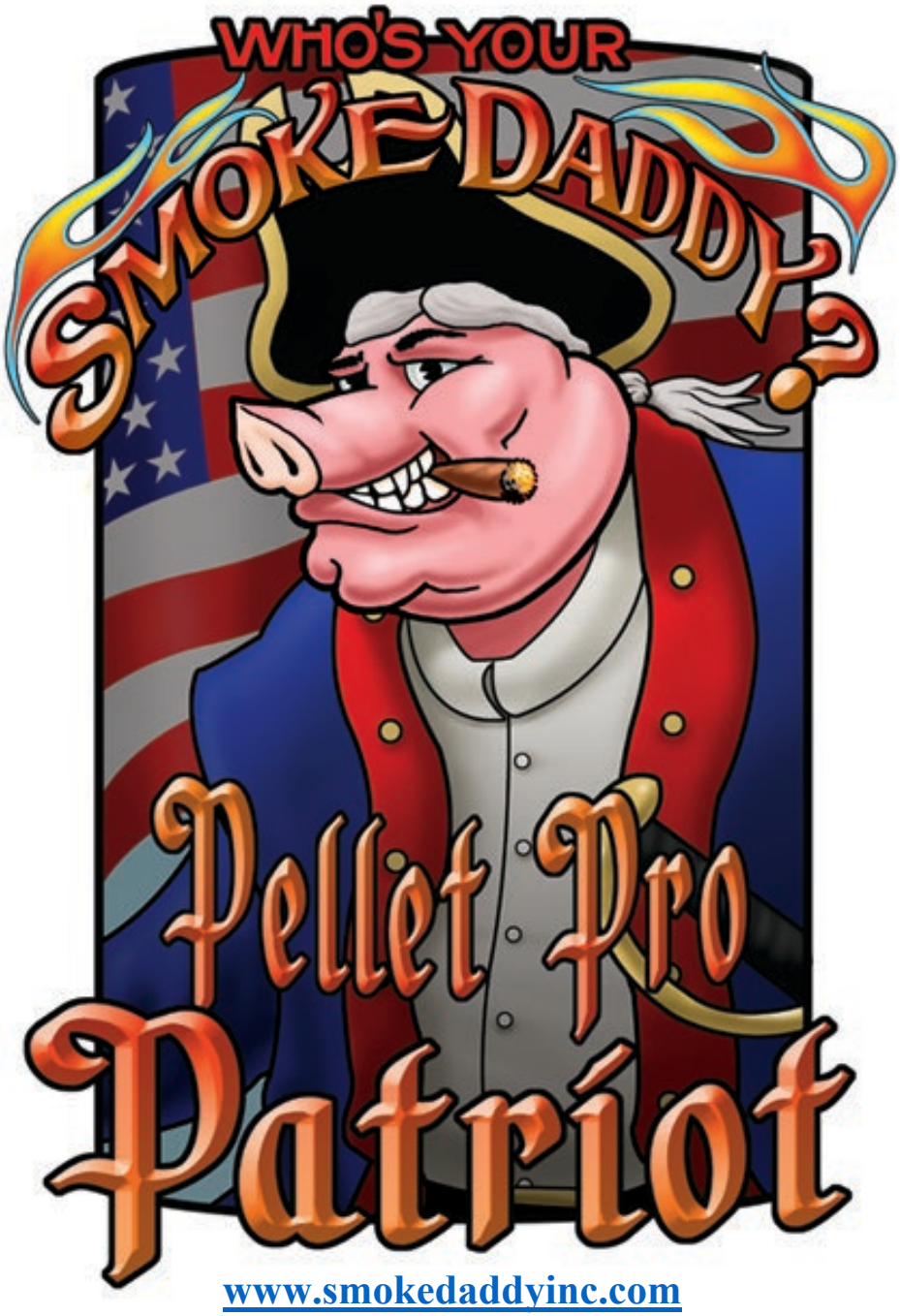
Pellet Pro® Patriot
Reference Manual



www.smokedaddyinc.com
(847) 336-1329


On
Off
Version 1.1.3
Proudly Made in the
USA
Low
Mid
High
1
2
Feed
Meat Probe
Pellet Pro®
Universal PID Controller
with Wi-Fi Capability
smokedaddyinc.com
Made in the USA

Quick Start-up Guide

To begin using the Pellet Pro® Patriot right away, consult this "Quick Start-up Guide" and review section five in the Pellet Pro® Patriot reference manual.

Keep in mind that the Start-up Guide is not a complete way to become familiarized with the Pellet Pro® Patriot. **It is recommended that users read through the Pellet Pro® Patriot reference manual in its entirety to become knowledgeable about unit's operation and functionality.**

Initial Start-up (No Pellets in the Auger)

1. Connect the Pellet Pro® Patriot to an outlet and wait for the version number to be displayed on the OLED display.
2. Open the lid/door of your cooking unit – the lid must remain open through step five.
3. Press the "ON/OFF" switch located on the face of the controller – this will begin RTD probe calibration to monitor temperature. When calibration is completed, the Pellet Pro® Patriot will enter Standby where only the fan will run.
4. While in Standby, press the "Feed" switch to prime the auger tube for your first cook. Once pellets begin to fall into the burn pot, you may select your desired mode, or, temperature
5. After smoke becomes visible and then clears, close the smoker lid/door.

Subsequent Start-up

1. Connect the Pellet Pro® Patriot to an outlet and wait for the version number to be displayed on the OLED display.
2. Open the lid/door of your cooking unit – the lid must remain open though step five.
3. Press the "ON/OFF" switch located on the face of the controller – this will begin RTD probe calibration to monitor temperature. When calibration is completed, the Pellet Pro® Patriot will enter standby where only the fan will run.
4. Once in standby, you may select your desired mode, or, temperature.
5. After smoke becomes visible and then clears, close the smoker's lid.

⚠CAUTION **It is important to note that all start-up operations are to be completed with the smoker open until visible smoke appears and clears. Failure to do so can lead to large smoke accumulation in the grill body – under these conditions, it is possible for explosive combustion to occur.**

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1. Preface

Early in the Spring of 2018, Smoke Daddy Inc. began the process of designing a newly envisioned Pellet Pro® PID Controller with Wi-Fi capability. With the positive, long-established, reputation of Smoke Daddy Inc. products, the goal of customer satisfaction was at the forefront of every preliminary discussion regarding the development of this controller. In order to fully satisfy the standards of this project, while also providing a far superior BBQing experience, Smoke Daddy Inc. committed the new Pellet Pro® PID Controller to be designed, engineered, and manufactured in the United States of America. Thus, began a collaborative effort between small businesses in the Midwestern United States to undertake this project - not only to revolutionize our Pellet Pro® PID Controller, but to revolutionize pellet grills by setting the standard in performance, quality, and user-experience.

Over the span of nearly two years, our team at Smoke Daddy Inc. has spent countless hours deliberating, developing, and testing software solutions to incorporate into the new Pellet Pro® PID Controller. By evaluating the strengths and shortcomings of our first Pellet Pro® PID Controller, we have developed robust temperature controlling algorithms that utilize not only closed-loop PID systems, but also timed-cycles that control external motor function in non-PID operating modes. Moreover, by using the industry's most innovative microcontroller, we seamlessly bridged the gap between Computer Science and the art of BBQ to provide the best mathematical solution to temperature swings and inconsistent cooks.

Smoke Daddy Inc. proudly presents: The Pellet Pro® Patriot

RTD Probe Wiring Diagram **Power/Component Wiring Diagram**

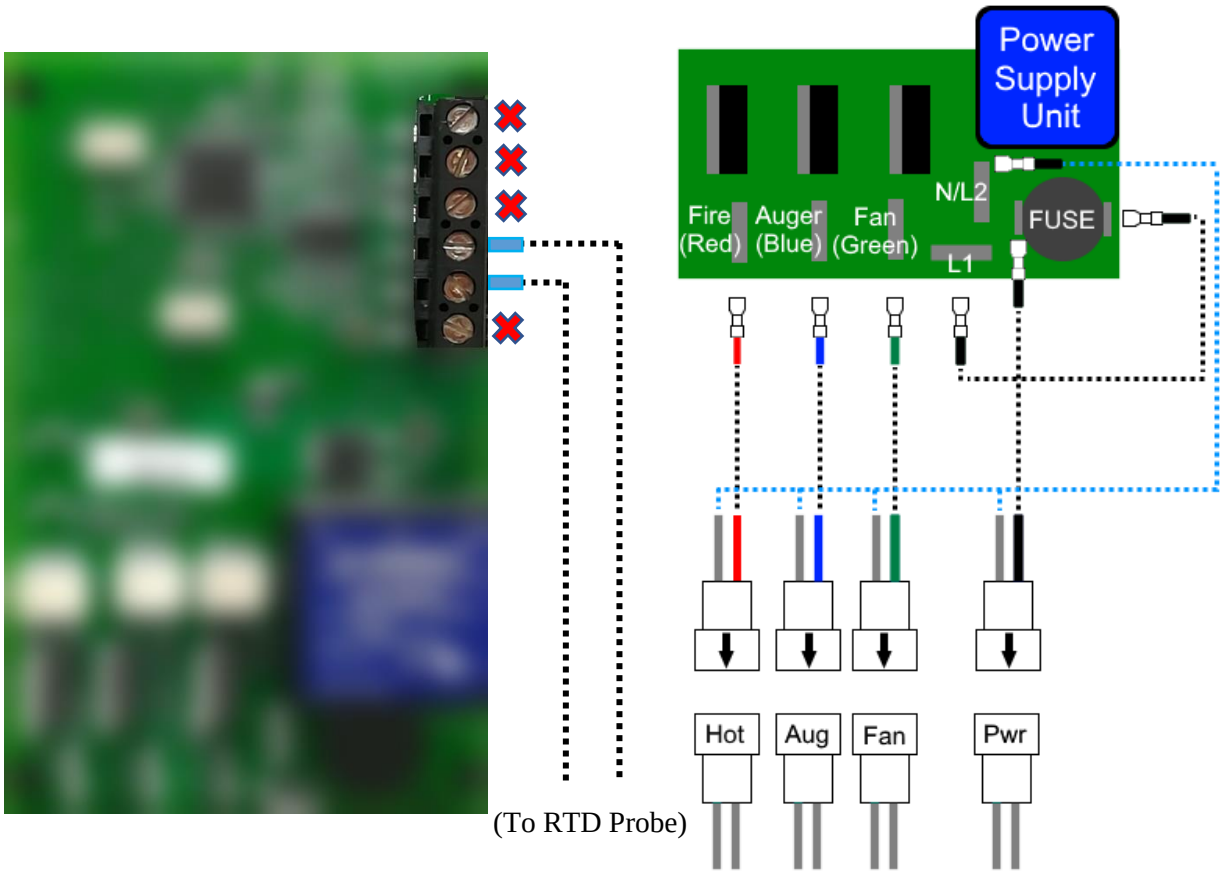


Figure 1: PCB and Wiring Diagram

ATTENTION **It is important to note that the wire colors on external components are independent of the wire colors on the Pellet Pro® Patriot wiring harness.** ***i.e. the green fan connector on the Pellet Pro® wiring harness may not be connected to another green wire.***

2. Definitions

Auger Motor: An external component located in the hopper assembly that receives power and instruction from the Pellet Pro® Patriot. This device augers fuel (wood or charcoal pellets) into the *burn pot* to be ignited by the *hot rod*.

Burn Pot: A reservoir to catch pellets as they auger into the body of a pellet grill, this is where fuel combustion occurs via the hotrod.

Fan Motor: An external component located in the hopper assembly that receives power and instruction from the Pellet® Pro Patriot. This device provides airflow into the burn pot ensure efficient combustion.

High Mode: A mode of operation by which the fan motor and auger motor both operate at 100 percent capacity. High mode is designed to allow your pellet grill to operate at its highest possible temperature.

Hot Rod: An external component in the burn pot that receives power and instruction from the Pellet Pro® Patriot. This device ignites wood or charcoal pellets for startup routines during operation.

Low (Hold) Mode: A mode of operation by which the auger motor operates on a timed cycle. Low (Hold) mode is designed to allow your pellet grill to operate at its lowest possible temperature.

Meat Probe: An external component that is connected to the face of the Pellet Pro® Patriot. This is a temperature recording device that is intended to provide the user with information about meat temperatures inside the body of the grill.

Microcontroller: An integrated computing device on a control board that provides instruction to external and internal components during operation. This device allows the *PID* algorithm to communicate with the fan and auger motors.

Molex Connector: A “pin and socket” connector that allows the Pellet Pro® Patriot to transmit electrical power to external components.

OLED Display (Monochrome): The 128x64 pixel display that is used by the Pellet Pro® Patriot to provide information about your cook such as: hot rod usage, Fine-Tuning, set temperature, current temperature, meat temperature, and more.

PID control: A method of control that receives measured input and calculates an output to modulate external components. Changes in power settings are based off deviation (proportion) from set point as well as the rate of change (derivative) of temperature.

Quick Mid: A mode of operation by which the fan motor and auger motor both operate via the PID algorithm. Quick Mid is a shortcut to set the control temperature to 270F.

Resistance Temperature Device (RTD): An external component located in the body of a pellet grill that measures resistance – this reading is transmitted to the Pellet Pro® Patriot and converted into temperature readings.

Wi-Fi Provisioning: The process by which an end-user establishes communication between the Pellet Pro® Patriot and a mobile device.

Wiring Harness: The assembly of electrical wires that are used to transmit electrical signals and power.

3. Summary of Operation

During operation, the Pellet Pro® Patriot will utilize a PID control algorithm or a timed cycle to maintain a specified temperature set point within five to ten degrees.

3.1 Start-up

The Pellet Pro® Patriot provides a dedicated, timed, start-up cycle that allows the user to set their desired temperature immediately (*see caution)*. During start-up, the fan motor will always operate at 100 percent capacity below 150°F and the auger motor will operate at 100 capacity but has a timed cycle of 90 seconds (60 seconds off, 30 seconds on).

⚠CAUTION **It is important to note that all start-up operations are to be completed with the smoker open until visible smoke appears and clears. Failure to do so can lead to large smoke accumulation in the grill body – under these conditions, it is possible for explosive combustion to occur.**

3.2 Temperature Readings

During operation, the Pellet Pro® Patriot will receive temperature readings every .10 second and average the collected data to provide quick, yet accurate, temperature readings to both the user and temperature controlling algorithms. These temperature readings are received from a PT1000 RTD probe that is fastened into the body of your pellet grill.

3.2 Temperature Readings (cont.)

It is important to note that the Pellet Pro® Patriot will enter an error state if inaccurate data is received from the RTD probe.

3.3 Temperature Controlling

The Pellet Pro® Patriot utilizes two methods of temperature controlling, timed and PID control, that are utilized at different times dependent on the current mode of operation.

PID control: The Pellet Pro® Patriot PID algorithm will be utilized at set temperatures between 200F-450F. Every two seconds, the temperature controlling algorithm will receive the current grill temperature as a parameter and adjust both the fan and auger motor power settings.

It is important to note that the fan motor will never have a power setting of zero, meaning, air will always be provided to the burn pot.

Timed control: The Pellet Pro® Patriot timed cycle control will only be utilized while the controller is set in Low (Hold) mode, or, start-up modes. Timed control provides consistent low temperature holding capability as well as intermittent, thin, smoke.

3.4 Shutdown

The shutdown cycle occurs over a 15-minute period where the fan motor will operate at 100 percent capacity and no additional external components will receive instructions. This routine is intended to extinguish any fire in the burn pot. During the last 30 seconds, the auger motor will operate at 100 percent capacity.

3.4 Shutdown (cont.)

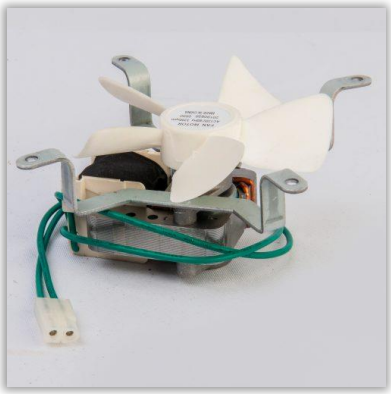
⚠CAUTION

It is important to note that the shutdown routine should be completed with the smoker lid open for the entire duration of shutdown. Failure to do so may disallow the fuel in the burn pot to fully extinguish.

4. Familiarization of Components

The Pellet Pro® Patriot, at minimum, will provide electrical power and instruction to four external components, they are as follows: fan motor, auger motor, hot rod, and RTD Probe. Additionally, the Pellet Pro® Patriot can accommodate two meat probes and a Wi-Fi module for mobile connectivity.

Fan Motor
0.48 AMP; 3200 RPM



Auger Motor
0.52 AMP; 2 RPM

Stainless Steel Burnpot

RTD Probe

Meat Probe

Ceramic Core Hot Rod

WARNING **Hot when in use.**

Figure 2: Familiarization of Components

5. Connecting the Pellet Pro® Patriot

Following are instructions on how to properly connect the Pellet Pro® Patriot wiring harness to external motor components (*refer to fig. 1 during this process)*:

CAUTION **Incorrectly connecting external components can lead to unexpected behavior from the Pellet Pro® Patriot – it is imperative that all components are connected correctly to ensure the controller will function properly and safely.**

5.1 Before Servicing your Pellet Pro® Patriot or Cook Unit:

1. Ensure no external power is transmitted to the Pellet Pro® Patriot via the power cord.

WARNING **Servicing the Pellet Pro® Patriot while connected to an external power source can be dangerous – disconnect any electrical power to prevent electrical shock.**

2. Remove safety cover from underneath the hopper – **to be replaced after servicing**.
3. Identify your fan motor, auger motor, and hot rod wires in your hopper assembly.
4. **If applicable, wait until any combustion in the burn pot has extinguished.**

5.2 Connecting the Wiring Harness to Components:

To begin connecting the Pellet Pro® Patriot to the external components in your pellet grill, insert the wiring harness (attached to the Pellet Pro® Patriot) through the rectangular cutout that is used to mount the controller to the body of the hopper.

Use the mounting point as a sight into the body of the hopper and connect all molex connectors from underneath the hopper assembly.

5.2.a To connect your **fan motor** to the Pellet Pro® Patriot:

1. Identify the fan motor located underneath the rear of the auger tube (*see Sec. 4 Fig. 2 for visualization*).
2. Identify the green/white wires located on the Pellet Pro® Patriot wiring harness – the wire will be labeled “F” for “fan”.
3. Connect the male Molex connector (green wire, from wiring harness) to the female Molex connector (from fan).
4. **The fan motor has been connected.**

5.2.b To connect your **auger motor** to the Pellet Pro® Patriot:

1. Identify the auger motor located at the rear of the auger tube (*see Sec. 4 Fig. 2 for visualization*).
2. Identify the blue/white wires located on the Pellet Pro® Patriot wiring harness – the wire will be labeled “A” for “auger”.
3. Connect the male Molex connector (blue wire, from wiring harness) to the female Molex connector (from auger).
4. **The auger motor has been connected.**

5.2.c To connect your **hot rod** to the Pellet Pro® Patriot:

1. Identify the hot rod wire located in your hopper – the color will most likely be white, or, white with black accents (*see Sec. 4 Fig. 2 for visualization*).
2. Identify the red/white wires located on the Pellet Pro® Patriot wiring harness – the wire will be labeled “H” for “hot rod”.

5.2.c To connect your **hot rod** to the Pellet Pro® Patriot (cont.):

3. Connect the male Molex connector (red wire, from wiring harness) to the female Molex connector (from hot rod).
4. **The hot rod has been connected.**

5.2.d To connect **power** to the Pellet Pro® Patriot:

1. Identify the power cord Molex connector in your hopper – the color will most likely be black.
2. Identify the black/white wire located on the Pellet Pro® Patriot wiring harness – the wire will be labeled “P” for “power”.
3. Connect the male Molex connector (black wire, from wiring harness) to the female Molex connector (from power cord).
4. **Power has been connected.**

ATTENTION **It is important to note that the wire colors on external components are independent of the wire colors on the Pellet Pro® Patriot wiring harness. *i.e. the green fan connector on the Pellet Pro® wiring harness may not be connected to another green wire.***

5.2.e To connect the **RTD Probe** to the Pellet Pro® Patriot:

1. Identify the second and third terminal positions (left-justified) on the terminal block located on the back of the Pellet Pro® Patriot.
2. Loosen the terminal positions with a small flat-head screwdriver.
3. Insert the RTD leads (incased in blue) from the RTD into the second and third terminal positions (left-justified).

5.2.e To connect the **RTD Probe** to the Pellet Pro® Patriot (cont.):

4. Tighten the terminal positions with a small flat-head screwdriver while the RTD leads are still inserted.
5. **The RTD probe has been connected.**

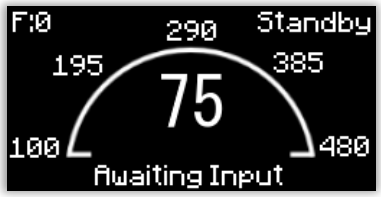
6. Pellet Pro® Patriot Operation

Power On: To power on the Pellet Pro® Patriot, connect external power to an outlet and wait for the version number to be displayed on the OLED display. After the version number has been displayed, press the “ON/OFF” switch located on the face of the controller – the controller will begin to calibrate the RTD probe to monitor temperature. When calibration is completed, the Pellet Pro® Patriot will enter standby.

Start-up: In start-up, the fan motor will always operate at 100 percent capacity below 150°F; the auger motor will operate at 100 percent capacity but has a timed cycle of 90 seconds (60 seconds off, 30 seconds on).

(see 3.1 for more information)

6.1 Standby Mode



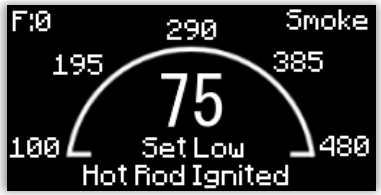
Standby mode is entered by default after the Pellet Pro® Patriot has calibrated the RTD probe. In this mode, only the fan motor will operate – this is to indicate that the controller is ready to receive input, **if the fan motor does not operate, there is an issue with the connectivity of external components**.

6.1 Standby Mode (cont.)

Priming the auger tube with pellets in Standby is possible if the “Feed” button is pressed. If pressed, the auger motor will operate at 100 percent capacity unless the user deactivates “Feed”, or, *they* enter another mode of operation.

ATTENTION **The start-up cycle will not execute in standby mode.**

6.2 Low (Hold) Mode

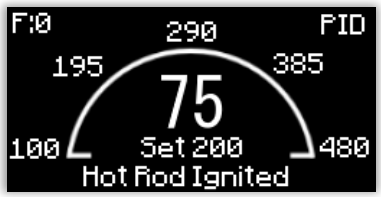


Low mode is entered by the user and can be accessed from any mode except shutdown and error states. In this mode, the Pellet Pro® Patriot will modulate fan motor power based on the currently read temperature. The auger motor’s operation is based off a timed cycle where small amounts of fuel are augured at a constant rate. Auger power is controlled similarly to fan power - the Pellet Pro® Patriot will modulate auger motor power based on the currently read temperature.

While set in “low”, there is no true set temperature, keep in mind that temperatures will fluctuate between 150°F and 200°F based on the volume of your cooking space.

ATTENTION **The start-up cycle will execute in low mode if the temperature is below 150°F.**

6.3 PID Mode

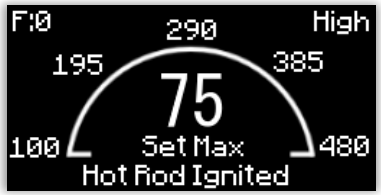


PID mode is entered when the user sets temperature within the interval 200°F-450°F. In this mode, power of both the fan and auger motor are set by the PID algorithm; set temperature will be maintained within five to ten degrees in this mode of operation.

6.3 PID Mode (cont.)

ATTENTION **The start-up cycle will execute in PID mode if the temperature is below 150°F.**

6.4 High Mode

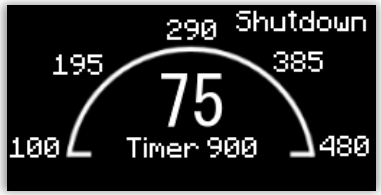


High mode is entered by the user and can be accessed from any mode except shutdown and error states. In this mode, both the fan motor and the auger motor will operate at 100 percent capacity.

While set in "High", there is no true set temperature, keep in mind that temperatures will continuously increase to the maximum operable temperature in your cooking unit.

ATTENTION **The start-up cycle will not execute in high mode if the temperature is below 150F – fan and auger motors will always operate at 100 percent capacity.**

6.5 Shutdown State



Shutdown is entered by the user and can be entered from any mode. In this mode, the fan motor will operate at 100 percent capacity and will continue to operate for a 15-minute duration. In the last 30 seconds of shutdown, the auger will operate to prime the burn-pot for the next cook. *(see section 3.4 for more information)*

6.6 Error States

An error state in entered if the Pellet Pro® Patriot determines incorrect operation or hardware malfunction:

If an error persists, please call at 847 336-1329

6.6 Error States (cont.)

- **<u>Error 001</u>: RTD Error** – This error state is entered if the Pellet Pro® Patriot receives seemingly incorrect data from the RTD Probe **e.g.** temperature readings above 1000°F.
- **<u>Error 002</u>: Ignition Failure** – This error state is entered if the Pellet Pro® Patriot has been unable to start-up for more than 10 minutes; a malfunction of the fan motor, auger motor, or hot-rod could have caused this error.

ATTENTION

If an error state is entered, the Pellet Pro® Patriot will be put into standby and will require a restart to become operational again.

6.7 Temperature Fine-Tuning

Temperature Fine-Tuning should be utilized if a user is experiencing over-shoot or under-shoot while in PID control. If entered, the user will be prompted to input the amount of temperature deviation, then, the PID will make further adjustments based off the Fine-tuning value.

7. Navigating the Keypad

The Pellet Pro® Patriot has nine switches that are used for various functions during operation such as: changing cooking modes, entering the settings menu, changing display options, and more.

7.1 ON/OFF Switch

The ON/OFF switch is used to enter and exit operation after the Pellet Pro® has been plugged in to external power.

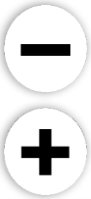
Functions

Function 1: If the controller is supplied with external power and is “off” (OLED Display is not illuminated), press the ON/OFF switch to enter standby.

Function 2: If the controller is supplied with external power and is “on” (OLED Display is illuminated), press the ON/OFF switch to enter shutdown.

Function 3: If the controller is in the “shutdown” state, press the ON/OFF switch to cancel “Shutdown” and enter “Standby”.

7.2 Decrement Switch/ Increment Switch



The decrement and increment switches can be used to increase and decrease the temperature setting by increments of five degrees. These switches can also be used in Wi-Fi Provisioning settings to enter an exit input fields. *(see section 8.2 for more information)*

The minimum and maximum set temperatures are 200F and 450F respectively.

Functions

Function 1: If the controller is in a standard operating mode, a user can press the increment and decrement switches to increase or decrease temperature by five-degree increments. **A user cannot increment or decrement temperature in Standby.**

7.2 Decrement Switch/ Increment Switch (cont.)

Function 2: If the controller is in Wi-Fi Provisioning mode, a user can press the increment and decrement switches to enter and exit input fields.

Function 3: If the controller is in Fine-Tuning mode, a user can press the increment and decrement switches to increase or decrease Fine-Tuning by five-degree increments.

7.3 Low Switch

The low switch can be used to enter the timed-low cycle during standard modes of operation. If the controller is in Wi-Fi Provisioning mode it can be used for menu navigation. (*see section 6.2 for more information)*

Functions

Function 1: If the controller is in a standard operating mode, a user can press the “Low” switch to enter the timed-low cycle.

Function 2: If the controller is in Wi-Fi Provisioning mode, the “Low” switch is used for **upward** navigation in the menu.

7.4 Mid Switch

The “Mid” switch can be used as a shortcut to modify the set temperature to 270°F. This state utilizes PID Controlling routines.

(see section 6.3 for more information)

7.5 High Switch

The High switch can be used to enter the “High” cycle during standard modes of operation.

(see section 6.4 for more information)

7.6 Feed Switch

The Feed switch can be used to prime the auger tube with pellets if the controller is in Standby mode. If the controller is in Wi-Fi Provisioning mode it can be used for menu navigation.

Functions

Function 1: If the controller is in “Standby”, a user can press the “Feed” switch to begin feeding the burn pot.

Function 2: If the controller is in Wi-Fi Provisioning mode, the “Feed” switch is used for **downward** navigation in the menu.

7.7 Meat Probe Switch

The Meat Probe switch can be pressed to change the current display mode of the controller. If pressed and in “Gauge Display”, the controller will enter “Meat Probe” display and vice versa.

7.8 Settings Switch

The Settings switch can be used to enter the settings state in standby and other standard modes of operation.

7.8 Settings Switch (cont.)

Functions

Function 1: If the controller is in standby mode and the Settings switch is pressed, the controller will enter Wi-Fi Provisioning mode.

Function 2: If the controller is in Wi-Fi Provisioning mode and the “Settings” switch is pressed, the controller will enter Fine-Tuning mode (if in Standby).

Function 3: If the controller is in a standard mode of operation and the Settings switch is pressed, the controller will enter Fine-Tuning mode.

8. Navigating the Menus

The Pellet Pro® Patriot offers two settings menus that can be accessed by pressing the settings switch. (*see section 7.8 for more information)*

Wi-Fi Provisioning Menu: The Wi-Fi provisioning menu is used to modify and view the information being used for Wi-Fi Connectivity. In this menu, you will be able to modify the following: SSID, security type, password, connectivity, and RSSI.

Temperature Fine-Tuning Menu: The Temperature Fine-Tuning menu is used to modify the amount of temperature tuning needed by increments of five degrees. This menu can be accesses during any point of operation except error states and shutdown. (*see section 6.7 for more information)*

9. Over-The-Air Updating

Please join the **Pellet Pro Patriot WiFi Controller Performance Team** group on Facebook or check the controller listing on our website for updates on the most current firmware.

PLEASE NOTE: Over-The-Air Updating can only be performed if the controller is already provisioned to a Wi-Fi network. If it is not, DO NOT perform the OTA Update.

Performing the Over-The-Air Update: (Only if new firmware is available)

1) Be sure the Wi-Fi controller is provisioned to an existing network and displays an IP address on the Wi-Fi Menu.
2) Disconnect the controller from the power source.
3) While reconnecting the power, press the “Low” and “High” buttons at the exact same time. (This is easiest with two people)
4) If the display does not show “Bootloader”, repeat this process as many times as needed.
5) Once the “Bootloader” appears, press the “Feed” button to update.
6) If there is an update available, the controller will automatically update and prompt to cycle the power. The firmware is now updated.
7) If there is no new firmware available, press the “Meat Probe” button to force the controller back to the controller’s current firmware.

DO NOT disconnect the power during the Over-The Air Update*

10. Cleaning and Maintenance

Cleaning and maintenance of the Pellet Pro® Patriot and your cooking units should be completed frequently and consistently for equipment longevity and functionality.

9.1 Cleaning and Maintenance of the Pellet Pro® Patriot

Over time, the Pellet Pro® Patriot will accumulate sawdust and debris on the PCB (printed control board) from normal use – in order to maintain proper functionality and heat-sink ability, frequently inspect the controlling unit and remove any debris with compressed air if necessary.

Additionally, inspect all Molex connections to ensure the components are connected securely.

ATTENTION **Inspection of the Pellet Pro® Patriot should be completed at least once a month. Follow all safety procedures listed in section five sub-section a. before cleaning the Pellet Pro® Patriot.**

9.2 Cleaning the Inside of Cooking Units

Over time, cooking units and their components accumulate ash and dust from frequent use of the wood pellets. In order to ensure clean combustion and proper controller function, be sure to vacuum out any ash and dust that collects in your cooking unit – this includes the burn-pot and surrounding areas.

ATTENTION **Inspection of your cooking unit should be completed at least once every three cooks. Follow all safety procedures listed in section five sub-section a. before cleaning your cooking unit.**

11. Troubleshooting and FAQs

Q: Why isn't my grill producing much smoke?
A: Even though smoke may not be visible at times, the wood pellets will provide smoke flavor for the foods being cooked. As with all other pellet grills, the amount of visible smoke is light (if you desire a larger amount of smoke, **we recommend** using the **Smoke Daddy Cold Smoke Generator**, or, the **Heavy D Stick Burner**). These devices produce smoke and can be used with wood fuels of your choice.

Q: My controller is unresponsive, what do I do?
A: Push the "ON/OFF" switch to enter the shutdown cycle. Then, unplug the controller and wait for approximately 15 seconds – after this time, plug in your controller and continue normally.

Q: Why is there smoke coming from the hopper?
A: Smoke coming from the hopper is an indication of burn-back. In order to solve this, set the controller to "standby" and activate the "Feed" switch for approximately one minute. Leave the Pellet Pro® Patriot in "Standby" until the temperature increases and decreases normally. Afterwards, set the controller to the temperature you had originally desired - this issue usually occurs when the Pellet Pro® Patriot is set at a high temperature and then quickly decreased, or, large amounts of saw dust accumulated in the burn pot.

Q: What if I want to attach the Pellet Pro® Patriot to another pellet hopper?
A: The Pellet Pro® Patriot is compatible with pellet grill brands such as Traeger, Camp Chef, Char-Broil, and other pellet hopper assemblies that use an auger motor, fan motor, RTD probe, and hot rod.
For Questions about compatibility, give us a call at 847-336-1329.

Q: Why can't the controller be provisioned to the local Wi-Fi network
A: Be sure that you are using a 2.4ghz bandwidth Wi-Fi network. It will not connect to a 5ghz or combined 2.4/5ghz network. If you're unsure that your network is exclusively 2.4ghz, please contact your internet provider.
A: When entering the local network SSID and password on the mobile app, ensure that all information is correct. This is case sensitive.
A: Ensure that the controller is within your local Wi-Fi network.

12. Disclaimer

The Pellet Pro® Patriot is used as a retrofit controller for many different brands of pellet grills. Some brands may not be compatible with the Pellet Pro® Patriot as it is designed to be used with a 2-rpm 0.4-amp auger motor and 4.8-amp fan motor. Smoke Daddy Inc. is not responsible for any misuse of the Pellet Pro® Patriot that may cause damage to the customers' grill or any other property. Smoke Daddy Inc. offers a 30-day money back guarantee where a full refund will be applied once product is received back in un-used condition. Therefore, this product is being sold subject to the following:

- This Wi-Fi Controller is provided 'as is' and with the limited warranty as stated above. Smoke Daddy Inc. makes no guaranties or warranties of any kind, either expressed or implied, including but not limited to warranties for a particular purpose, warranty of merchantability or of non-infringement of any rights of third parties."
- The Wi-Fi controller will only connect to a 2.4ghz local Wi-Fi network. If you are unsure that your Wi-Fi uses a 2.4ghz bandwidth, please contact your internet provider. It will not connect to a 5ghz or combined 2.4/5ghz network.

Experiencing Burn-back?

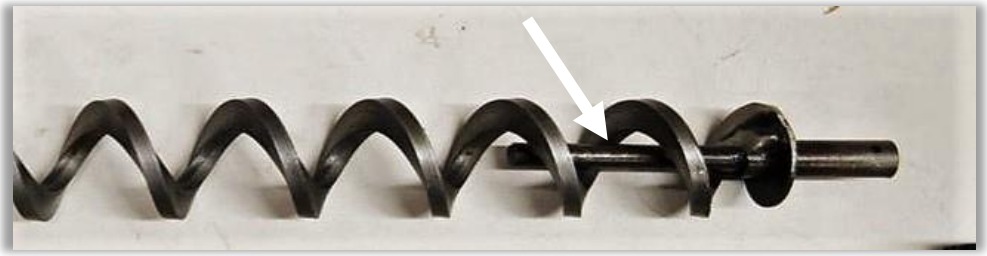
If you are experiencing burn-back, check the auger motor and fan motor. **The Pellet Pro® Patriot is designed to be used with a 2rpm .52amp auger motor and 3200rpm .48amp fan motor**. Some grill brands contain lower amperage motors which may cause this burn-back to occur.

Please give us a call at (847) 336-1329 if you are experiencing this problem.

Be Sure Your Auger Has the Limiter Rod

If you are experiencing temperature fluctuations or if the temperature is maintaining consistently higher than your setpoint, be sure that your auger contains the 1/4” diameter limiting rod. This prevents the pellets from filling the auger tube completely.

If your auger does not have this rod, call (847) 336-1329 for information.



Any Questions or Comments?

Email us at **info@smokedaddyinc.com** or call at (**847) 336-1329**.

Visit our website at **www.smokedaddyinc.com**

User Notes