MVP HYDRA BASIC OPERATION

You are one of the very first recipients of this new machine! As we are still completing the updates to the Owner's and Tech Manuals, we wanted to provide some basic operating instructions to help you understand the differences between this machine, and the Hydra you are familiar with. We have included the written instructions below, as well as a more graphic **Quick Start Guide** for ongoing reference.

The Factory Settings for your machine are as follows:

Brew Group Temp: 203°F Steam Tank Temp: 250° F Brew Mode: **M** (Fully Manual)

Save Mode: Locked Temp: Fahrenheit

Enabled Programs: 1 & 2 (of 6)

PROGRAM 1:

Preinfusion 4 seconds Ramp Up: 2 seconds Ramp Down: 92% Total Water Count: 280

PROGRAM 2:

Preinfusion 4 seconds Ramp Up: 2 seconds Ramp Down: 92% Total Water Count: 380

Now, we suggest that you approach the machine and try the following steps, to begin to get a feel for it. You can refer to the written instructions below, or skip to the Quick Start Guides on pages 7-8 if you prefer a more visual process.

BREW HANDLE MOVEMENTS

We use the word SHIFT to indicate a quick press to the brew handle, and HOLD when you need 2.5 seconds or longer to advance or change modes. NOTE: the brew handle now bounces back, rather than staying in a fixed position

SHIFT Left- Start Brew

SHIFT Right- Stop Brew * YOU CAN SHIFT RIGHT TO STOP BREWING AT ANY TIME

HOLD Left - Cycle through Brew Modes (M - MP - VP on lower left corner of the timer)

HOLD Right - Save Icon Flashes in the lower right corner, as well as the Red Yield triangle in the center. This indicates that SAVE mode is currently **locked**

Now that you feel how the Brew Handle works, let's engage with the different Brew Modes.

ABOUT THE BREW MODES

M = Manual Mode: The barista manually advances every brew stage

MP= Manual Program: The settings for Pre Infusion, Ramp Up, are set. The barista manually Ramps Down, and stops the brew cycle (Just like the past Manual Hydra models)

VP= Volumetric Program: The barista only needs to start brew function. The rest is determined by the selected program (As with the past Sabre models)

The machine arrives in M mode, so you can see and feel the advance of each brew stage. Give it a try without any coffee first. Watch as each shift left advances the brew graph to the next column.

BREWING IN M MODE: (Reference Row 1A on the Quick Start guide)

- 1) Shift the brew handle to the left to begin brewing at line pressure **NOTE: the brew handle now** bounces back, rather than staying in a fixed position
- 2) Advance to Ramp Up by pressing left again
- 3) Shift left to get to 9 Bar extraction
- 4) Shift left one more time when you want to ramp back down to line pressure
- 5) Shift right to stop

Now, change the Brew Mode to MP, and run program 1.

CHANGING BREW MODES: (Reference row 1C on the Quick Start Guide)

- 1) Hold brew handle left for 2.5 seconds and you will see the mode change MP
- 2) Holding for another 2.5 seconds will advance to VP
- 3) and another 2.5 seconds will get you back to M
- 4) Simply let go when you land on the mode you want

Brewing in MP Mode: (Reference Row 2B of the Quick Start Guide)

- 1) Shift the brew handle to the left to begin Pre Infusion
- 2) When set Pre Infusion time ends, Ramp Up time automatically begins
- 3) When Ramp Up time ends, full brew pressure automatically engages
- 4) Shift left to Ramp Down, when desired
- 5) Shift right to stop brewing

You will see that the machine keeps running until you advance through Ramp Down stage and once more to stop the brew cycle.

Now, change the Brew Mode to VP by holding left again. Choose Program 1 or 2 by shifting right. You will see, as these are the only programs enabled, they just toggle back and forth as you repeatedly shift right. Run one, and then the other, in any order. Once you have run one program, shift right to switch to the other. The Total Water Count on program 2 is 100 counts higher, so you will see that shot run longer.

Brewing in VP Mode (Reference Row 2C of the Quick Start Guide)

- 1) Shift the brew handle to the left to start the shot
- 2) The program will then take you through all brew stages, and stop automatically

VP Mode does it all for you.

Next, change the Brew Mode back to M by holding left again. Now we can set you up to work on your own recipe!

Pick up the wired controller, scroll through & read the screens to learn your way around a bit. You will need to get to Level 2 Menus to enable Save Mode, and any more of the 6 programs you might wish to add.

To enter Level 2 menus:

- 1. Press and release the home button in the upper right to return to the "temperature overview" screen
- 2. Press and hold the home button, while you also press and release the 3rd line button (lower left side)
- 3. Release the home button

You should end up here:



- 1. Push the button to the left of the word LOCKED to select that line
- 2. Scroll to change to UNLOCKED
- 3. Push the middle left button again to deselect

Scroll down to reach the next page.



This is where you choose how many programs you would like activated on each group. What you set on this screen will apply to all groups. As you see, 1 & 2 are already enabled. If you would like to add or remove any options, you can do so here. Program 1 cannot be deactivated.

Scroll down until you get to the option to *Return to Operation*. Push the button to the left of that text and you will go back to the *Temperature Overview Screen* (Home).

Prepare your coffee.

You should still be set to M mode. Brew in M Mode until you get to a shot that looks and tastes right for your roast. When you achieve a recipe you would like to save, here is what you do.

SAVING A RECIPE: (Reference row 1B on the Quick Start Guide)

- 1) Hold the brew handle to the right for 2.5 seconds to enter SAVE mode. You will see the green disk appear on all groups
- 2) Shift right to advance through the enabled programs each shift will move to the next enabled program. Stop when you get to the one you want
- 3) Shift left to save the program to that position. You can repeat this at any position on any group
- 4) Hold right for 2.5 seconds to exit SAVE mode

You are also able to reference *and fine tune* the parameters -Pre infusion, Ramp Up time, Ramp down %, and **Total Water Count - on the hand held controller. The addition of Total Water Count is exciting because it illustrates the number of approximate pulses of the flow meter per ml/g. So, if for example, you want to simply add a gram more water to your recipe, you just add 5 counts to the TWC. Adjustments made with the hand held controller remain until a new program is saved to that position.

Now, if you would like your team to be able to simply run this program as you have set it, you can change modes to VP for maximum ease of repeatability.

Hopefully this step by step tour gives you the foundation you need to use the MVP Hydra to your desired end.

On the following pages you will find:

- A description of the new timer
- Our graphic Quick Start Guide for ongoing reference and training
- A list of updates to the Hand Held Controller (in comparison to the most recent Hydra)

THE TIMER:

- 1) There is a numeric counter that starts and stops with brew function, in a new one piece housing!
- 2) The bottom left corner shows which brew mode is currently selected. **M** (fully Manual), **MP** (Manual Program) or **VP** (Volumetric Program)
- 3) The four column Brew Graph at the bottom center shows the 4 stages of brew function- Pre Infusion, Ramp Up, Pump Pressure, and Ramp Down.
- 4) The dots that frame the counter show enabled programs (6 available) *note that program lights are disabled in **M** mode, unless you are saving the last shot brewed
- 5) There is a disk icon that comes up in the bottom right corner when you hold right to enter save mode.

 An arrow pointing left shows that you shift the brew handle left to save to the displayed position
- 6) A red triangle flashes in the center when flow of water is blocked, or if Save Mode is locked, or if the Low Level probe in the steam tank is dry





M Manual \bowtie Manual Program Volumetric Program

1A

1B

1C



Manual **>>** Manual Program Volumetric Program

2A

2B

2C

MVP HYDRA

UPDATES TO HAND HELD CONTROLLER SCREENS

1.2 (Menu Level 1, page 2)

- Current program # is now listed
- "Stage 1" has been renamed to "Pre-infusion"
- "Stage 2" has been renamed to "Ramp Up"



1.3

- Current program # is now listed
- "Bypass" has been renamed to "Ramp Down"
- Brew volume can be changed manually
- To add one ml, add about 4.5 counts



All auto-backflush selectors are all now on a single page



To enter Level 2 menus:

- 1. Press and release the home button to return to the "temperature overview" screen
- 2. Press and hold the home button, while you also press and release the 3rd line button (lower left side)
- 3. Release the home button

2.1

We added an option to lock the ability to save a program from the group head



- Up to 6 programs can be made available on each group
- Program #1 cannot be deactivated
- Deactivated programs retain any settings stored, but are not available for further saving or brewing replay until reactivated. The program location is also skipped (on the timer) when cycling through programs with the right press



- This screen only appears on machines with a line boost system installed
- [AUTO] runs the boost motor when any water valves are open
- [ON] runs the boost motor until a 5 minute time-out
- [OFF] stops the boost motor from running at all



The "puck temp" line has been removed



2.6

Steam tank fill delay setting has been relocated to this screen



2.8

- Power save mode "start" and "end" time have been changed to "cool down" and "heat up" time to reduce confusion
- Changed the screen that appears while power save mode is active to show the heat up time



As the arrow keys are now used to move between screens, you must first select [SCROLL] before you can use the arrows to view other errors



