# User Manual

## *Replacement Universal Control Board for Pit Boss, Traeger, Z Grills and Asmoke*

## Compatible Models:

**Traeger**:

Pro 20, 22, & 34, Texas Elite 34, Lil Tex 22, JUNIOR ELITE 20, Ridgeland, Heartland, Mesa 22, Century 22/34, Silverton (2019), and Bronson 20

**Pit Boss:**

1000 Traditions 2, 1000 Traditions, 1000SC, Rancher, Rancher XL, PB340, PB440D, PB700FB, PB700D, PB700S, PB700SC, PB820FB, PB820D, PB820FBC, PB820SC.
Tabletop Pellet Grill: Mahogany 150PPS Tabletop, Pro Series II Portable 150, PP150PPG

**Z Grills:**

450-550 SERIES: 450A, 550A, 550B, 550C
600 SERIES: L6002E, L6002B, FLAME ELITE 600D3E, L600D
700 SERIES: 700D, MASTER 700E, 7002B, 7002E
1000 SERIES: LEGEND 1000D3E 10002B2E 10502B

**ASMOKE:**

Tabletop Pellet Grill: AS300/350(Adapter Needed), AS500N, AS550/550P

## Illustration:

1. Indicates the desired temperature that has been selected. (including smoke mode)
2. Indicates the meat probe temperature when probe is connected. "noP" displayed when meat probe is not connected.
3. Indicates the current temperature of unit. "Err" displayed when ambient probe is not connected.
4. Indicates the auger motor is turning and feeding pellets to the Burn pot.
5. Indicates the igniter is on.
6. Indicates the fan is running.
7. Pellets hopper is empty.
8. Press and hold the "Prime" Button to activate an extra feed of pellets to the Burn Pot. This can be used to add more fuel to the fire just before opening the barrel lid, resulting in a quicker heat recovery time. It can also be used to add more fuel while smoking, to increase the intensity of clean smoke flavor. Overfeeding the Burn Pot may damage to grill barrel paint.
9. Press the button to switch to Fahrenheit or to Celsius as preferred.
10. Meat probe connection ports.

## Package Content

Controller X 1
Pin-SM Adapter X 1
Power Supply Socket Adapter X 1

## OPERATING INSTRUCTIONS

### 1. PID Version Setting:

This product has 3 PID versions (300, 450, 700) to choose from. Each PID version is specifically designed for grills of different cooking surface area. You can select the corresponding PID version according to the cooking surface area of your grill.

***Version 300 for tabletop grill***
***Version 450 for 400-680 square inches of cooking surface***
***Version 700 for 700-1000 square inches of cooking surface***

**NOTE:** As the grill gets to temp, The PID tries to regulate the temp by cycling the auger and fan on and off in order to give a consistent temperature, so **IT IS NORMAL** to see that the auger and fan running intermittently.

### Setting Steps:

Press and hold the "F/C" button when power off and then turn on the power, the controller will automatically enter the mode of PID version setting.
(1) The control dial points at "OFF", the screen displays none;
(2) Dial to "SMOKE", "P-300" ("P-450" or "P-700") is displayed, indicating the current PID version;
(3) Dial to "200", "C-300" is displayed, this version is suitable for tabletop grill;
(4) Dial to "225", "C-450" is displayed, this version is suitable for small grill (400-680 square inches of cooking surface);
(5) Dial to "250", "C-700" is displayed, this version is suitable for large grill (700-1000 square inches of cooking surface);
(6) Dial to other options, "— — —" is displayed, indicating invalid option;
After selecting the corresponding version according to the cooking surface area of your grill, press the "F/C" Button,"P-300" (or "P-450","P-700") will be displayed, indicating that the setting is done. Cut off the power, and then turn on it, the version number will be displayed for 1 second on the screen.
**Note:** If the dial is not on "OFF" when the power is off, "ErP" will be displayed and the controller beeps when you turn on the power.

### 2. Connected Units Fault Detection System

The system is off by default, you can Press "Prime" and "F/C" Buttons at the same time to activate/deactivate it.

- **SYSTEM ON:**

The controller can monitor the fault (e.g. bad contact, short circuit, open circuit, load current out of normal range) of its connected parts. When the fault occurs, the corresponding icon displays, the screen flickers, and the controller beeps and stop working.
(1) If the igniter rod is abnormal, "Er1" displays, the "igniter ERR" icon displays, the screen flickers, and the controller beeps;
(2) If the auger motor is abnormal, "Er2" displays, the "motor ERR" icon displays, the screen flickers, and the controller beeps;
(3) If the fan is abnormal, "ErF" displays, the "fan ERR" icon displays, the screen flickers, and the controller beeps.

- **SYSTEM OFF:**

When it is off, if all connected parts are working normally, the corresponding icon does not light on. If the system finds that some of the connected parts is abnormal, the corresponding icon flickers, indicating that there is a problem with it. Make sure wire connections are firmly connected and dry, if it still does not work, replace the faulty part.

- **NOTE:** No fan fault detection on Version 300.
- **IMPORTANT:** The fault alarm indicates that the load current of a certain part is out of the normal range, the controller will stop working when the fault detection system is on. But sometimes that doesn't mean the part is necessarily completely damaged. You can bypass the "Fault Detection" by turning off the system to see if you can keep using the unit. However you should consider replacing the fault part as soon as possible to avoid an unexpected situation where the grill is unusable when the fault part is completely damaged.

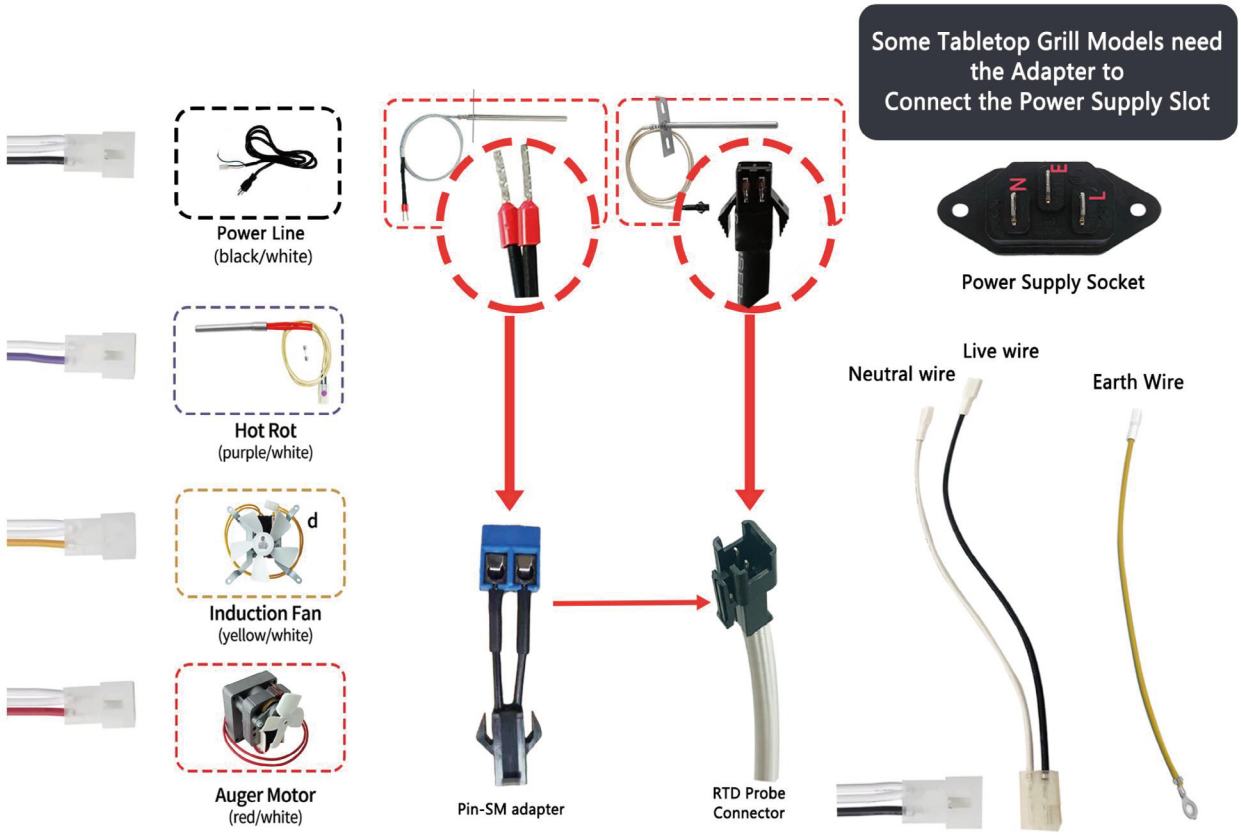
### 3. SMOKE MODE:

The Version 300 only has 1 smoke option, "S" is displayed on the screen (refer to Illustration 1.) when in smoke mode.
The Version 450 and 700 have 6 options from "P0" to "P5", "P0 (P1, P2, P3, P4, P5)" is displayed on the screen when in smoke mode.
Press the "PRIME/P-set" button to select a certain option. The intensity of clean smoke flavor increases as the option goes up.

### 4. Shut Down

Do not cut the power supply right after you turn off the unit. The button lights (illustration 7. 8.) flicker after you turning off the unit, indicating that cool down program is running in order to prevent cases such as fuel pipe scorched, ash stacking in burn pot and hopper backfire. This process will usually last 15 mins. You can unplug when the button lights flickering stops.

## 5. Wiring




## 6. ERROR CODE

| Code | Explanation | Solution |
|---|---|---|
| ErP | Rotary knob not on OFF when powering up | Turn to OFF then power up. |
| Err | RTD Sensor abnormal | Check the wiring, connect it firmly, If it doesn't work, change the damaged RTD Sensor. |
| ErH | Ambient temp overheat（>650F） | Open the grill lid to dissipate heat. |
| ErL | Ignition failed | Check 1. whether the pellets hopper is sufficient; 2. Whether the feeding pipe is scorched and blocked; 3. Whether the hatch is closed. |
| Er1 | Ignitor Abnormal | Check the wiring, connect it firmly, If it doesn't work, change the damaged ignitor. |
| Er2 | Auger Abnormal | Check the wiring, connect it firmly, If it doesn't work, change the damaged auger. |
| ErF | Fan Abnormal | Check the wiring, connect it firmly, If it doesn't work, change the damaged fan. |