessary before reuse.
2.2.2 Startup Using the Keypad Interface
Open the display panel by pushing down on the small rectangle located in the lower right area of the fireplace screen (see Figure 1). The display panel will popup.

To the left of the display, press the power button on the Settings Pad (Figure 2) and the “Initializing” “Please Standby” display will appear while the controller boots up and the steam supply is heated (Approx. 3 minutes).

As soon as the fireplace is ready to operate, you will see a “Ready” display. After a short delay, the simulated fire will start and the display backlight will turn off. The display may be pushed down again to lock it into place, hiding it from view.

**Note:** The wireless remote control may also be used to operate the fireplace.

2.2.3 Shutdown Using the Settings Pad
Press the power button again and the simulated flame will shut off.

2.2.4 Operational Status Indicators
In Figure 2 there is an illustration of the fireplace’s status indicators. The operational states are:

**A** – When the fireplace is first turned on and is powering up, the “Initializing…” indicator will come on, followed by the “Please Standby” indicator.

**B** – A timer shows how much time has elapsed since the fireplace was first powered up. Typically, this should not be more than a few minutes.

**C** – When the startup sequence is complete, the “Ready!” indicator will appear and the unit is fully operational.

**D** – When the water reservoir it low, the “Add Water” indicator will come on to warn that more water should be added for continued operation.

**E** – When it is necessary to replace the water filter, the “Change Water Filter” indicator will come on.

**F** – If the fireplace’s viewing window (glass) is left open or has not been closed properly, the “Viewing Window Open” indicator warns that it should be closed.

**G** – If the fireplace controller has detected a Fault condition affecting proper operation, the “Contact Service” and “Fault Code(s)” indicators will come on. Please call a service technician to resolve these types of problems.

**H** – The flame height, flame intensity and Aux. heat settings are setup according to customer preferences. These are confirmed by 3 rows of indicators to view adjustments as they are entered.

**Settings Pad** – This entry pad allows for the power to be turned on/off, the Aux. Heat to be turned on/off and the operating menu to be accessed. The fireplace settings may generally be changed by scrolling through the menu and using the “-” and “+” adjustment buttons to make changes. If a Fault is detected, the “Alert” indicator and corresponding display will be activated.
3.0 Installation Instructions

3.1 General
A qualified electrician should add one (or two when connecting the heater) dedicated 20 Amp, 120 Volt circuit per local building codes. **NOTE:** Follow all national and local electrical codes.

3.1.1 Unpacking the Fireplace
Follow the procedure below to unpack and inspect the fireplace:

1. Carefully remove the packing from around the unit and set aside parts that are wrapped separately.
2. Check that all parts and accessories are accounted for before disposing of any packaging. **Note:** The glass and some other parts are protected inside the fireplace and may not be unpacked until start-up.
3. If necessary, keep the original packaging for future transport and/or storage.

Refer to Figure 3 to review the general contents of the packaging.

3.2 Fitting the Fireplace

3.2.1 Location of the Fireplace
The fireplace may be installed at any indoor location. However, when choosing a location, please keep in mind the following guidelines:

- Install out of direct sunlight for maximum performance.
- Select a suitable location that is not susceptible to moisture and is a safe distance from flammable items like drapes, furniture or high traffic areas.
- If any of the power connection points are damaged, it must be repaired by the manufacturer, authorized dealer or certified technician.
- Make sure that it is possible to connect the fireplace power directly using a dedicated line back to the breaker box with a code-compliant connection to the installation location.

3.2.1.1 Clearances
Do not lean or drape cloth or other flammable materials on the fireplace or block air ways.

3.2.2 Product Dimensions

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Viewing Area</th>
<th>Firebox Dim.</th>
<th>Framing Dim.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FusionFire 60</td>
<td>24&quot; x 60&quot;</td>
<td>31⅞&quot; x 73.86&quot;</td>
<td>32&quot; x 74¼&quot;</td>
</tr>
</tbody>
</table>
3.2.2.1 **Product Drawing**
Refer to the detailed product drawing in Figure 5. A front view of the assembly is shown along with a detail of the front panel settings pad and display assembly.

![Figure 5](image)

3.2.3 **Centering**
Setup a centerline reference point on the wall before making any cuts. Refer to the Display Window Centerline drawing (Figure 6) since the firebox is larger on the right side.
Make sure that the center of the fire display area is properly located within the room as planned in advance.

![Figure 6](image)

3.3 **Preparation**
There is one power connection (or two power connections if heater is used), a water supply connection (connection optional), and a vent pipe (connection optional) that must be put in place by the installer (Figure 7). The user controls are self-contained and are accessed either by using the Settings Pad as described in the User Instructions or the wireless remote control.

**Note:** Main fireplace housing has fastening tabs to firmly secure it to the framed wall openings using the screws provided.
Ducted Vent Connection to Outside (optional)

Quick Connect Union (supplied)

Ball Valve (not supplied)

Water Supply

FusionFire Fireplace

AC Cable For Fireplace Display

AC Cable For Aux. Heater

Connections May Be Combined Into One Cable

AC Terminal Board

Breaker Box

Figure 7
3.3.1 Framing for Wall Build-In
Prepare the framed opening according to the table and figures below. Note that the opening must be deep enough to support the 14” depth of the fireplace assembly without touching an obstruction.

<table>
<thead>
<tr>
<th>Model</th>
<th>Height</th>
<th>Width</th>
<th>Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>FusionFire 60</td>
<td>32&quot;</td>
<td>74 1/4&quot;</td>
<td>14&quot;</td>
</tr>
</tbody>
</table>

3.3.1.1 Framing Details
Please reference the Display Window Centerline drawing (Figure 6 above) and the Installed Fireplace Illustrations (Figures 8 & 9), to be sure the fireplace is properly centered in the room.

**NOTE:** The fireplace becomes heavy when its water reservoir is full. To prevent undue stress on the framing, use a platform constructed from ¾” plywood to support the entire assembly before finishing. For best performance, this platform should be level to within 1/16” across the width of the unit.
3.3.2 Electrical Power Connections
Small wall plug-in converter power sources must NOT be used to power the fireplace because of this fireplace's higher power requirements. Even under the best of conditions, it is only possible to power the system using a dedicated line back to the breaker box; do not connect to other equipment or outlets located in the room.

WARNING – WIRE DIRECTLY TO A DEDICATED 20A BREAKER

The information below describes how the main electrical connections must be setup when using the “Flame Only” function or when using both the flame and heater functions (Figure 10).

3.3.2.1 Connect: Flame Only (No Heater)
A single 120 Volt, 20 Amp power connection, which is a dedicated line back to the breaker box (one run of “Solid Romex 12/2 CU NM-B W/G” cable recommended), is used to connect the main power directly to the fireplace when only the simulated flame is needed.

3.3.2.2 Connect: Flame & Heater
Two 120 Volt 20 Amp, dedicated lines back to the breaker box (2 runs of “Solid Romex 12/2 CU NM-B W/G” or 1 run of “Solid Romex 12/4 CU NM-B W/G” cable recommended).

3.3.3 Water Supply

3.3.3.1 Water purity
A Reverse Osmosis (R.O.) system is required for commercial installations. Boiler life is extended when the water supply contains low amounts of dissolved solids. For residential applications, an RO system is not required, but recommended for extended boiler life.

3.3.3.2 Water line connection
When connecting to a fresh water supply, use a ¼” polyurethane water line with a John Guest fitting connected to an in-line ball valve.

3.3.3.3 Manual fill option
A water line is not mandatory for operation. Manual fill is available and comes standard with each fireplace. When the water supply container level gets low, a warning is shown on the display to remind the user to refill the container.

Although not required, using a Reverse Osmosis (R.O.) or distilled water source to refill the water supply is highly recommended for extended life.

3.3.4 Venting

3.3.4.1 Optional venting requirements
Please refer to Figure 11 for the location of the vent and the vent slider control. Note that a 6” vent duct is recommended in installations in a room that has an area of less than 500 square feet.

**Note:** When using the heater, the external vent should NOT be used. This will prevent heat from escaping to the outside.

To prepare the vent connection, remove the protective plate from the top of the fireplace and install the Vent Duct Flange in its place to use for the duct connection.

A length of venting duct and the Vent Duct Flange, to which is attached, are included with the fireplace Accessory Kit (sold separately). The length of this duct is 20 feet and is the MAXIMUM length of duct that can be used. Using a longer length duct run will result in improper ventilation of steam during operation.
Make sure the steam vent slider lever (shown in Figure 11) on the front panel is in the closed position. This will cause the internal fan to force the steam out via the vent rather than the front of the fireplace.

3.3.4.2 Steam safety
Because pure steam contains no chemicals or breathing hazards, it is safe to operate without an external vent. The only concerns are in situations where there is high ambient humidity or small room installations where humidity may build up to uncomfortable levels.

3.4 Installation

3.4.1 Mat and Water Leak Sensor
Before installing the fireplace in the wall opening, place the mat (Figure 12) on the heavy plywood bottom support. Then, locate the Water Leak Sensor which is attached to the rear of the fireplace in a small plastic bag.

After removing the sensor from the bag, slide it into the small slot located on the front right corner of the mat. Be sure the two connecting wires are facing up to allow connection to the fireplace and face the printed circuit pattern down.

If the sensor gets wet, it will trigger a Fault Code to indicate water is accumulating in the mat.

3.4.2 Fitting the Fireplace
Install the fire unit in the framed opening while noting the width dimension illustrated in Figure 13. This shows the entire width, including the Fastening Tabs.

3.4.2.1 Fastening Tabs
Use drywall screws with a minimum length of 1¼” to secure the unit to the framed opening using the L-shaped metal fastening tabs attached to the sides of the fireplace.
3.4.3 Connecting the Fireplace
Connect to water and electrical sources using the types of connections described below.

3.4.3.1 Water Connections
Cold Water Inlet Connection: For the auto-fill option, use the 12”-18” long, ¼” diameter poly tubing stub-out that is packed in a plastic bag and taped to the rear panel of the unit. It is recommended that this tubing be joined to the water feed line by using a John Guest, ¼”, quick connect union (supplied) as shown in Figure 14.

It is also recommended that a compression fitting with a shut-off valve be fitted at the water source (a ball valve of the type shown in the Figure 15, not supplied).

Note: There is another water shut-off valve that is accessible through the front of the fireplace under the media panel.
3.4.3.2 Making Electrical Connections

**Water Leak Sensor:** Connect the wire from the water leak sensor, that was previously attached to the rubber mat, and route it to the control board. Plug the connector on the end of the wire into the Leak Detection connector (Figure 16) on the control board.

![Figure 16](image)

**AC Wire Entry:** The firebox enclosure includes 2 standard 1/2" knockouts as the entry point for external AC wiring.

**AC Connection Termination:** A screw-type terminal block is provided for connections back to the AC breaker panel. The terminal block (see Figure 17) accommodates the 12-gauge (L1, L2 and Gnd.) connections for both the flame and heater.

AC wiring from the circuit breaker to the fireplace must be “Solid Romex 12/2 CU NM-B W/G” or “Solid Romex 12/4 CU NM-B W/G” cable.

![Figure 17](image)

**AC Circuit Breakers:** The AC breaker panel circuit protection is required to be 20A single-pole circuit breaker (15A not allowed). The auxiliary heater must be on a separate dedicated breaker.

**Terminating AC Connections:** Once the wiring has been run between the breaker panel and the fireplace, terminate (see Figure 17 above) the appropriate conductors at each end using recognized line (L1, L2), neutral (N1, N2), and safety ground standards.

3.4.3.3 Verifying Electrical Connections

With the fireplace & heater (if applicable) turned off (power button has not been pressed) and the main breaker in the ON position, check the open-circuit voltage on the fireplace connection terminals and on the heater connection terminals (if applicable).

Both open-circuit readings should read greater than or equal to 115 Volts AC. **Then, Cut the Power** at the breaker panel.
Verifying Ground Connections: Use a multimeter to verify that fireplace metal surfaces are properly grounded using the following procedure:

1. With the multimeter set to read Ohms on the lowest range, short the probes together and verify a reference reading for “0 Ohms” (or a very low value) as shown in Figure 18.

2. Connect the multimeter between the copper grounding bar and the green wire connection on the fireplace’s AC input screw terminal as shown in Figures 19a and 19b. Verify that the reading is 0 Ohms (within 0.1 Ohms of the reference value previously noted).
3. Connect the multimeter between the copper grounding bar and the metal portion of the fireplace’s front panel as shown in Figures 20a and 20b. Verify that the reading is 0 Ohms (within 0.1 Ohms of the reference value previously noted).

4. Likewise, connect the multimeter alternatively between the copper grounding bar and the side metal, rear metal, light-bar, and boiler metal parts of the fireplace. Verify that the readings are within 0.1 Ohms of the reference value for each test.

If any of the reference readings are 0.2 Ohms or greater, contact a factory representative before completing the installation.
3.4.4 Finishing the wall
Make sure the protective cardboard and the protective film are in place before completing the drywall installation. It is important that drywall finishing debris and overspray does not get applied to the fireplace surfaces or interior components.

3.4.4.1 Drywall Stops
Install drywall to the drywall stops along the perimeter of the fireplace display insert (see Figure 21).

NOTE: DO NOT DRILL OR SCREW INTO THE FIREPLACE CHASSIS.

3.4.4.2 Drywall Placement
To secure the drywall, use a small amount of construction strength adhesive to bond the drywall to the front panel surface.

Make sure that the drywall does not go past the drywall stop.

3.4.4.3 Construction Barrier
After the fireplace is installed, the drywall is finished, construction is complete, and there is no debris on the site, remove the cardboard construction barrier from the front (see Figure 21).

Then carefully remove the protective film from the media bed by removing the tape holding it in place.

3.4.5 Final start-up procedure
Make sure all connections and the fireplace itself have been thoroughly cleared of dust and debris before beginning the start-up procedure.

3.4.5.1 Filling the Reservoir
If using the manual water fill method, proceed as follows: With the glass door open, lift the water fill flap located on the left side of the media bed (see Figure 22) and add about 3 gallons of clean water to the reservoir. Do not fill beyond the max fill indicator.

The display will indicate each time more water is needed.
If using the direct water facilities connection option (recommended), connect the water supply and correct possible leaks before going any further. Once a good water connection has been verified, turn ON the ball valve (see Figure 23), shown in OFF position) and monitor the flow into the reservoir.

Once the reservoir is full, the float valve will turn off the flow automatically. Check again for leaks.

Place the black metal media bed into position and screw into place (4 screws).

Activate the AC power by turning ON the appropriate breaker(s) at the power panel.

3.4.5.2 Power Up

The User Display is mounted in a mechanical "carriage mechanism". Push the mechanism down to release and allow viewing of the display. Push it down again to latch and hide the display from view (the normal operation position).

At the fireplace, with the display in the viewing position, press the power button on the left end of the built-in keypad (see Figure 24) to start the fireplace.

If a problem occurs during startup, an alert condition will be indicated in the display area. For more details about this refer to the “Servicing” section.

Checking the AC Load Current: Using an AC Amp Meter monitoring the hot side (black) branch circuit connection to the fireplace at the breaker box, measure the AC load current (see Figure 27). With the boiler still heating, it should be 16 Amps or less.

NOTE: If the boiler has reached operating temperature and has cycled off, wait for it to cycle back ON and take the AC current reading again.

If the optional heater is equipped, likewise measure the AC current probe to the hot side (black) branch
circuit connection to the heater, turn the heater on, and verify that the current draw on that circuit is 16 Amps or less.

3.4.5.3 Fire Bed Media Installation
The Fireplace package includes a 10 Lb. bag of decorative glass media. Optional media can be selected by the user and separately placed by the installer.

The media must be evenly distributed over the bottom metal panel that covers the water reservoir. This is done to maximize the fire ember effect when the lighting is active during operation.

3.4.5.4 Draining the Reservoir/Boiler
Should it become necessary to drain the boiler and reservoir, a T-valve is positioned in the water line between the Steam Subsystem pump and the manifold inlet. A “recoil” type drain hose of length 2m +/- .5m is connected to the T valve and stored for use beneath the media bed.

To drain the water tank for winterizing, the T-valve (see Figure 28) is used to route water from the pump out the drain hose. One end of the drain hose is pulled out of the fireplace and placed into an external bucket. The pump is activated during system power ON by pressing and holding both “up/down” Adjust-Buttons on the keypad simultaneously.
3.5  Installation FAQ's

FREQUENTLY ASKED QUESTIONS

Q. How do you program the remote control?
A. The remote comes pre-programmed and ready to use. No programming is necessary.

Q. What distance can the remote be used from the fireplace?
A. Optimal distance for the remote control is within 16 feet (5 meters).

Q. Can you turn on the fireplace via the front panel keypad and off via the remote (or vice versa)?
A. Yes.

Q. How long will the LED lights last?
A. LED Lamps have a life span of up to 20 years.

Q. Can the fireplace be installed outside?
A. No. Please review the entire safety sections before installing this fireplace.

Q. Does the fireplace need to be on a dedicated 20 Amp circuit?
A. Yes, and two dedicated 20 Amp circuits must be wired when the heater is used.

Q. What thickness of drywall should be used for the recessed installation?
A. 1/2” or 5/8”.

Q. How often does the battery in the remote need to be replaced?
A. Annually, possibly more with heavy use.

Q. Is there a remote receiver in the fireplace that requires a battery?
A. No, only the actual remote requires a battery. The rest of the fireplace runs entirely off of the main power supply.
### 3.6 Troubleshooting
Follow the procedures outlined below to diagnose and resolve problems. **Note:** Always remove power from the system at the breaker box before replacing electrical components. To restart the system, turn OFF the power at the breaker box for 30 seconds and then restore.

#### 3.6.1 Fault Diagnosis Chart

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>POSSIBLE CAUSE</th>
<th>CORRECTIVE ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flame and backlight are not visible but fireplace display shows it’s turned on</td>
<td>Wiring is loose at fireplace</td>
<td>Shut off the breaker at the breaker panel and check the connections</td>
</tr>
<tr>
<td></td>
<td>Breaker panel connection is loose or breaker is defective</td>
<td>Shut off the breaker, check the breaker panel connections, verify voltages, and tighten/replace as needed.</td>
</tr>
<tr>
<td>Fireplace lights up but there is no flame visible</td>
<td>Boiler connections are loose</td>
<td>Disconnect from power source and inspect for loose connections between the boiler and its control board</td>
</tr>
<tr>
<td></td>
<td>Boiler control board is defective</td>
<td>Replace the control board with one of the same model and part #</td>
</tr>
<tr>
<td>Nothing comes on (front panel screen, etc.)</td>
<td>There is a problem with the keypad and/or its mounting that is preventing the buttons from functioning</td>
<td>Reposition the fireplace in the installation so that no part of the fireplace is interfering with the keypad controls. Check that there is no foreign material lodged in the keypad</td>
</tr>
<tr>
<td></td>
<td>Power was “live” when the fireplace was installed</td>
<td>Turn the main breaker to the &quot;OFF&quot; position for 30 seconds. Next flip the breaker back into the &quot;on&quot; position for 20 seconds for a complete reboot of control section.</td>
</tr>
<tr>
<td></td>
<td>Not operating the keypad properly with finger</td>
<td>Press the end of your finger firmly on the keypad and apply moderate pressure</td>
</tr>
<tr>
<td></td>
<td>Loose connection on control board</td>
<td>Check functions with remote control. If functional, check wiring connections on control board</td>
</tr>
<tr>
<td></td>
<td>Fireplace turns off on its own and will not come</td>
<td>Fault code 07 “BOILER OVER TEMPERATURE” is shown on the display</td>
</tr>
<tr>
<td>Keypad operates the fireplace but the remote control does not</td>
<td>Fault code 15 “ROOM TEMPERATURE ABNORMAL” is shown on the display</td>
<td>Remove built up dust from the fireplace vents and replace internal fan if necessary.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Fault code 15 “ROOM TEMPERATURE ABNORMAL” is shown on the display</td>
<td>Check the ambient room temperature and make changes to maintain it between 65F-85F.</td>
<td></td>
</tr>
<tr>
<td>Keypad operates the fireplace but the remote control does not</td>
<td>Low Battery</td>
<td>Replace battery in remote control with a 2032 coin-cell</td>
</tr>
<tr>
<td>Keypad operates the fireplace but the remote control does not</td>
<td>Not aiming control correctly</td>
<td>Aim remote control to the upper right of the viewing area where sensor is located</td>
</tr>
<tr>
<td>Keypad operates the fireplace but the remote control does not</td>
<td>Remote control defective</td>
<td>Replace remote control</td>
</tr>
<tr>
<td>Keypad operates the fireplace but the remote control does not</td>
<td>Remote Sensor is defective</td>
<td>Replace remote sensor inside fireplace</td>
</tr>
<tr>
<td>Aux heater does not function and/or Fault code 16 “AUX HEATER FAILURE” is shown on the display</td>
<td>Heater wiring is loose at fireplace</td>
<td>Shutoff the breaker at the breaker panel and check the connections</td>
</tr>
<tr>
<td>Aux heater does not function and/or Fault code 16 “AUX HEATER FAILURE” is shown on the display</td>
<td>Breaker panel connection is loose or breaker is defective</td>
<td>Shutoff the breaker, check the breaker panel connections, verify voltages, and tighten/replace as needed.</td>
</tr>
</tbody>
</table>