

# FETCO®



## ECO SERIES PROGRAMMING GUIDE

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Part # P105

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## Default Settings

Parameter	Name	CBS-2031ee CBS-2032ee	CBS-2041ee CBS-2042ee
X.1	Brew Volume	2.49 LTR	1.0 GAL
X.2	Brew Time (Min:Sec)	4:00	4:00
X.4	Prewet Percent	0%	0%
X.5	Prewet Delay (Min:Sec)	1:00	1:00
X.6	Drip Delay (Min:Sec)	1:00	1:30
7	Water Temp.	200 F	200 F
7.1	ECO Mode	OFF	OFF
9	Brew at Set Temperature	1	1
58	Temperature Scale	F	F
59	Water Volume Scale	Liters	Gallons
60 & 61	Brew Valve Flow Rate	1.47 (If #59=LTR) 0.39 (If #59=GAL)	0.40 (If #59=GAL) 1.51 (If #59=LTR)

*Use Parameter 57 to reset all settings to factory defaults.*

## To Enter Programming Mode

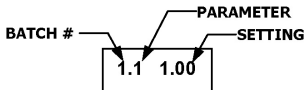
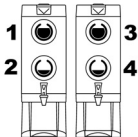
- Turn the brewer off by pressing the power switch.
- Press and hold the power switch until the display reads **P r G**.  
The left side **STOP** button will illuminate.
- Quickly press the **STOP** button.
- The display will show the software version.

Example: **0.0 03.L**

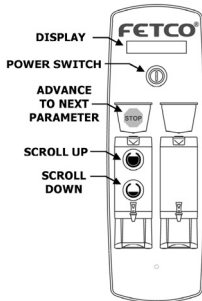
- Press **STOP** to continue.

## Batch Settings

- Batches are numbered  
1 – 2 (single side) or 1 – 4 (dual side)



Example: Left Side – Large Batch – Volume 1.0 Gal.



- Next, the first batch parameter is displayed – batch 1, brew volume  
Use the **SCROLL UP** and **SCROLL DOWN** buttons to adjust.

Example: **1.1 1.00**

Press the **STOP** button to go to the next parameter – brew time.

Example: **1.2 4.00**

- Repeat the last step until all parameters are programmed for batch #1.  
(See the chart below for an explanation of each parameter.)

- Next, batch #2 programming begins.

Display: **2.0 OFF**

Change to “**ON**” to enable.

(The top batch on each side cannot be disabled.)

- After all batches are programmed, the temperature settings are next.

Display: **7 200**

**Important!** After programming, you must press and hold the **STOP** button until the display reads **STO** to save the settings and exit programming mode, or changes will be lost.  
You may exit programming at any time.

## Batch Parameters (X = Batch Number)

Parameter	Name	Range	Comment
X.0	Batch Enabled or Disabled	On/Off	Top batch on each side cannot be disabled.
X.1	Brew Volume	Liters: 0.94 – 4.72 Gallons: 0.24 – 1.24	To switch between gallons and liters, see # 59 in Advanced Settings section.
X.2	Brew Time (Min: Sec)	2:00 – 9:30	
X.4	Prewet Percent	0.00 – 15.0%	Percentage of total brew volume.
X.5	Prewet Delay (Min:Sec)	0:10 – 5:00	The time between end of prewet cycle and start of brew cycle.
X.6	Drip Delay (Min:Sec)	0:30 – 6:00 Minutes	Brew switch continues to flash.

## Temperature Settings

Parameter	Name	Range	Comment
7	Water Temp.	188°-206°F 87°-96°C	Temperature inside tank. Will be slightly lower at spray head. To display in Celsius, see # 58 in Advanced Settings.
7.1	ECO Mode	OFF/ON	ON= After 1 hour without brewing, the temperature setting will automatically be lowered by 30°F, and the display will read ECO. Press STOP to resume heating. The hot water faucet may be used without affecting the ECO cycle, however the dispensed water may be cooler than desired.
9	Brew at Set Temperature	0 - 1	0=Will brew at any temperature. 1=Will brew only at set temperature. Note: Changes will not take effect until the next brew cycle is complete.

10	Enter Advanced Settings & Diagnostics	0 - 1	0 = Skip Advanced Settings & Diagnostics. Loop back to start of batch programming. 1 = Enter Advanced Settings & Diagnostics. Press <b>STOP</b> to continue.
<b>Important!</b> To save changes, press and hold <b>STOP</b> until the display reads <b>STO</b> to exit programming mode and return to operating mode.			

## Advanced Settings and Diagnostics

Address	Description	Range	Comment
50	Water Level in Tank	0 - 1	Tests if tank is full. 0 = Tank is not full. 1 = Tank is full.
51	Water Resistance (K $\Omega$ )	0 - 200	Displays the electrical resistance of the water in kilohms as measured between the water level probe and the tank. If greater than 200, or if the tank is not full, the display will read - - -
53	Power Relay State	0 - 1	To check the function of the power relay, press the power button repeatedly. The display should toggle between 0 and 1.



54	Water Level Sensitivity	LO - HI	LO – 0 to 50 K $\Omega$ HI – 50 to 130 K $\Omega$ If water resistance (address 51) is greater than 25 K $\Omega$ , set on HI to prevent unwanted filling of tank.
55	Tank Temperature	180° - 206°F	Displays current tank temperature.
56	Single Brewer Model Number	31 or 41	Must be set for the correct model number of the brewer: 31 for CBS-2031ee, 32 for CBS-2032ee, etc.
	Dual Brewer Model Number	32 or 42	
57	Reload Defaults	0 - 1	Changes all settings to default factory settings. 0 = Do not reload defaults 1 = Reload all defaults If 1 is selected, you must advance to the next address for this change to take effect. Does not change address 56 – model number.

58	Temperature Scale	F or C	F = Displays temp in degrees Fahrenheit C = Displays temp in degrees Celsius
59	Water Volume Scale	GAL or LTR	GAL = Displays volume in gallons LTR = Displays volume in liters
60 and 61	Left Brew Valve Flow Rate Right Brew Valve Flow Rate	Depends on model. See User's Guide.	Use this to compensate for minor discrepancies in actual volume versus programmed volume. Set lower to increase volume, higher to decrease volume.
<p>The following formula can be used to determine the correct setting:</p> $\frac{\text{ACTUAL VOLUME}}{\text{PROGRAMMED VOLUME}} \times \text{CURRENT SETTING} = \text{NEW SETTING}$			

64	Keypad Test	0 - 1	<p>Tests the function of control panel switches.</p> <p>Starting with the batch buttons, press each button. The display will show the name of the switch being pressed and the switch light will go out (there is no light for the power switch).</p> <p>Switches are named as follows: Brew switches: S1, S2, S3, etc. Power switch: Po Right Stop Switch: Str The left STOP switch must be pressed last, as this will exit the test.</p>
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65	Relay Test	<p>Tests the individual relays that control various components.</p> <p>0 - Skip relay test.</p> <p>To start Relay Test, press top batch button – display will read OFF.</p> <p>Press power switch – display will read ON.</p> <p>Press <b>STOP</b> to continue.</p> <p>Use the batch buttons to turn each component ON and OFF.</p>
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**WARNING!** Hot water may be dispensed from the valve being tested.

Address	Description
90	Left or Single Brew Valve
91	Right Brew Valve
95	Fill Valve
96	Heater (To protect the heaters, this test will work only if the tank is full.)

Press **STOP** to go back to address 65.  
 Press the lower batch button to exit Relay Test.

67	Factory Use Only – Do not use.
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**Important!** To save changes, press and hold **STOP** until the display reads **STO** to exit programming mode and return to operating mode.