



2 ELEMENT PANEL SETTINGS

PID AND TIMER OVERVIEW

Grounded Brewing Technologies

Thanks again for your support!

MANUAL MODE

We have shipped the panel with the Boil PID ready to be placed into manual mode for better boil control.

To place in manual mode hold the <<PF button for at least 2 seconds until you see MANU displayed in yellow on the display.



This will then set the PID to a percent output of the heating element rather than setting the PID to a specific temperature.


With this function in place you can then set the percentage to 100.0 until boil is reached. Depending on the rest of your equipment, anywhere from 60 to 80 percent should be adequate to maintain a rolling boil.

To get back out of manual mode just hold the <<PF button for at least 2 seconds until you see MANU go away. This will be back in temperature set mode.

When having manual mode enabled you can only use the UP and DOWN arrows to set the output percentage if in manual mode as well as the temperature setting if in temperature set mode.


If manual mode is not enabled you can move through the temperature settings using the <<PF button to adjust each of the three digits.

To disable manual mode press and hold the  button for at least three seconds cycle through using the button  until you reach AMōV. Hold the DOWN arrow until -169.



This takes you into the advanced settings mode. Press  until you PF. A-M will be the setting it is on now, but if you hit the UP or DOWN arrow until you reach SHIFT this will disable manual mode.





To get back to the main screen press and hold the  button for at least 2 seconds. Then press and hold it again for at least 3 seconds and this will return you to the main menu.

TEMP PROBE CALIBRATION

To calibrate your temperature probe tap the button  and this will access the operation mode level. Cycle through the menu by pressing the  until you reach $\bar{L}NS$ setting.


Using the UP and DOWN arrows you can adjust for temperature offset.

The best way to calibrate your temperature probes is to submerge the ends in a glass of ice water. This water/ice mixture should give a reading of 32°F or 0°C. Any tenth of a degree or full degree off can be added or subtracted by the $\bar{L}NS$ setting.



AUTO-TUNE– (Make sure to switch on element while auto tune is taking place)

Auto-tune is highly recommended before brewing to allow the Boil and HLT PIDs to learn your system.

To run an auto-tune cycle press  then  until AT OFF appears. Then press the UP arrow to display At – 2.



Press the  button again to return to the main screen. Wait until TUNE in yellow disappears for auto-tuning to be completed.

MANUAL MODE PULSE SETTING


Press and hold  for at least 3 seconds. Cycle through using  the button until you reach the CP setting. Using an SSR it is recommended to be around 12 or higher. The way this works is the PID will pulse the element on for half of the set value and off for half the set value. So if it is set at 12 it will be on for 6 seconds and off for 6 seconds.



PID ALARM SETTINGS


Temperature Range Setting – Wanting to hold at 150°F to 152°F

With the PID temperature alarms the best settings that we have found to use are by holding the button for at least 3 seconds.  Cycle through using the  button until you reach ALT1.



Hit the UP arrow until you reach setting 1. Next, hit the  button once until you reach AL1H set this 0.1.


Hold the  button for at least 3 seconds to get back to the operation menu. Hit the  button until you reach AL1H, set this to 1 and then set AL1L to 1.


Hit  until you get back to the main menu. Set the PV setting to 151°F.

This means the alarm will trigger when the temperature drops below 150°F and when the temperature rises above 152°F.

Temperature Setting Lower-Limit – Wanting to hold above 65°F.

For this you will set ALT1 to 3 and ALT2 to 0. Set AL1H to 0.2.

Hold the  for at least 3 seconds to get back to the main operation menu.


Hit the  button until you reach ALL1, set this to 1.


Set PV to 65°F.

This means the alarm will trigger when the temperature drops 1 degree or more below 65°F.

Temperature Setting Lower-Limit – Wanting to hold below 150°F.

For this you will set ALT1 to 2 and ALT2 to 0. Set AL1H to 0.2.

Hold the  for at least 3 seconds to get back to the main operation menu.

Hit the  button until you reach ALH1, set this to -1.

Set PV to 150°F.

This means the alarm will trigger when the temperature rises 1 degree or more below 150°F.

Any questions on this please contact us at info@groundedbrewingtechnologies.com!

TIMER SETTINGS

With the timer, the only settings that should be adjusted from what it is shipped at would be if you would prefer the timer to count UP or DOWN. The timer ships with the setting of counting DOWN.

To change this setting, hold the MODE button for at least 3 seconds. Once in the settings screen press the MODE button until you see timm. Press the far right UP or DOWN arrow to adjust this setting.

The other setting that can be adjusted is the color display of the timer. To change this setting continue to press the MODE button until you reach the Cōlōr setting. The included instruction manual will let you know what equals what color combination.

Anything not covered here you would like to know?
Contact us at info@groundedbrewingtechnologies.com!

Cheers and Happy Brewing!

