BUNN®

H5E-DV PC H5EA PC



INSTALLATION & OPERATING GUIDE

BUNN-O-MATIC CORPORATION

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To ensure you have the latest revision of the Operating Manual, or to view the Illustrated Parts Catalog, Programming Manual, or Service Manual, please visit the Bunn-O-Matic website, at www.bunn.com. This is absolutely FREE, and the quickest way to obtain the latest catalog and manual updates. For Technical Service, contact Bunn-O-Matic Corporation at 1-800-286-6070.



BUNN-O-MATIC COMMERCIAL PRODUCT WARRANTY

Bunn-O-Matic Corp. ("BUNN") warrants equipment manufactured by it as follows:

- 1) All equipment other than as specified below: 2 years parts and 1 year labor.
- 2) Electronic circuit and/or control boards: parts and labor for 3 years.
- 3) Compressors on refrigeration equipment: 5 years parts and 1 year labor.
- 4) Grinding burrs on coffee grinding equipment to grind coffee to meet original factory screen sieve analysis: parts and labor for 3 years or 30,000 pounds of coffee, whichever comes first.

These warranty periods run from the date of installation BUNN warrants that the equipment manufactured by it will be commercially free of defects in material and workmanship existing at the time of manufacture and appearing within the applicable warranty period. This warranty does not apply to any equipment, component or part that was not manufactured by BUNN or that, in BUNN's judgment, has been affected by misuse, neglect, alteration, improper installation or operation, improper maintenance or repair, damage or casualty. This warranty is conditioned on the Buyer 1) giving BUNN prompt notice of any claim to be made under this warranty by telephone at (217) 529-6601 or by writing to Post Office Box 3227, Springfield, Illinois 62708-3227; 2) if requested by BUNN, shipping the defective equipment prepaid to an authorized BUNN service location; and 3) receiving prior authorization from BUNN that the defective equipment is under warranty.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ANY OTHER WARRANTY, WRITTEN OR ORAL, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF EITHER MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. The agents, dealers or employees of BUNN are not authorized to make modifications to this warranty or to make additional warranties that are binding on BUNN. Accordingly, statements by such individuals, whether oral or written, do not constitute warranties and should not be relied upon.

If BUNN determines in its sole discretion that the equipment does not conform to the warranty, BUNN, at its exclusive option while the equipment is under warranty, shall either 1) provide at no charge replacement parts and/or labor (during the applicable parts and labor warranty periods specified above) to repair the defective components, provided that this repair is done by a BUNN Authorized Service Representative; or 2) shall replace the equipment or refund the purchase price for the equipment.

THE BUYER'S REMEDY AGAINST BUNN FOR THE BREACH OF ANY OBLIGATION ARISING OUT OF THE SALE OF THIS EQUIPMENT, WHETHER DERIVED FROM WARRANTY OR OTHERWISE, SHALL BE LIMITED, AT BUNN'S SOLE OPTION AS SPECIFIED HEREIN, TO REPAIR, REPLACEMENT OR REFUND.

In no event shall BUNN be liable for any other damage or loss, including, but not limited to, lost profits, lost sales, loss of use of equipment, claims of Buyer's customers, cost of capital, cost of down time, cost of substitute equipment, facilities or services, or any other special, incidental or consequential damages.

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INTRODUCTION

This equipment heats and dispenses water on demand for beverages and cooking purposes. It has a panel above the dispense valve that indicates the status of the dispenser. This equipment is for indoor use, either wall-mounted or on a sturdy counter or shelf.

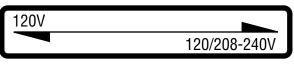
USER NOTICES

The notices on this dispenser should be kept in good condition. Replace unreadable or damaged labels.

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00824.0000

A WARNING

- ◆ Fill water tank before turning on thermostat or connecting appliance to power source.
- Use only on a properly protected circuit capable of the rated load.
- **♦** Electrically ground the chassis.
- ◆ Follow national/local electrical codes.
- Do not use near combustibles.

FAILURE TO COMPLY RISKS EQUIPMENT DAMAGE, FIRE, OR SHOCK HAZARD

READ THE ENTIRE OPERATING MANUAL BEFORE BUYING OR USING THIS PRODUCT

THIS APPLIANCE IS HEATED WHENEVER CONNECTED TO A POWER SOURCE

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WARNING

To reduce the risk of electric shock, do not remove or open cover.
No user-serviceable parts inside.
Authorized service personnel only.
Disconnect power before servicing.

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This equipment must be installed to comply with the International Plumbing Code of the International Code Council and the Food Code Manual of the Food and Drug Administration (FDA). For models installed outside the U.S.A., comply with the applicable Plumbing /Sanitation Code.

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Optional Field Wiring

120 V, 15.4 A, 1850 W 1PH, 2-Wire + GND, 60HZ

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Optional Field Wiring

120/208-240 V, 16.9 A, 4050 W 1PH, 3-Wire + GND, 60HZ

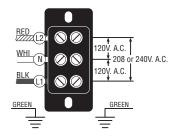
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ELECTRICAL REQUIREMENTS

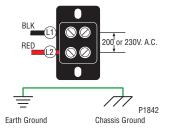
WARNING - The dispenser must be disconnected from the power source until specified in *Initial Set-Up*.

Refer to Data Plate on the Brewer, and local/national electrical codes to determine circuit requirements.



120/208 & 120/240V ac single phase models

Note: This electrical service consists of 3 current carrying conductors (Neutral, L1 and L2) and a separate conductor for earth ground.



230V ac single phase models

Note: This electrical service consists of 2 current carrying conductors (L1 and L2) and a separate conductor for earth ground.

Electrical Hook-Up

CAUTION – Improper electrical installation will damage electronic components.

- 1. An electrician must provide electrical service as specified.
- 2. Using a voltmeter, check the voltage and color coding of each conductor at the electrical source.
- 3. On models equipped with a master switch (right side, lower rear corner), place it in the "OFF" position, Fig 1.
- 4. Remove the upper and lower rear panels.
- 5. On Dual Volt models, make sure the toggle switch below the circuit board is set to the desired voltage (120 volts or 208/240 volts) and the red switch on the circuit board is in the "SET" position, Fig 2.
- 6. Install a strain relief and the proper electrical wiring to the terminal block.
- 7. Connect the dispenser to the power source and verify the voltage at the terminal block before proceeding. Reinstall both rear panels.
- 8. If plumbing is to be hooked-up later be sure the dispenser is disconnected from the power source. If Plumbing has been hooked-up, the dispenser is ready for *Initial Set*



FIG 1



FIG 2

CE REQUIREMENTS

- This appliance must be installed in locations where it can be overseen by trained personnel.
- For proper operation, this appliance must be installed where the temperature is between 5°C to 35°C.
- Appliance shall not be tilted more than 10° for safe operation.
- An electrician must provide electrical service as specified in conformance with all local and national codes
- This appliance must not be cleaned by water jet.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given instructions concerning use of this appliance by a person responsible for its safety.
- Children should be supervised to ensure they do not play with the appliance.
- If the power cord is ever damaged, it must be replaced by the manufacturer or authorized service personnel with a special cord available from the manufacturer or its authorized service personnel in order to avoid a hazard.

PLUMBING REQUIREMENTS

This dispenser must be connected to a **COLD WATER** system with operating pressure between 20 and 90 psi (138 and 620 kPa) from a $\frac{1}{2}$ " or larger supply line. A shut-off valve should be installed in the line before the dispenser. Install a regulator in the line when pressure is greater than 90 psi (620 kPa) to reduce it to 50 psi (345 kPa). The water inlet fitting is $\frac{1}{4}$ " flare.

NOTE - Bunn-O-Matic recommends 1/4" tubing for installations of less than 25 feet and 1/8" for more than 25 feet from the 1/2" water supply line. At least 18 inches of an FDA approved flexible beverage tubing, such as reinforced braided polyethylene or silicone, before the dispenser will facilitate movement to clean the countertop. Bunn-O-Matic does not recommend the use of a saddle valve to install the dispenser. The size and shape of the hole made in the supply line by this type of device may restrict water flow.

This equipment must be installed to comply with the International Plumbing Code of the International Code Council and the Food Code Manual of the Food and Drug Administration (FDA). For models installed outside the U.S.A., you must comply with the applicable Plumbing/Sanitation Code for your area.

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PLUMBING HOOK UP

- 1. Remove the shipping cap from the fitting on the rear of the dispenser, Fig 3.
- 2. Attach the flare elbow fitting (supplied separately with the dispenser) to the fitting.
- 3. Flush the water line and securely attach it to the flare elbow fitting.
- 4. Turn on the water supply.



FIG 3

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INITIAL SET-UP

CAUTION - The dispenser must be disconnected from the power source throughout the initial set-up, except when specified in the instructions.

- 1. Remove the upper panel from the rear of the dispenser.
- 2. Make sure the toggle switch below the circuit board is set to the desired voltage (120 volts or 208/240 volts) and the red switch on the circuit board is in the "SET" position.
- 3. Connect the dispenser to the power source and turn-on the water supply.
- 4. Place the master switch in the "ON" position.
- 5. Water will automatically flow into the tank to the proper level and shut-off. This will take approximately 7 minutes.
- 6. The water will heat to the factory default setting of 200° F (93° C) for most dispensers, and 90° F (32° C) for other dispensers.
- 7. Refer to PROGRAMMING to set the tank temperature, ready temperature, and dispense volumes.

DRAINING THE DISPENSER

CAUTION - The dispenser must be disconnected from the power source throughout these steps.

- 1. Disconnect the dispenser from the power source.
- 2. Shut-off and disconnect the incoming water supply
- 3. Remove the 4-40 screws at the sides of the top panel.
- 4. Gently remove one of the grommets from the tank lid.
- 5. Insert a syphon tube to the bottom of the tank and syphon ALL of the water out.

CLEANING

The use of a damp cloth rinsed in any mild, non-abrasive, liquid detergent is recommended for cleaning all surfaces on Bunn-O-Matic equipment.

WALL MOUNTED INSTALLATION

If the dispenser is wall mounted, the bottom of the dispenser should be at the same height as a counter or table top. Use B.O.M. part #12542.0000 for side mounted Wall Bracket Kit or # 13125.0001 for front mounted Wall Bracket Kit .

SUPPORT FOR LARGE RECEPTACLES

CAUTION: If the dispenser is to be used with larger receptacles such as pitchers or pots, those receptacles must be adequately supported during dispensing of hot water to avoid spillage of very hot water. This support may be provided by a table or counter top, or use B.O.M. part #12599.0000 Shelf Kit.

OPERATING CONTROLS



(a) VOLUME SELECTOR BUTTONS

Press and release the button corresponding to the Small, Medium, or Large volume, to select the desired amount of water to be dispensed. Pressing a different button after a cycle has been initiated does not change the volume in progress.

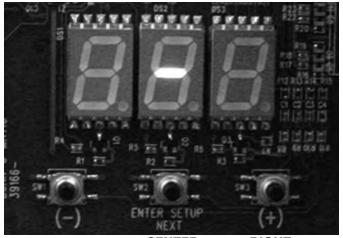
(b) AUTO STOP/MANUAL DISPENSE BUTTON

Press and release button to stop a dispense cycle. Press and hold button to dispense manually.

- (c) HIDDEN PROGRAMMING BUTTON
- (d) LED INDICATORS
- (e) DISPENSE NOZZLE

PROGRAMMING

When power is applied to the dispenser, the display located on the bottom of the main circuit board will show the revision level of the software for 5 seconds, and then go to (-). While the tank is filling, the display will read (FIL). When the tank is full the display will return to (-).



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LEFT BUTTON

CENTER **BUTTON**

BUTTON

LEVEL 1 PROGRAMMING

TANK WATER TEMPERATURE & READY TEMPERATURE SET-UP

- 1. Press and hold the center button until **P1** appears on the display (approximately 3 seconds) then release button. The tank water temperature set point will appear on the display. Factory default is 200° F for most dispensers, and 90° F for some.
- 2. Press the (+) button to increase the temperature set point, and the (-) button to decrease the set point.
- 3. After the Tank Temperature is entered, press and release the center button once more. The display will read **P2**, then show the ready temperature set point. Factory default is 195° F for most dispensers, and 85° F for some.
- 4. Use the (+) button to increase the temperature set point, and the (-) button to decrease the set point.
- 5. To exit Level 1 Program press and release the center button once more. The display will show Software version, then (-).









LEVEL 2 PROGRAMMING

DISPENSE TEMPERATURE LOCKOUT, FAHRENHEIT OR CENTIGRADE SELECTION, & **FACTORY DEFAULTS**

- 1. To enter Level 2 Programming, press and hold the center button until **H1** appears on the display (approximately 6 seconds) then release button. The display will either read **noL** (LOCKOUT DISABLED) or **Loc** (LOCKOUT ENABLED). When (ENABLED), unit will not dispense if the Tank Temperature is below the (READY) temperature settina.
- 2. Use the (+) or (-) buttons to alternate between **Loc** and **noL**.







- 3. Press and release the center button once more. The display will read **H2**, then show either **FAH** (Degrees in Fahrenheit) or **Cen** (Degrees in Centigrade).
- 4. Press and release the (+) or (-) buttons to alternate between **FAH** and **CEn**.
- 5. To Exit Level 2 Programming, press and release the Center Button twice more. The Display will show the Software Version, then (-).

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RESTORING FACTORY DEFAULTS

- 1. To restore Factory Defaults (This clears all settings that were previously entered), press and release the center button until **H1** appears on the display (approximately 6 seconds). Release the Center Button, then press and release the Center Button twice more. The display will read **H3**, then show (- -).
- EEn
- 2. Press and hold both (+) and (-) buttons to initiate the resetting of the factory default settings. The display (- -) will flash on and off during this time (about 5 to 7 seconds).



3. When the factory default numbers are loaded in, the display will stop flashing, then read **don** (DONE). You can now release the two buttons.



NOTE: If you release the two buttons at any time before the display reads **don**, the Factory Default numbers will not be entered. The old numbers will remain in the memory.

don

4. To exit Level 2 Program press and release the center button once more. The Display will show the Software Version, then (-).

ADJUSTING DISPENSE VOLUMES

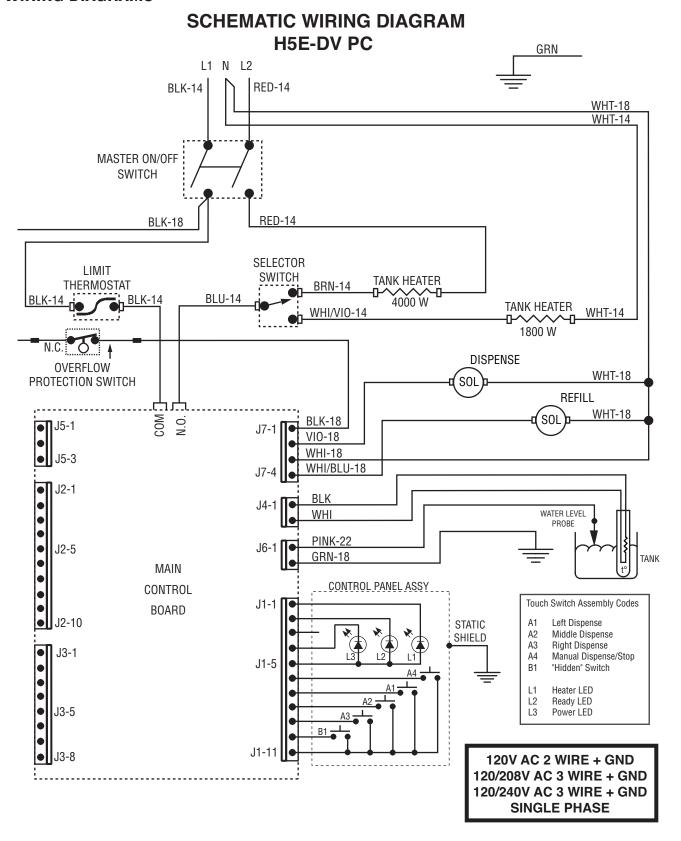
NOTE: The dispenser should be at operating temperature before setting dispense volumes.

- 1. Press and hold the hidden programming button, located under the ® next to the BUNN logo on the front of the dispenser until the 3 LED's begin flashing from the left to the right. Release the button.
- 2. Place an empty graduated container under the dispense nozzle.
- 3. Press and release the batch size to be set. The LED's will stop flashing, and the LED over the button just pressed will come on solid. Water will begin to dispense into the container.
- 4. When the desired amount of water is dispensed, press and release the same button. The water will stop dispensing and the batch size is now set.
- 5. The LED's will begin flashing from left to right again. Repeat steps 2 thru 4 to set up the other batch sizes.
- 6. To exit the programming set up at any time, press and release the hidden button once. The dispenser is now ready for use.

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WIRING DIAGRAMS



WIRING DIAGRAMS

