

FETCOSM



CBS-1150V+TM Bypass Programming Guide

For 1-½ GALLON BYPASS MODELS
CBS-1151V+; CBS-1152V+

FETCO CBS-1150V+ Brewers With Bypass have unique construction only available for these models.

(800) 338-2699

(847) 719-3000

techsupport@fetco.com

www.fetco.com

© 2008-2018 Food Equipment Technologies Company

Part # P173

February 2018

FETCO®, EXTRACTOR® and V+ are trademarks or trade names of Food Equipment Technologies Company.

Scroll Across (A-F)

PROGRAMMING MENU LAYOUT

CBS V+ Series

	[A] PROGRAM	[B] GENERAL	[C] INPUTS	[D] OUTPUTS	[E] OTHER
A ₁₀	PERMANENT <small>Position A10&A40 are permanent</small>				
A ₁₁	Brew Volume	B1 Tank Temp	C1 LLC Probe	D1 Heater Test	E1 Display Firmware
A ₁₂	Brew Time	B2 [Brew at Temp]	C2 B. Basket Sensor	D2 Test Fill Valve	E2 Sel. Brewer Model
A ₁₃	Prewet Percent	B3 LLC Sensitivity	C3 Tank water temp.	D3 Test L. Brew Valve	E3 Display Errors
A ₁₄	Prewet Delay <small>(only when prewet % >0%)</small>	B4 Temperature F/ C	C4 Keypad Test	D4 Test R. Brew Valve	E4 Clear Errors
A ₁₅	Bypass Percent	B5 Volume unit G or L		D5 Test L.Bypass Valve	E5 Reload Defaults
A ₁₆	Drip Delay	B6 Left Flow Rate		D6 Test R.Bypass Valve	E6 Save to USB
A ₂₀	Batch <i>ACTIVATE?</i>	B7 Right Flow Rate		D7 Screen Brightness	E7 Load through USB
A ₃₀	Batch <i>ACTIVATE?</i>	B8 Left Bypass Flow			E8 Demo Mode
A ₄₀	PERMANENT	B9 Right Bypass Flow			
A ₅₀	Batch <i>ACTIVATE?</i>	B10 Slow Mains Flow			

Scroll Down

A₆₀ Batch *ACTIVATE?*
 Use this chart to quickly locate and access programming topics. The topics are in groups A-E in this guide.
 "F" screen is Save and Exit

A₇₀ Recipe Copy?
 Check the user guide for more comprehensive details of the settings. User guides are located online at fetco.com in Service-Resources....
...or use our QR code!



Popular Operator Control Settings		(Default Factory Settings)	
Parameter	Name	Notes	CBS-1151V+ CBS-1152V+
A ₁₁	Brew Volume	In gallons	1.5 GAL
A ₁₂	Brew Time (Min:Sec)	(4:00+1:30drip del)	4:00
A ₁₃	Prewet Percent	0%-15%	0%
A ₁₄	Prewet Delay (Min:Sec) <i>Appears only when Prewet >0%</i>	1:00 (if >0%)	1:00-5:00 <i>(only if prewet is >0%)</i>
A ₁₅	Bypass Percent (from total brew)	0%-40%	Factory set at 0%
A ₁₆	Drip Delay (Min:Sec)	1:30	1:30
B1	Hot Water Tank Temp.	170-207	200 F
B2	Brew at Set Temperature	On/Off	“YES” [ON]
B3	LLC Sensitivity (See User Guide)	(High=R.O. water)	LOW”
B4	Temperature Scale	°F/°C	F
B5	Water Volume Scale	Gallons/Liters	Gallons
B6 & B7	L & R Brew Valve Flow Rate	Trims outputs	3.40 LPM
		<i>FLOW rate is in Liters/Min even if brewer is in Gallons</i>	
A(20, 30&50,60)	Batch Activate [Batches on buttons 2&3 and 5&6 if dual]		Yes-Active
Go to Parameter E5 to reset all settings to factory defaults.			

HOW TO ENTER PROGRAMMING MODE TO ACCESS CONTROLS AND DIAGNOSTICS

- 1) Turn the brewer off by pressing the power switch.
- 2) Turn power switch "ON"
- The display will progress through startup screens.

Example:

Brewer and version code

CBS-1152B

v 1.0. 1744

- The **STOP** button will illuminate. As shown—right
- 3) Quickly press the **STOP** button (no need to hold)
- Brewer is now in *PROGRAMMING MODE*...

- 4) Press the **STOP** button to advance the menus across the top A-F and back to START ("A")

- 5) Press **1** to enter menus for individual settings under letter

NOTE: Buttons light up only when they are available to make adjustment

Batch Settings

Advance through settings

The menu topics are numbered A1-A7; B1-B8 -etc...

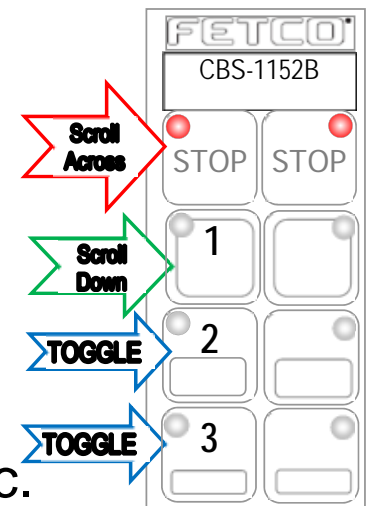
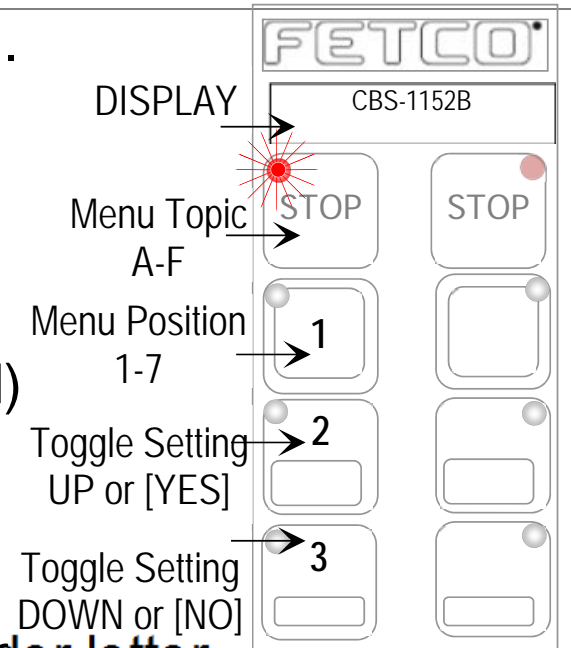
- Press button **1** to select recipe programming

Position name, topic & reference position show in display.

First programming position	BREW VOLUME
A11 is shown in example	A11 3.00 L ±

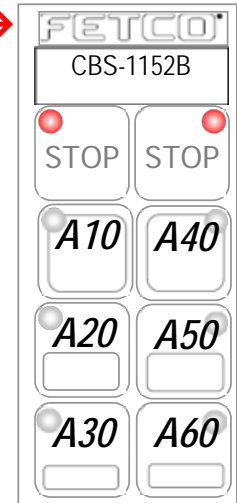
- Toggle buttons **2** and **3** to make changes.

- Then press button **1** to advance to next programming topic.



To change recipes

Illustration shows each recipe batch position →



All recipe programming is made from the “A” screens

TO ACCESS BATCH RECIPES:

-Enter “A”-BATCH PRG

-Press button “A10” to scroll through the parameters

Press “STOP” to scroll across the other recipe buttons

Single brewer has 3 recipes. Twin brewer has 6 recipes

-All recipe settings are programmed from the “A” screen.

Each recipe button may be individually programmed.

Top recipe buttons (A10&A40) are permanent. Lower recipe buttons

(A20, A30&A50, A60 if dual can be hidden. To hide or deactivate a

button: toggle the BATCH ACT screen.

BATCH ACT	<i>Toggle to NO to deactivate or hide lower recipes</i>
A20 YES –	

A11 screen sets the total brew volume

(Total brew volume includes BYPASS volume if selected)

Note: some water is retained in the used coffee grounds

-Scroll down (press button A10) to the next setting A12 to set brew time to dispense the volume set in A11.

BREW VOLUME	<i>First programming position A11 is shown in example</i>
A11 3.00 L ±	

Note: goes to default setting if set too short for volume entered

BREW TIME	<i>Second programming position A12 is shown in this example</i>
A12 04:00 ±	

- Press A10 button continue scrolling down through A13-A15 for all recipes. (See user guide for detailed explanation of each parameter)

-After all brew recipes are set press **STOP** button to go to—GENERAL “B”

B1 is Tank Temperature

This controls the brew water temperature and the hot water service faucet

Toggle buttons A20 and A30 to make changes

Then press A10 to advance

Tank Temp B1 200F ±	<i>First programming position “B1” Is for hot water tank temperature</i>
------------------------	------------------------------------------------------------------------------

B2 is Brew at Temperature

Default is YES. Brew will not start until hot water tank temperature is at setpoint.

Brew @ Temp B2 YES -	<i>Brew pauses & will start when hot water tank temp. is at setpoint</i>
-------------------------	----------------------------------------------------------------------------------

If Brew at Temp is set to “NO”-brew will start at any temperature above 77°C/170°F. Toggle buttons A20 & A30 to adjust

Then press A10 to advance

-Following the PROGRAMMING MENU LAYOUT chart shown on page 2

Complete your adjustments in the GENERAL –“B” parameter

- Settings found under BATCH PROGRAM “A” GENERAL “B” include most needed for start-up and operation.

-Always verify the model number (displayed when brewer first powered ON). Model selection is found in E2

-Always SAVE & EXIT as shown in screen “F” or new settings will be lost.

Press A10 to advance though the settings to change or check settings

-then press STOP to continue scrolling across C-E positions

Batch Parameters –A-MENU and PROGRAMMING

Brewers are shipped with all recipe batch buttons enabled and set to the defaults shown in A1-A6. These are full batches. Adjust settings of the individual recipes under batch PRG “A”			
Position	Name and default setting	Range	Comment
A. <i>20,30</i> A. <i>50,60</i>	Batch Enabled or Disabled	YES/NO	The top batch on each side cannot be disabled. (A10&A40)
A_ <u>11</u>	Brew Volume 3 liters CBS-1130V+	CBS-1130V+ 0.95 – 4.75 (Liters)	To switch between gallons and liters, go to position B5
	1.50 gal CBS-1150V+	CBS-1150V+ 0.50-2.00 (Gallons)	
A_ <u>12</u>	Brew Time (Min: Sec) 4:00	2:00 – 12:00	Factory default total brew is 5:30 (4:00 brew time+1:30 drip delay)
A_ <u>13</u>	Prewet Percent 0%	0.00 – 15.0%	Percentage of total brew volume.
A_ <u>14</u>	Prewet Delay 00:00 (Min:Sec)	0:10 – 5:00 Prewet must be > 0%	The time between end of prewet cycle and start of brew cycle.
A_ <u>15</u>	Bypass Percent	0-40%	Amount diverted from brew
A_ <u>16</u>	Drip Delay 1:30 (Min:Sec)	0:30 – 6:00 Minutes	Brew switch continues to flash.

B-E Advanced Settings and Diagnostics

Batch Parameters – B-GENERAL settings

Position	Name and default setting	Range	Comment
B1	Tank Temperature 200°F-or-93° C	77° to 97°C 170° to 207°F	NOTE: Equipment factory default is set for metric
B2	Brew at Temp. Setpoint "YES"	YES/NO	Batch to start when at set temperature: <u>SEE USER GUIDE</u>
B3	LLC Sensitivity "LOW"	LOW/HIGH	High is only for low mineral or R.O water <u>SEE USER GUIDE</u>
B4	Temperature Scale "°F" Fahrenheit	°F/°C	NOTE: Changing will overwrite user settings
B5	Volume Scale L-(CBS-1130) G-(CBS-1150)	Liters/Gallons User adjustable	CBS-1130V+ factory set in liters CBS-1150V+ factory set in gallons
B6&7	Left/Right <u>brew</u> valve flow rate NOTE: flow rate only in <u>liters per min</u>	Default: 3.40LPM Range: 2.9-3.9LPM	Adjusts the brew valve flow rate. <u>SEE USER GUIDE</u>
B8&9	Left/Right <u>bypass</u> valve flow rate NOTE: flow rate only in <u>liters per min</u>	Default: "OFF" Range: 2.8-3.8LPM	Adjusts bypass valve flow rate. <u>SEE USER GUIDE</u>
B10	Mains low flow "NO"	NO/YES	Trims fill system for low flow from supply

Batch Parameters – C-INPUTS controls & conditions

Position	Name and default setting	Range	Comment
C1	LLC Probe Continuity Direct Read	Reading of tank water resistivity in TDS	Reading of tank water resistivity in TDS
C2	Brew Basket Sensor	YES/NO	YES or NO
C3	Tank Temp. Direct Read	Hot water tank temperature	Hot water tank temperature
C4	Keyboard Test	All buttons	Checks buttons under membrane cover

Batch Parameters – D-OUTPUTS settings

Position	Name and default setting	Range	Comment
D1	Heater Test	ON/OFF 10 seconds maximum ON time	Energizes Heaters! For diagnostics/service use only
D2	Fill Valve Test	ON/OFF 10 seconds maximum ON time	Tests Fill Valve
D3&4	Left & Right Valve Test	ON/OFF 10 seconds maximum ON time	Tests Left & Right Brew Valve
D5&6	Left&Right Bypass Test	ON/OFF 10 seconds maximum ON time	Tests Left & Right Bypass Valve
NOTE: If heater or valve are switched "ON" for testing they will automatically turn "OFF" in ten (10) seconds			
D7	LCD Brightness Default is 8	0-15	Adjust LCD screen brightness only-Not for LEDs under buttons

Use this formula to compensate for minor discrepancies in actual volume versus programmed volume

$\frac{\text{Measured Volume}}{\text{Programmed Volume}} \times \frac{\text{Current Setting}}{\text{New Setting}} = \frac{\text{New Setting}}{\text{Current Setting}}$	Use this formula to determine the new setting: Enter new setting in B6 or B7 -See user guide.
------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------

Use the formula above to compensate and fine-tune brew volume. Brew valve and bypass valve flow rates are in **liter/min**. Enter the brew valve New Setting value into B6/B7 and save as in the "F" screen (Brew volume is set at position A₁)

Tips: First calibrate brew (have bypass at 0%); next run a full brew with bypass. Check brew volume and adjust bypass up or down incrementally at B8 & B9 to fit total volume. Never adjust brew flow rate if bypass is in use-only adjust bypass FR.

HINT: Set lower to increase volume, higher to decrease volume. TIP: Always check flow from supply for fouled water filter .

E3-Error Codes

DO NOT CLEAR ERROR CODES UNTIL ERROR IS IDENTIFIED AND/OR CORRECTED →Contact specialized personnel for error codes

Code	Description	Possible Cause	Corrective Action
001	Software error-error on start up or corrupted software	Improper start-up or shutdown	Restart , if still fault: reload software
050	Short-circuit in temperature probe	Probe failure.	Replace probe.
051	Open temperature probe.	Bad probe connection, or probe failure.	Check all connections. Replace probe if necessary.
100	Initial Fill Error. Initial fill time took longer than expected after power up.	Water supply flow rate is too low.	Watch for short potting during brew cycle. Investigate cause of low flow rate. (Clogged water filter...)
101	Error on refill-. Tank did not refill within expected time.	Water supply flow rate is too low.	Watch for short potting during brew cycle. Investigate cause of low flow rate. (Clogged water filter...)
201	Heater open, high limit thermostat or Solid-State Relay (SSR) fault	Failure of: heating element, SSR, high Limit or low voltage	Check and replace heating elements if necessary.
255	Touch pad error	Keyboard contact longer than 2 min Or faulty reassembly	Restart , if still fault: reload software. If mechanical: replace membrane switch or control module
NO BSKT	Insert Brew Basket	Brew basket must be in place This is a SAFETY FEATURE	Insert brew basket into brewer rails to enable brewer

Consult the user guide for your brewer for more complete information

Batch Parameters – E-OTHER software and code settings

Position	Name and default setting	Range	Comment
E1	Display Firmware	1.0.1744	Displays current version
E2	Select Model	CBS-1151BP CBS-1152BP	NOTE: Will need reboot COMPLETELY OVERWRITES ALL USER SETTINGS
E3	Display Errors	1=Newest/6=Oldest LAST six errors only	See Error Code Chart for references
Resetting error codes should be after completing the service and factory diagnostics and correcting any brewer faults. Clear error codes by cycling the brewer "OFF" then "ON".			
E4	Clear Errors	YES/NO	NOTE: Always contact FETCO Technical Service for errors (800)338-2699
E5	(Reload) DEFAULTS	Reset to default of base model	NOTE: COMPLETELY OVERWRITES ALL USER SETTINGS
E6	USB Data Save		Save data to USB
E7	Load From USB	Will need reboot	Plug in USB flash-drive device
E8	DEMO Mode	ON/OFF	Demonstrates the controls for training. Brewer will not brew when in demo mode. Reset in E8 to "OFF" to exit

Batch Parameters **F**—HOW TO SAVE SETTINGS—EXIT & RETURN TO PROGRAMMING

IMPORTANT! After programming, you **MUST SAVE** your settings before exiting programming mode or changes will be lost.

Settings are saved from the “F” screen as shown below.

You may exit programming at any time.

After programmed settings are saved, the brewer exits PROGRAMMING mode and returns to regular brew operations. Settings are saved only when brewer returns to OPERATING MODE **DO NOT** attempt to save by rebooting (turning power OFF then ON). All changes made will be discarded and brewer will remain in the existing default settings.

<p><u>From any screen</u>-Press STOP button until the EXIT (“F”) screen appears</p>	<p><u>From the “F” screen</u> Press button 2 to toggle to show the EXIT-YES screen</p>	<p><u>From EXIT-YES screen</u> Press button 1 to toggle to show the SAVE screen</p>	<p><u>From SAVE screen</u> Press button 2 to toggle to show the SAVE-YES screen</p>	<p><u>To SAVE and EXIT</u> Press button 1 to SAVE your changes and to EXIT to OPERATING MODE</p>