Part V: Tips, Maintenance, FAQs and Troubleshooting:

Tips and Maintenance

- 1) Always <u>forward think your roast</u> by 10-15 seconds. This is the amount of time that is required to start reversing the trend from roasting to cooling.
- 2) After five roasts cycles, always perform a system self clean. Insert the cylinder (empty), chaff tray, close the front door, press ½ then Start. Let the system complete an entire roast & cool cycle. We also suggest a quick clean with Simple Green at this time as well. Failure to perform this maintenance procedure will in time adversely affect your roaster's functionality and longetivity.
- 3) The following times listed are guidelines to better anticipate a roast hitting 2nd crack. The times shown are approximately what it takes from start of the first crack/snap of 1st crack to the start of 2nd crack for regular coffee (decaf gets darker quicker). This guideline is especially important to know when using Profile 2/ P2. We have found over the course of many tests using P2 it will give you only a few 1st cracks then go silent, moving gently into 2nd crack in the times shown below. We suggest adjusting times as close to the following once you hear the first cracking sound of 1st crack. This should allow you to more accurately control your roast.
 - a) 1/4 lb 1:30 minutes
 - b) ½ lb 2:10 minutes
 - c) 1 lb- 3:10 minutes
- 4) Roasting times may vary due to voltage, but a good understanding of the A, B, C, D (Program /Times) to Profiles P1, P2, etc., is as follows:

A to P1

B to P2

C to P3

D to P4 (subtract 30 seconds using)

D to P5 (add 30 seconds using)

5) Associated initial start times of A, B, C, D to weights 1/4, 1/2, 1 (see Chart on next to last page)

| 1/4 | 1/2 | 1 |
|-------|---------------|---|
| 8:30 | 12:00 | 18:00 |
| 9:30 | 13:00 | 20:00 |
| 10:00 | 14:00 | 21:30 |
| 10:30 | 15:00 | 23:00 |
| | 9:30 10:00 | 8:30 12:00 9:30 13:00 10:00 14:00 |

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6) In order to prevent possible issues with over roasting, we have built in <u>maximum roast times</u> associated with each profile. If you should happen to be roasting at P1, the system is designed to prevent you from allotting more than 20:30 minutes roast time. This is a safety feature. The same feature is true for the other profiles but with longer times. See Chart below:

| | 1/4 | 1/2 | 1 |
|----|-------|-------|-------|
| P1 | 10 | 13:30 | 20:30 |
| P2 | 10:30 | 14:30 | 22:30 |
| P3 | 11 | 15:30 | 23:30 |
| P4 | 11:30 | 16:30 | 24:30 |
| P5 | 12:30 | 17:30 | 25:30 |

^{*} When using P1 or P2, in certain instances, Program times C and/or D, may appear not to function. This was designed to occur. In those instances C and/or D's pre-programmed start times exceed the maximum allowed roast time for that profile.

7) For <u>quicker cool down</u> an option does exist, should the user decide take the following measure. After the beans have ceased snapping (approximately 1:30), while keeping the system on cool, simply open the front door. Doing this will facilitate a greater airflow over the beans. The one drawback is small amount of chaff will find it's way past the chaff tray.

NEVER STOP THE SYSTEM IMMEDIATELY AFTER COMPLETING A ROAST TO REMOVE THE CYLINDER AND COOL THE BEANS. DOING A SYSTEM STOP BEFORE REASONABLE COOLING COULD DAMAGE THE SYSTEM'S INTERNAL ELECTRONIC COMPONENTS.

8) Adjusting profiles by time additions and subtractions at proper times can be used to slightly alter the pre-programmed profiles. You can shorten or lengthen the middle leg of a profile or end leg of a profile in terms of percentage to total time. The adjustments can be made by prior to or just after starting the roast cycle.

Example: P5 is 33% of each power application throughout the entire roast. Thus if you were to set the timer at 6:00 minutes each leg of the profile would last approximately 2:00 each.

However if you were to set the timer for 6:00 minutes to begin with, then upon starting a roast add 2:00 minutes you will have immediately reduced the middle leg's total percent of total roast to 25% versus the original 33%.

Conversely let us say you want to lengthen the middle leg and shorten the end leg of the roast. Before starting press the timer to read 10:00. The system then reads it is to run approximately 3:20 per leg. Once starting however reduce the time to 8 and you will have the first legs of the roast at 3:20 each but the final leg at 1:20.

If you wish to shorten the roasts middle leg percentage to total and lengthen the end leg, reduce times to start, then once started add time back.

If you wish to lengthen the roasts middle leg percentage to total and reduce the end leg, add time to start, then once started reduce the time back.

The possible variations number in the hundreds once you understand the roaster and the beans you are roasting.

*** DO NOT overuse this option by pressing the – (minus sign) 24 times before start then pressing + (plus sign) 20 times after start. You will shorten the life of the switches. This is intended for MINOR adjustments.

Part V: Tips, Maintenance, FAQs and Troubleshooting continued

| My system stonged and an arms | | |
|---|--|--|
| My system stopped and an error message reads: 1) Err1 2) Err2 & Err3 3) Err4 4) Err5 5) Err6 If an error message appears, immediately cease using the Behmor and contact tech support In cooling I noticed a little smoke leakage | 1) Thermostat is damaged or roaster has been stored in sub 45F enviro 2) Coffee beans have burned or the oven chamber has experienced an unacceptable rise in heat 3) Draw fan is damaged 4) DC fan is damaged 5) DC motor (cylinder) is blocked or damaged. We have worked to seal the door area and other tiny cracks, but to totally seal the system is impossible. On rare occasions, you might see a wisp of smoke | 1) Call or email tech support 2) Let system cool for a minimum of 3 hours, then retry. Should problem persist, call or email tech support for immediate service 3) Call or email tech support 4) Call or email tech support 5) Call or email tech support tech@behmor.com We advise gently cleaning the door seal on a regular basis with a damp cloth to ensure no chaff or other particulate matter prevents a proper seal. |
| When roasting, I noticed a little smoke from the exhaust. | Occasionally, whether due to the quality of the beans, the darkness of the roast or even the quantity/darkness of the roast, small amounts of smoke may be seen. During the first couple of roasts there may be a little smoke as the system "seasons" itself. Home wiring could be old and doesn't supply a sufficient amount of voltage to run the system properly. | reduce the quantity of that type of bean when it is noticed it tends to smoke. On subsequent roasts the smoke should go away. Try different power outlet whose line may carry a greater amount of voltage |
| Sometimes I notice, even when I've added time I can't complete a roast. | In some instances and in some homes there will and can be voltage issues that are outside our control. | Try using a different outlet. In some cases an outlet only a matter of a few feet away can and will have better voltage input and sustainability. Try roasting at a different time of day. As is true throughout the country during summer the afternoons are when the largest power consumption occurs |
| I tried the above and I still have the same problem. | In older homes where the wiring goes back to the copper clad aluminum days or further back where you have consistently low voltage. | If wanting to roast the maximum we suggest reducing the quantity from 16 ounces to 13-14 ounces yet still using the 1 pound programs. If you want to roast using ½ pound setting with either profiles (P2-5) we suggest using 6 ounces of green coffee. |
| While the chamber was still warm I opened the front door and noticed the gasket is wavy in appearance and not glued down | The gasket is attached using tiny nipples and not glued so the expansion and contraction caused by heat up and cool down has no ill effects on the materials | Do nothing this has been designed to be as it is. |
| When the cylinder is turning I hear squeaking. | Like any metal to metal rubbing, in time noises can be emitted. | Take a Q Tip or similar, place a drop of <u>food</u> <u>oil</u> (olive, veg etc.) on it. Now rub the Q Tip in the grooved area (round peg) of the cylinder |

Part V: Tips, Maintenance, FAQs and Troubleshooting continued

Only use the Behmor 1600 a well-ventilated environment and maintain at least 18"(eighteen inches) of clearance on all sides, this includes 18" clearance from the top and exhaust the vent.

In Case of Fire: Never open the chamber door.

The Behmor 1600 should automatically react to fire and shut down. Once the system has performed a shutdown, unplug the roaster and, if possible, move it outdoors for proper venting. Causes of such a fire would likely be traced back to using a high chaff coffee or allowing a roast to go past 10 seconds into 2^{nd} crack. As instructed earlier, we strongly advise against the use of high chaff producing coffees or roasting past 10 seconds into 2^{nd} crack.

If the system should not shut down because of fire, as instructed earlier in the Important Safeguards, stop the roast and unplug the roaster. Then move it outdoors when safe to do so.

AGAIN NEVER open the chamber door if a fire occurs.

For any other problems, please email tech support-tech@behmor.com. Please tell us what you were doing, where you were in the roasting process-as best you can, and identify the issue as much as possible. Please also include phone number or other contact information so customer service can respond.

Higher resolution Profile Charts are available at our website

Please remember to register your roaster and check for manual updates monthly.

Online registration: www.behmor.com/behmor_register.html

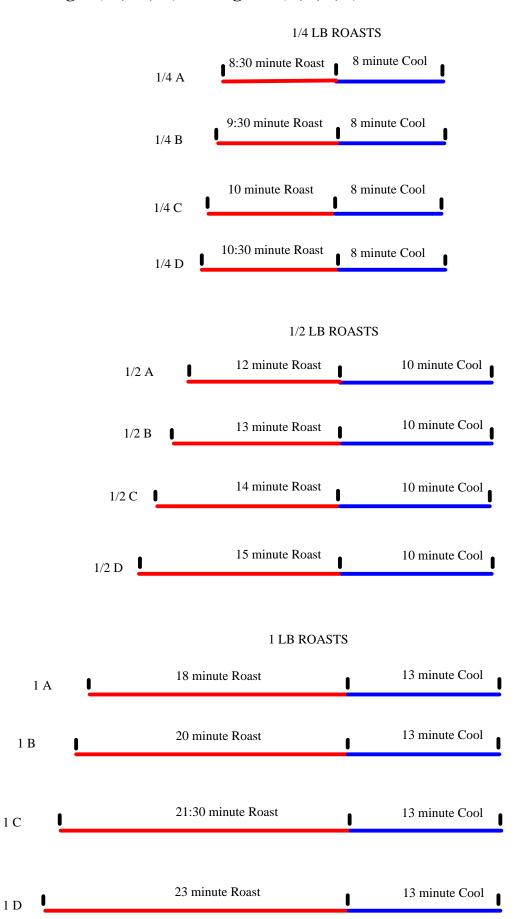
Be sure to include you email address to receive any updates regarding manual changes, special promotions or other items.

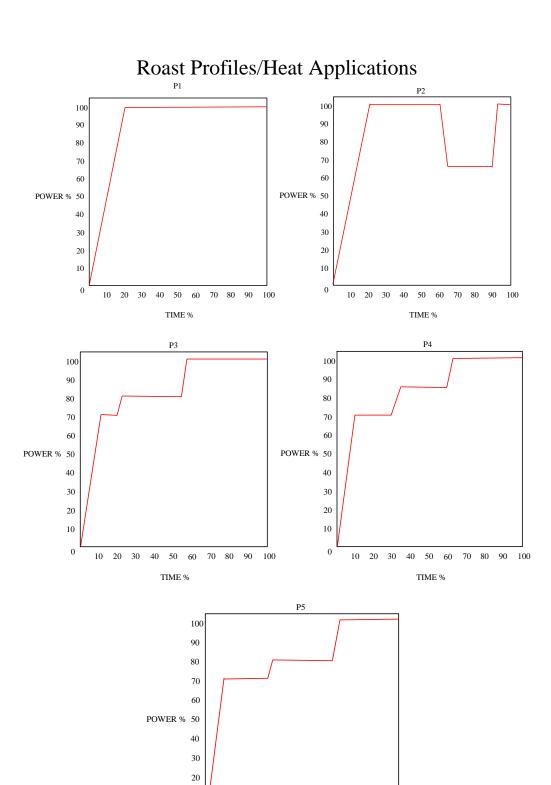
Manual updates: www.behmor.com/manual.html

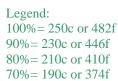
REMEMBER

Never leave the roaster unattended when in use !!!!

Weight (1/4, 1/2, 1) to Program (A,B,C,D) Roast Times*







** above profile data is for illustrative purposes only

TIME %

10