

# **Solo Panel**

User Guide

## Warnings



- Make sure to use a dedicated GFCI outlet for your main power plug.
- This electric brewing panel is not considered waterproof. Place the panel in a
  protected area of your brewing space where it will not be exposed to the water and
  wort splashes and spills that are sometimes common on a Brew Day.

## Congrats on securing your new Solo Panel!

We designed our panel to be simple and easy to use. We want you to focus on making great beer and not worry about messing with settings and long menus of options.

In this guide we will go through how to set it up and all the features. From there you'll be ready to brew!

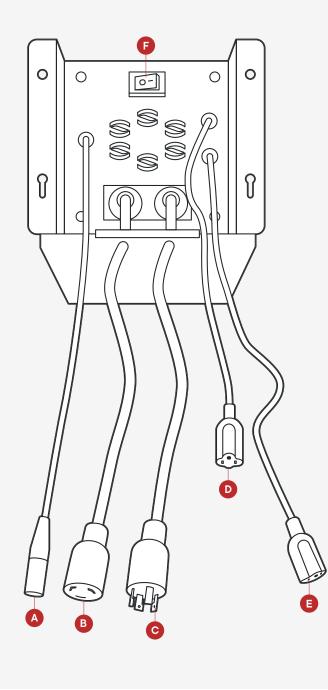
<b>D1</b> .	Setup	4.
	Panel Overview	
	Process	6.

# Setup - Electrical Setup

**NOTE:** This panel is designed to use the following receptacles -

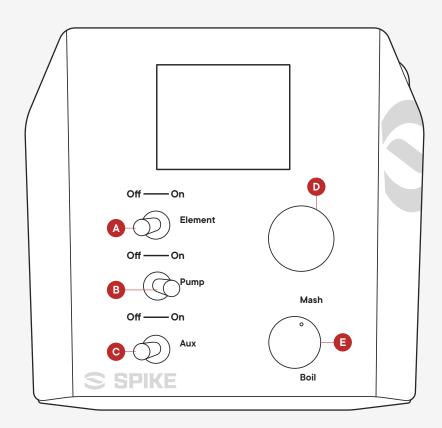
120V: NEMA 5-15 3-prong on 15A breaker 240V: NEMA 14-30 4-prong on 30A breaker Do NOT plug anything into these ports that are outside of the wattage limits

ITEM	DESCRIPTION
Α	Temperature Probe Plug
В	Heating Element Plug
С	Power Plug
D	Pump Plug
E	Auxiliary Plug
F	Power Switch



## Setup -Panel Overview

- A. Element Switch turns on your heating element. This circuit can handle heater load up to 25A / 6000W.
- **B. Pump Switch** turns on your brew pump. This circuit can handle load up to 1.5A / 180W.
- C. Aux Switch turns on whatever you connect to your auxiliary outlet. If you have our Steam Condensing Lid, plug in the submersible pump here. This circuit can handle load up to 1.5A / 180W.
- D. Temperature / Power Dial rotate the dial to adjust the temperature or power percentage. Be sure to push the dial to confirm the new set point. The number will be yellow while you adjust it. When it turns white, it is set.
- E. Heating Mode Dial change between Boil and Mash modes. For Mash Mode (typically used for mashing), set your temperature and the controller will heat up your batch to that temperature and maintain it. For boiling, use Boil Mode. When you're ready to start the Boil, press the button and set the percentage to 100% to get to a boil as fast as possible. After reaching a boil, you can lower the percentage to get a less aggressive boil (80–90%). If you are using our Steam Condensing Lid, use 40–50% power after the boil starts.



### Setup-Process

#### **Getting Started**

Your panel is ready to use out of the box! No need to autotune the panel.

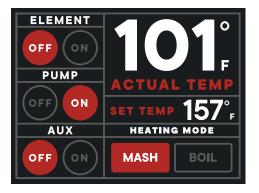
- **1.** Remove the panel from the box and place it in your desired location.
- 2. Attach your element cord to the element and control panel. These items are sold separately.
- **3.** Connect your pump to the panel in the labeled outlet.
- **4.** Connect your temperature sensor to your panel and to your temperature probe (sold separately).
- **5.** Lastly, plug the panel power cable into the wall and panel.
- **6.** To power the panel, flip the switch underneath the front. The display will turn on and after a few seconds the home screen will appear.

#### PRO TIP:

- Make sure your temperature probe quick connections are clicked in all the way.
- The panel has an internal cooling fan, which creates a soft hum when turned on.
- Do not turn on your element unless it is submerged in liquid.

#### **Controlling Your Mash**

Ready to Mash in? The panel has 2 temperature control options, Mash and Boil. "Mash Mode" allows you to set a specific temperature, and the heating element will hold the liquid at that temperature.



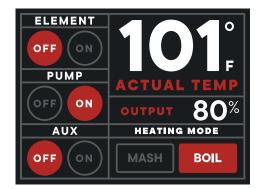
- 1. Rotate the small knob in the lower right hand corner to MASH. The display screen on your panel will highlight "MASH" as shown in the Graphic.
- Rotate the larger knob to adjust your "Set Temp". The value will blink yellow.
- Once the temperature value you want is showing, push the knob down one time. The value will no longer blink yellow. This means the value is entered.
- **4.** Turn your element to "ON" using the dedicated toggle switch. Your element will now heat to the set temperature.

#### PRO TIP:

- The controller can be set from 0-215F/0-105C
- Your element will not turn on in "Mash Mode" until your temp probe is plugged into the panel and reading the temperature properly.

#### **Controlling Your Boil**

Ready to boil? Be sure to change your setting to "Boil Mode" which will allow us to control heating output by percentage instead of actual temperature. The panel will fire the electric heater at the % duty cycle displayed, which allows your kettle to reach a rolling boil quicker than if it were set to temperature control mode.



1. Rotate the small knob in the lower right hand corner to BOIL. The display screen on your panel will highlight "BOIL" as shown in the graphic.

### Process -Solo Panel

- 2. To adjust the desired % output, rotate the large knob. The value will blink yellow.
- **3.** When the % output is showing your desired % on your panel, push the knob down one time. The value will no longer blink yellow. This means the value is entered.
- **4.** Turn your element to "ON" using the dedicated toggle switch. Your element will now heat to the set output.

**PRO TIP:** The controller can be set between 0–100% output.

#### **Changing the Temperature Display Units**

The Solo panel can display temperature in Fahrenheit and Celsius.

#### DEVICE SETTINGS

UNIT	F-degree
TEMP OFFSET	O°F
ABOUT	

#### BACK TO HOME SCREEN

- 1. Push down the large knob for 3 seconds. The "DEVICE SETTINGS" screen will appear.
- **2.** Rotate the large knob to highlight the "UNIT" line.

- **3.** Press the knob to move to the units you are looking for. You will see the screen display switch from "F-degree" to "C-degree" depending on what you choose.
- **4.** Use the knob to highlight "BACK TO HOME SCREEN". Press the knob down to return to the main screen.

#### Adding a Temperature Offset

The Solo Panel can apply a temperature offset to the sensor value displayed on the main screen. This is used to accommodate differences sometimes found between the temperature sensor and the middle of the grain bed.

#### DEVICE SETTINGS

UNIT	F-degree
TEMP OFFSET	5°F
ABOUT	
BACK TO HOME SCREEN	

- 1. Push down and hold the large knob for 3 seconds. The "DEVICE SETTINGS" screen will appear.
- **2.** Rotate the large knob to highlight the "TEMP OFFSET" line. Press the knob down once.
- **3.** Rotate the knob to the desired offset value. The value will blink yellow.
- 4. Once your desired value is showing on your panel

screen, press the knob down one time. The value will no longer blink yellow. Your value is set.

**5.** Use the knob to highlight "BACK TO HOME SCREEN". Press the knob down. You will return to the main screen.

**PRO TIP:** The panel can adjust your temp offset +/- 25 degrees

#### Using the Toggle Switches

There are three toggle switches in your panel – Heating Element, Pump, Aux. These switches act as simple controls to turn your plugged in devices on and off. The display screen will correspond and highlight to show which mode of ON/OFF you are in.

NOTE: The Heating Element will not switch on and operate in MASH mode unless there is a proper temperature sensor plugged in reading the correct value. This is a safety precaution to make sure there is always an acceptable value within range for the temperature control algorithm to function properly.