Mission Statement:

To provide the best product at the best price and provide superior customer service for all your Smokin-It needs!!

Innovative products

No retail mark ups or middleman

Auber "Autotune" Instructions

Your Auber PID comes pre-tuned, so to get the best performance for your Smokin-It ® smoker, we recommend you perform an autotune. This will set the PID unit to *your* smoker and give you consistent results.

Autotuning sets the "P," "I" and "D" parameters, based on your particular smoker model. The procedure is the same for every Smokin-It ® model smoker.

Tuning is the process that matches the control characteristics of the controller to the heating characteristics of the cooker. The controller is said to be tuned to the cooker when its memory is programmed with values telling it how fast the cooker warms up, cools off, and how efficiently it transfers heat.

Autotune must be performed with the PID unit and smoker setup for 'actual' cooking conditions. This procedure uses a 'simulated' cooking setup and is intended only for tuning. The following steps apply to all models:

1. Program the PID as follows:

C01	140	E01	t	t01	.5
C02	225	E02	t	t02	2
C03	140	E03	t	t03	1
C04	0	E04	t	t04	0
C05	0	E05	t	t05	0
C06	0	E06	t	t06	0

We are programming the Auber using time for each step. This will eliminate the need for the meat probe (Probe 2). If you are performing the tuning while smoking something requiring a meat probe, substitute your own programming and use the meat probe. The idea is to tune using actual cooking conditions.

2. Prepare the smoker. You can use a few bricks, or a large metal pan of sand for the 'heat sink' (we are simulating meat, so we need something to will absorb heat in the smoker). You should also use a water pan on the floor of the smoker, next to the wood box. We often use water pans during smoking, so we want to tune with one in place. Foil the bottom of the smoker and the lid of the smoke box, as you would during an actual smoke. Remember to poke a hole in the bottom drain/air hole. **You do not need to add wood during the simulated cook.** Place the bricks (or pan of sand) on the highest shelf possible. Temperatures are most consistent near the top of the smoker.

    a. Plug the smoker temperature probe into the Probe 1 outlet and insert it through the vent hole in the top of the smoker. Attach the probe on the same shelf as the 'simulated' meat, but not touching the bricks or pan of sand.

    b. Make sure your drip pan is in place, below the smoker. This has an effect on airflow into the smoker, so be sure it's inserted.

3. Plug the smoker into the PID and plug the PID into the power outlet. Turn the PID on, and use the following procedure to begin the tuning process:

    a. Press the **SET** button for 4 seconds, or until you see **LCK** displayed in the left window

    b. Press the **+** button until **166** reads in the right-hand window

    c. Press **SET** again to enter the PID setting menu. Continue to press **SET** until **At** is displayed (3 more times).

    d. Press **+** to change the parameter in the right window to **1**

    e. Press **SET** again 4 more times, until the box temperature displays in the left window (should be close to the ambient air temperature

At this point, the left display will flash between **At** and current box temperature**.** Your PID is now in the process autotuning itself to your smoker. Let the program run until it is no longer flashing **At** in the window. The length of time for this process varies; based on how quickly the PID unit adapts to how fast the smoker heats up and cools down. This can take several hours depending on the ambient conditions.

Once the autotune is complete, we recommend writing down the **P**, **I** and **D** settings. To retrieve these settings, go back into the PID setting menu the same way you did in step **3a** above. Once you enter the 166 code scroll through each setting by pressing **set**, but do not change anything. Write down the values as you see P, I and D in the left window as these are your new autotune settings.

Temperature probes and placement:

The Auber PID comes standard with a removable probe. Probe placement can affect the reading received by the PID, so you want to be as consistent as possible when placing the probe in the smoker. It is recommend placing on the highest shelf, but make sure it's at least 2 inches away from the cold meat. If it is too close, it will think the temperature is lower than actual temperature and will give a false reading to the PID. After autotuning, you want to try and place the probe in the same location it was during the autotune.

One way to eliminate the inconsistency of probe placement is to upgrade your smoker to the Auber Wall Mount temperature probe.

WS-SENSOR05

The Auber wall mount probe has several benefits:

You never have to remove it. This eliminates the possibility of damaging the probe by getting water in it. Simply wipe it down, after use, with a damp cloth. There is no way to get water into the probe.

The autotune settings remain absolutely consistent. You remove the variable of probe placement from the equation, so each smoke is as accurate as possible. Temperatures typically hold +/- 1° using the wall-mount probe.

Because the probe is always with the smoker, it's always easy to hook-up. Just plug it into the PID and you're ready.

Here is a link to an installation post on www.smokinitforums.com: http://smokinitforums.com/index.php?topic=1594.0

We hope you enjoy your Smokin-It ® smoker, and hope the Auber PID helps you make a great smoker even better!

***** NOTE: Please write down your values while setting up your PID***

The Smokin-It Team~

Check our FAQ, 'For the Customer' and the Smokin-It customer forum (all on our website) for recipes and information!!
Please contact us at smokin.it.info@gmail.com if you have any questions or concerns