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VITRO M5 - PROGRAMMING GUIDE

v0-10061-EN

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1. PROGRAMMING

1.1 DEFINITIONS

- **Programming status:** when the machine can program any of its functions.
- **Working status**: when the machine is ready and available for beverage dispensing.
- **General menu**: set of all programming functions.
- **Customized menu**: selection of functions that the operator decides to show on the display. Functions not included will remain hidden.

1.2 PROGRAM CONTROL

- To access and configure the programming functions, the machine has a portable keyboard with four keys. It is located at the back of the selection panel, on the door.
- The functionality of the control changes for the working or programming states.
- The keys have two ways of being pressed: single press and long press (holding the key down for more than 3 seconds).

Functionality in working mode

	SINGLE KEYSTROKE	**PULSE MAINTAINED**
A key	1 x dispensing service (or over the counter)	Access to functions by groups
B key	Beater washing	Show the temperature on the display
C key	Access to the programming menu	Direct execution of a function
D key	Allows external programming	Personal menu settings

Functionality in programming mode

- Press C to access the programming menu.
- If there have been incidents during the service (breakdowns, exhausted returns...), these will appear on the screen. With A and B you can go forward and backward through the warnings or incidents recorded.
- Press A to access the Function Menu (if there are no incidents, a single press of the C key will be enough). The first function included in the Function Menu appears.

1.3 ACCESS MODES TO PROGRAMMING FUNCTIONS

In Vitro M5 you can access the programming functions in different ways. The details of each access mode are described in the following sections.

- General menu: access to function groups.
- General menu: access to all functions.
- Personal menu: access to all predefined functions.
- Personal menu: access to a certain function.

1.4 GENERAL MENU: ACCESS TO FUNCTION GROUPS

- Access to functions through groups, by type of functionality.
- Within the group, access to the different functions by means of the forward and backward keys.

Function groups

Group 000	Actions
Group 100	Accounting
Group 200	Programming of prices and sales mode
Group 300	Programming of selections
Group 400	Programming the machine's operating mode
Group 500	Hourly Functions

Access mode

Access	A 5s	
Groups navigation	**A**	↑ advance
	B	↓ go back
Access to group functions	**D**	↵ enter
Navigation functions	**A**	↑ advance
	B	↓ go back
Execution function	**D**	↵ enter

Salir	**C**	⏲ exit

1.5 GENERAL MENU: ACCESS TO ALL FUNCTIONS

Access	D ⏱ 5s	Display: “hidden programs” 1st programming function.
Navigation functions	**A**	↑ advance
	B	↓ go back
Visible functions: letter "P" between function number and name Hidden functions: dash "-" between function number and name		
Show / Hide function	**D**	
Exit	**C**	⏲
	Inactivity ⏱ 30s	

1.6 PERSONAL MENU: ACCESS TO ALL YOUR FUNCTIONS

Access	**C**	Display: 1st personal function visible
Navigation Functions	**A**	↑ advance
	B	↓ go back
Execution Funtion	**D**	↵ enter
Exit	**C**	⏲ exit
	Inactivity 30s	
Access to previously defined personal functions		

The personal menu can hold a maximum of 32 functions.

1.7 PERSONAL MENU: ACCESS TO A CERTAIN FUNCTION

Access	C 5 s	Display: “FUNCTION 000”
Training function number	A B sel. C	1st form the function number Y 2nd access with D

2. PROGRAMMING FUNCTIONS

2.1 NEW FUNCTIONALITIES IN VITRO M5

- The Vitro M5 model incorporates a fresh milk module, which allows this ingredient to be integrated into the drinks dispensed.
- The natural milk is stored in a refrigerated container attached to the machine.
- The refrigeration unit has the option to be connected to the machine via the I2C bus integrated in the fresh milk module. A refrigerator can also be used without communication with the machine.
- The fresh milk module brings two new ingredients to the recipes: liquid and foamed milk, which can be dispensed at a predetermined temperature or at room temperature.
- In the programming of Vitro M5 the following functions or new features have been added to existing functions.
- Summary table of new features:

Function	New	Add	Detail	Comments
F030		●	CLEAN FRESHMILK TEST NEVERATEST AIR INPUT TEST MILK OUTPUT	Component cleaning, testing and calibration functions
F315		●	ING. MILK LIQ ING. MILKFOAM	Two new ingredients in the recipe.
F333	●		REFRIGERATOR	Refrigerator Parameters
F461		●	FRESHMILK TEMPERATURE	Fresh milk temperature adjustment

2.2 DESCRIPTION OF THE NEW FUNCTIONALITIES

- The new functionalities are described below in terms of their purpose and the meaning of the steps and results.
- The operation of access, navigation, execution and output of functions and subfunctions is described in the following chapter along with the other existing functions.

2.2.1 F030 - SUBFUNCTION CLEAN FRESHMILK

NOTE: the fresh milk function can be started, alternatively, by pressing D at any time.

- Daily cleaning procedure of the fresh milk module.
- A daily cleaning is recommended. The minimum level is to do it once every 48 hours.
- If this is not done within 48 hours, the system will block the dispensing of fresh milk until the cleaning is completed.
- The process starts by asking to insert the cleaning jug and start the initial rinse by pressing D.

INTRODUCE JAR AND PRESS D

- After a few seconds, the system asks to empty the cleaning container, discarding the water resulting from the rinsing. The cleaning container is asked to be reintroduced, this time adding 20 cl of the cleaning solution inside.

CHANGE JAR AND PRESS D

- The process is restarted by pressing D and has a total duration of 10 minutes.
- At the end, the display shows the process successfully completed and asks you to confirm it by pressing D. It is important to confirm by pressing D to reset the cleaning cycle counter.

2.2.2 F030 - SUBFUNCTION TEST REFRIGERATOR

Functionality by which a communication with the refrigeration unit is established.

- The cooling unit returns its status and the current temperature of the chamber.
- Within F030 navigate with A to the TEST NEVERA subfunction.
- The cooling unit returns its status and the current temperature of the chamber.
- If the refrigerator is not the one recommended by Azkoyen it will not respond to this request. Nor will it respond if the F333 has been configured as a REFRIGERATOR - NO
- The display will show a text like the one below.

T 04: Milk OK

- The numerical value after T = [04] represents the temperature in the chamber [4º C].
- OK if the level detects that there is milk in the container.

- Exit the function by pressing C.

2.2.3 F030 - SUBFUNCTION TEST AIR INPUT

- This test measures the equivalent volume of air that would enter the milk circuit during a 10 second pump time.
- Instead of air intake the test uses water in the opposite direction, i.e. from the machine to the outside.
- This function in combination with TEST MILK OUTPUT is used to calibrate the cream generation system.
- On the display, the test result will be shown like this:

TEST AIR INPUT

▶ Execute by pressing D

52 cc

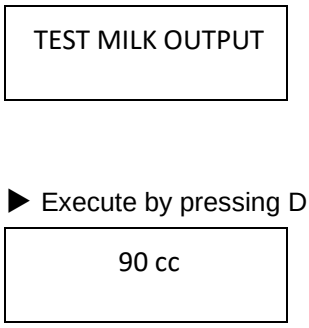
- The resulting value of the test gives us information about the level of calibration and the possibility of action:
  - A correct calibration would be to obtain in this test a value that turns out to be 60% of the value measured in TEST MILK OUTPUT.
  - If the value is higher, it would be necessary to close the manual air inlet valve.
  - If the value is lower, the manual air inlet valve should be opened.

2.2.4 F030 - SUBFUNCTION TEST MILK OUTPUT

- This test complements the AIR INPUT TEST to obtain a calibration value for the cream system.
- When executed, the volume in cubic centimeters of water leaving the EV of milk will be measured in a time of 10 seconds.

- The value obtained must be between 70 cc and 100 cc. A lower value means that there is an anomaly in the milk circuit. In this case:
    - Check that there are no obstructions in the milk tubes.
    - If, having checked the circuit pipes and connections, and replaced them if necessary, the value is still below the minimum volume, replace the milk pump because it is damaged.

- On the display, the test result will be shown like this:



- The value obtained, within the working margins, should be compared with the air inlet value (AIR IN = 60% MILK OUT).

- To exit press C.

2.2.5 F315 PROG. SERVICES (NEW INGREDIENTS)

- The Vitro M5 model provides two new ingredients for the recipe set. The ingredients are displayed as: MILKLIQ (milk) and MILKFOAM (cream).
- The dispensed volume is defined in CC.
- The machine keyboard (F315) cannot be used to change the temperature of a predefined service. This can be done via the PC configurator.
- The treatment of these ingredients through the programming keyboard is like that of any other ingredient in the recipe. It indicates the time in which to start dispensing and the amount represented in cc.
- From the F315 will be possible: Add, Delete and Modify steps with these ingredients

2.2.6 F333 REFRIGERATOR

- In Step 1, you configure whether to use a refrigerator for the milk system [YES/NO].
- In step 2 you define the position of the cooler activated in step 1. The position where a cooler can be installed can be left side, right side or under the counter.
- In step 3, regardless of the configuration of step 1, the maximum length of the suction pipe is defined. A value must be selected from the three options shown: 100 cm, 120 cm and 150 cm. Under no circumstances should the selected length be exceeded due to the risk of damage to the pump or other hydraulic circuit elements. The length must be measured from the outlet on the panel of the machine to the end of the pipe, with the filter incorporated, when it is inserted into the tank and the end touches the base of the container.
- To exit press C.

2.2.7 F461 TEMPERATURE

- This function defines the setpoint temperature of the milk.
- It appears as the second option after having set the Espresso temperature.
- The maximum temperature for milk is limited to 70 ºC.
- The display will look like this:

ALGORITHM REG.T.
T FRESHMILK? 070

- Change the value of T and validate with the D key to set it.
- To exit press C.

2.3 GENERAL LIST OF PROGRAMMING FUNCTIONS.

The following list details all the machine's programming functions, in the order in which they are shown on the display. In the factory default setting, a selection of the most important ones is shown (green).

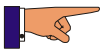
Function	Description	With EXECUTIVE protocol	With MDB protocol
1	Downloading returners	●	Yes
2	Filling Returners	●	Yes
10	Communication	Yes	Yes
30	Machine test	Yes	Yes
90	Software version	Yes	Yes
92	Load programming	Yes	YES
97	Delete Flash	Yes	Yes
99	Reset the machine	Yes	Yes
110	Amount of sales by selection	Yes	Yes
111	Units sold by selection	Yes	Yes
113	Units sold in "free sale" mode	Yes	Yes
114	Meter for maintenance and cleaning	Yes	Yes
115	Product accounting	Yes	Yes
120	Economic amount of all sales	Yes	Yes
121	Total units sold	Yes	Yes
122	Total money collected in "free sale" mode	Yes	Yes
125	Total money raised in the pre-selections	Yes	Yes
126	Units sold in each preselection	Yes	Yes
141	Total amount in Piggy Bank	Yes	Yes
142	Total amount in the revolving tubes	Yes	Yes
143	Amount in each of the return tubes	●	Yes
148	Total amount collected from recharging prepaid cards	●	Yes
149	Total amount of sales made with tickets	●	Yes
162	Total amount of sales made with tokens	●	Yes
171	Deletion of accounting data	Yes	Yes

Function	Description	With EXECUTIVE protocol	With MDB protocol
174	Deletion of the accounting data of the mixers	●	Yes
180	Accumulated total amount of sales	Yes	Yes
183	Accumulated of the total amount in money box	Yes	Yes
185	Accumulation of the total amount manually dispensed from the returns	●	Yes
186	Accumulated of the total amount of the non-delivered changes	●	Yes
187	Accumulated total amount of prepaid card sales	●	Yes
188	Accumulated total amount of recharges on prepaid cards	●	Yes
189	Accumulated total amount of sales paid with tickets	●	Yes
190	Accumulated total amount of sales paid with tokens	●	Yes
191	Accumulated total amount of sales for each selection	Yes	Yes
193	Accumulated of the total amount of sales made in the "free sale" mode	Yes	Yes
201	Programming the sales price for each selection	Yes	Yes
202	Copy the sales prices in several selections	Yes	Yes
203	Alternative sales prices	Yes	Yes
204	Unique selling price	Yes	Yes
206	Prevents minors from purchasing product	Yes	Yes
209	Enables a discount or a surcharge on pre-selections	Yes	Yes
210	Program the spindle stroke: 180º or 360º.	Yes	Yes
211	Schedule the number of days you can sell a product	Yes	Yes
220	Free sale	●	Yes
221	Sale in single, multi-sale or forced sale mode	●	Yes
228	Prevents minors from purchasing product	Yes	Yes
300	Associated selections to channels	Yes	Yes
302	Allows to associate selections that are alternated so that the discharge is homogeneous	Yes	Yes
303	Not operational		
309	It associates motors to work simultaneously when pressing a selection.	Yes	Yes
315	Schedule water and product quantities	Yes	Yes
317	Modify the values of some presets	Yes	Yes
320	Preheating of the product mixers	Yes	Yes

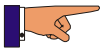
2.4 DESCRIPTION OF THE DEFAULT PROGRAMMING FUNCTIONS

Group 000: Shares

Function030	**MACHINE TEST**	**Test for different elements of the machine.**
	Executes a functional check of all elements of the machine.	

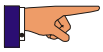

D

The display shows the first item to be checked.

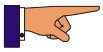

A

Repeatedly until the first new LIMP function. FRESHMILK

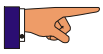
The cleaning of the milk module is executed


D

Remove milk container, insert cleaning container and continue by pressing D.


D

Run the test


C

Go back and exit to the menu.

The process is always the same, and the elements on which the test can be done are

- Product Extractors
- Product mixers
- Electrovalves
- Erogation group movement
- Group's lower piston movement
- Coffee Grinder
- Grind coffee doser
- Cups extractor arm
- Cups detector
- Cleaning Fresh Milk
- Fridge test for refrigerator verification
- Cream system calibration Test Air Input
- Cream system calibration Test Milk Output
- Etc.

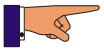
Calibration of the product hoppers: soluble and grain

During the test run of the product and grinder extraction motors, if this test is not stopped by pressing the C key, both the motors and the grinder work for 10 seconds; after this time, the machine's display offers the possibility of writing down the amount of product extracted or ground coffee during those 10 seconds. To do this, the extracted product must be collected, and this quantity must be weighed on a suitable scale.

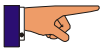
This process is called calibration of the product hoppers; once this has been done, in function 315, the machine offers the possibility of programming the quantities of soluble product or ground coffee in grams.

It is possible to make the calibration of all or part of the hoppers of soluble products and coffee beans.

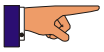
Function 090	**<<SW>>VERSION**	**Software version that the machine has installed.**
	It shows the version that the software has of each one of the Modules.	



D



D



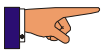
C

The *display* shows different options. For each of them it shows the date of update and the program code.

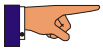
Go back and exit to menu.

Function 092	**<< LOADING PROG.>>**	**Accepts an animation file.**
Only machines with PMC card	Allows the machine to record an animation file that is saved in an external USB-type device and displayed on the screen.	

Select configuration.

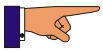


Search for the desired configuration



D

Confirm.

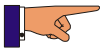


C

Go back and exit to the menu.

A o B Function 92 is only operational if a "USB key" is connected

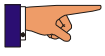
Function 097	**<< DELETE FLASH.>>**	**Perform a flash memory reset.**
Only machines with PMC card	Allows you to delete the backup program stored in the flash memory. This program serves to update the program version of the different cards, for example when a replacement card is inserted.	



D

Execute the deletion and return to service

Function 099	**<<INITIALIZE>>**	**It performs a complete reset of the machine's programming.**
	Executing this function deletes the EEPROM memory and automatically recovers the last settings entered in the machine: either from function 401 or from function 82.	

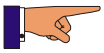


D

Execute the deletion and return to service mode

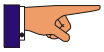
Group 100: Accounting

Function 110	**<<SELECT MONEY.>>**	**Economic amount of sales of each product selection.**
	Shows the amount of sales for each product selection.	



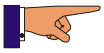
D

By pressing a selection, the display shows your sales.



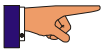
C Go back and exit to the menu.

Function 111	**<<SALES SEL.>>**	**Units sold for each product selection.**
	Shows the number of sales made by each product selection	



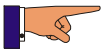
D

By pressing a selection, the display shows your



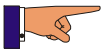
C Go back and exit to the menu.

Function 113	**<<UNTS/IN F.S.>>**	**Units sold in "free sale".**
	It shows the number of sales made in the "free sale" mode (no money).	



D

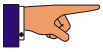
When you press a selection, the display shows your sales number in the free sale mode.



C

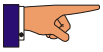
Go back and exit to the menu.

Function 114	**<< COUNTERS>>**	**Meter for maintenance and cleaning**
	From a certain number of services, it shows the need to clean the filter of the espresso or fresh brew group, as well as the need to change the water filter.	



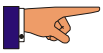
D

When you press D, it shows the services performed since the last deletion.



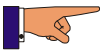
D

Pressing A you can choose "delete YES" and pressing D you make the deletion.



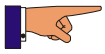
D

It allows to program the number of services from which and when entering in programming, the machine shows the need to change the water filter.



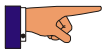
D

Services performed since the last filter cleaning of the espresso group and, allows to program the number of services to indicate the need for cleaning.



D

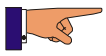
It shows the services performed since the last filter change of the "Fresh Brew" group and, allows to program the number of services from which, it shows the need to perform its cleaning.



C

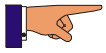
Go back and exit to the menu.

Function 115	**<< PRODUCT ACCOUNTING>>**	**Accounting for product consumed from each hopper**
	If the "hopper calibration" has been carried out from function 30, in this function it is possible to see the product consumption of each hopper and reset the meter.	



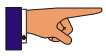
D

Shows the grams consumed since the last deletion.



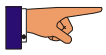
D

By pressing A you can choose "delete YES" and by pressing D you make the deletion.



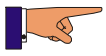
D

It shows the remaining grams of product in the hopper.



D

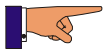
Show the rest of the products.



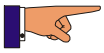
C

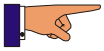
Go back and exit to the menu.

Function 120	**<<TOTAL MONEY>>**	**Economic amount of all sales.**
	It shows the total economic amount of all sales made by the machine or associated machines.	



D — The display shows the financial amount of all sales. If several machines are linked by a single PRI card, it displays the total amount of sales for all machines



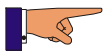


A
B
D

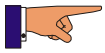
The display shows the total economic amount of each of the machines:
"Module E", hot drink machine
"Module A", cold drink machine

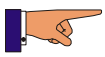
C — Go back and exit to the menu.

Function 121	**<<TOTAL UNIT.>>**	**Total number of units sold.**
	Shows the total number of services sold.	



D — The display shows the total number of services sold. If several machines are linked by a single PRI card, it displays the total sum of services of all machines



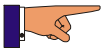


A
B
D

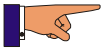
The display shows the sum of each of the machines:
"Module E", hot drink machine
"Module A", cold drink machine

C — Go back and exit to the menu.

Function 122	<<TOTAL MON. F.S.>>	**Total amount collected in the "free sale" mode.**
	It shows the total economic amount of all the sales made by the machine in the "free sale" mode.	

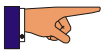


D The display shows the financial amount of all



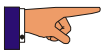
C Go back and exit to the menu.

Function 125	<<MON. PRESELEC.>>	**Economic balance generated in the pre-selections.**
	It shows the economic amount collected in operations involving product pre-selections.	



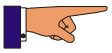
D

When you press a "preselection" key, the display financial amount of all sales.

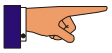


C Go back and exit to the menu.

Function 126	<<UNIT. PRESEL.>>	**Sales of each pre-selection.**
	It shows the number of sales made by each "pre-selection".	



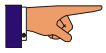
D When you press a "preselection" key, the display financial amount of all sales.



C Go back and exit to the menu.

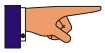
Function 141	**<<MON. IN BOX>>**	**Total amount in the money box.**
	It shows the economic amount that the money box has. The maximum figure it can show is 999,999.	

D It shows the amount of money in the moneybox.

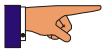


C Go back and exit to the menu.

Function 142	**<<MON .IN TUB.>>**	**Total amount in the return tubes.**
	It shows the economic amount contained in the return tubes.	

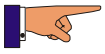


D It shows the total amount of money in the return tubes.

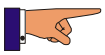


C Go back and exit to the menu.

Function 143	**<<ACCO. BY TUB.>>**	**Amount in each return tube.**
	It shows the economic amount contained in the return tubes.	



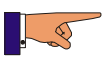
D It shows the economic amount in the return tube.



A

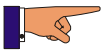
B

It shows the economic amounts in the different return tubes on the display.

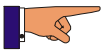


C Go back and exit to the menu.

Function 145	<<MON. RET. HAND>>	**Amount extracted when executing F001.**
	It shows the economic amount of the money extracted by means of the function 001 <<empty tubes>>.	

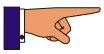


D It shows the total economic amount.



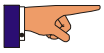
C Go back and exit to the menu.

Function 146	<<MON. NOT GIVEN>>	**Amount of returns not delivered to users.**
	It shows the total economic amount of the changes that the machine had to deliver to users and, for various reasons, has not delivered.	



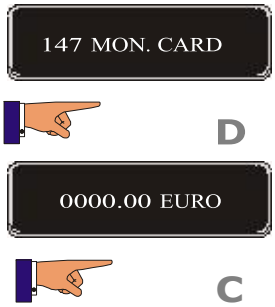
D

It shows the total economic amount.



C Go back and exit to the menu.

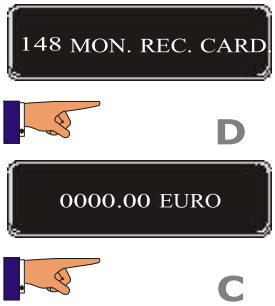
Function 147	<<MONEY. CARD>>	**Total amount of sales with prepaid card.**
	It shows the total economic amount of the sales made with a prepaid card.	



It shows the total economic amount.

Go back and exit to the menu.

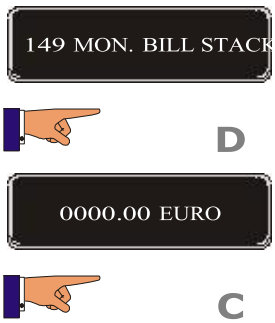
Function 148	**<<DIN. REC. TAJ.>>**	**Total amount for the recharge of prepaid cards.**
	It shows the total economic amount that the machine has collected in operations made by users to recharge their "prepaid" cards.	



It shows the total economic amount.

Go back and exit to the menu.

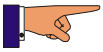
Function 149	**<<DIN. TICKETS>>**	**Total amount of sales made with tickets.**
	It shows the total economic amount that the machine has collected in the sales where users have used tickets to pay for services.	



It shows the total economic amount.

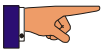
Go back and exit to the menu.

Function 162	<<REC. TOKENS>>	Total amount of sales made with tokens.
	It shows the total economic amount equivalent to the tokens collected.	



D

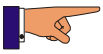
Shows the total financial amount of token 1.



A

B

The display shows token 1 or token 2.

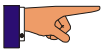


C

Go back and exit to the menu.

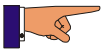
Function 171	<<ERASE ACCOUNTING.>>	Deletion of accounting data.
	It deletes the accounting data of the following programming functions:	

110	Sales amount per selection	141	Money in Piggy Bank
111	Number of sales per selection	145	Money extracted manually
113	Units on "free sale".	146	Amount of undelivered change
120	Total amount of sales	147	Amount of card sales
121	Total services sold	148	Amount charged on card
122	Amount in "free sale	149	Amount of sales with tickets
125	Preselections	162	Amount of sales with tokens
126	Units by pre-selection		



D

The accounts are deleted.

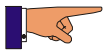


C

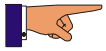
Go back and exit to the menu.

Function 174	<<BOR. CONT. DEV.>>	Deletion of accounting data from the returns.
	Clears accounting data from all displayed functions:	

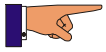
142	Tube Coin Accounting	143	Accounting by Tube



D

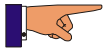


D The accounts of the are deleted.



C Go back and exit to the menu.

Function 180	<<Z/TOTAL. MON>>	Accumulated from the total amount of sales.
	It shows the total economic amount of all sales made by the machine. This information cannot be deleted.	



D

It shows the economic amount.

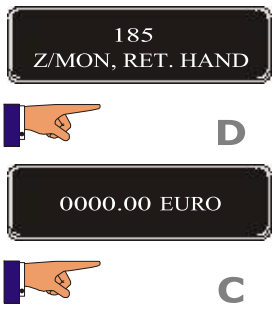
C Go back and exit to the menu.

Function 183	<<Z/M. COIN BOX>>	Accumulated of the total amount in money box.
	It shows the total economic amount of the money box. This information cannot be deleted.	

It shows the economic amount.

Go back and exit to the menu.

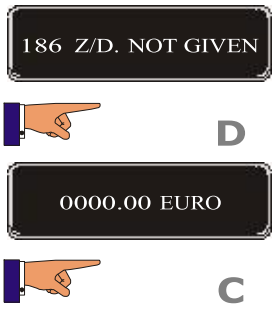
Function 185	**<Z/MON. RET. BY HAND>>**	**Accumulated of the total amount manually dispensed from the returners.**
	Displays the total economic amount manually dispensed from the returners. This information cannot be deleted.	



It shows the economic amount.

Go back and exit to the menu.

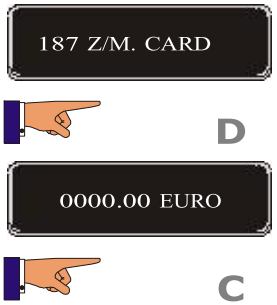
Function 186	**<Z/D. NOT GIVEN>>**	**Accumulated from the total amount of undelivered changes.**
	It shows the total economic amount of changes that the machine had to deliver to users and, for various reasons, has not delivered. This information cannot be deleted.	



It shows the economic amount.

Go back and exit to the menu.

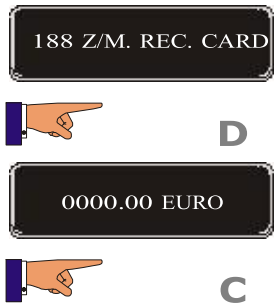
Function 187	**<<Z/D. CARD>>**	**Accumulated of the total amount of the sales with prepaid card.**
	It shows the total economic amount of the sales paid with prepaid cards. This information cannot be deleted.	



It shows the economic amount.

Go back and exit to the menu.

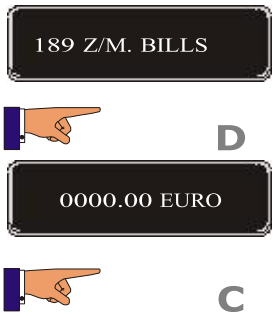
Function 188	**<<Z/D. REC. CARD>>**	**Accumulated of the total amount of the recharges in the prepaid cards.**
	It shows the total economic amount collected by the machine in operations made by users to recharge their prepaid cards. This information cannot be deleted.	



It shows the economic amount.

Go back and exit to the menu.

Function 189	<<Z/D. TICKETS>>	**Accumulated of the total amount of the sales paid with tickets.**
	It shows the total economic amount that the machine has collected in the sales where users have used tickets to pay for services. This information cannot be deleted.	



It shows the economic amount.

Go back and exit to the menu.

Function 190	<<Z/REC. TOKEMS>>	**Accumulated from the total amount of sales paid with tokens.**
	It shows the equivalent of the total economic amount that the machine has collected in the sales made with tokens. This information cannot be deleted.	

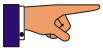
It shows the economic amount.

Go back and exit to the menu.

Function 191	**<Z/UNID. SEL.>>**	**Accumulated of the total amount of sales of each product selection.**
	It shows the total economic amount that the machine has collected in the sales made in each of the product selections. This information cannot be deleted.	

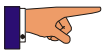
D

When you press a selection, the display shows the number of services you have prepared.



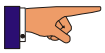
C Main menu.

Function 193	**<Z/UNIT/SEL FS>>**	**Accumulated of the total amount of sales made each product selection in the "free sale" mode.**
	It shows the equivalent of the economic amount that corresponds to the product extractions made in the "free sale" mode in each of the product selections. This information cannot be deleted.	



D

When you press a selection, the display shows the number of services that you have prepared for free sale.



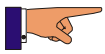
C Main menu.

Group 200: Price programming and sales mode

Function 201	**<<PROG. PRICES>>**	**Sales prices of each product selection.**
	The sales prices of the different product selections are programmed.	

D

The display shows the sales price of the product



A or B Increases or decreases the value.

D Access the next digit to be able to modify it.

C Go back and exit to the menu.

Function 202	**<<PRICE/SELECTION>>**	**Copy sales prices to various product selections.**
	Allows you to copy the same price on several product selections.	

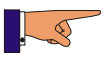
D

Allows you to program a sales price.

A or B Increases or decreases the value.

D Access the next digit to be able to modify it.

Allows you to assign the price to several selections by pressing the corresponding sale button.



C Main menu.

Function 203	<<PRICE ALTER PRESS SELECTION>>	Alternative sales prices.
	It allows to program other sale prices that will be operative in the alternative schedule. The alternative schedule will work if indicated by function 530 <<time of events>>.	

ALTERN PRICE
PULSE SELECTION

S41: 99.99 €

A or B — Increase or decrease the price.

D — Record the changes.

PULSE SELECCION

S46: 99.99 €

A or B — Increase or decrease the price.

D — Record changes and go to work status

Repeat the operation as many times as necessary

Function 204	<<UNIQUE PRICE>>	Unique selling price.
	A sales price is programmed for all product selections.	

204 UNIQUE PRICE

D

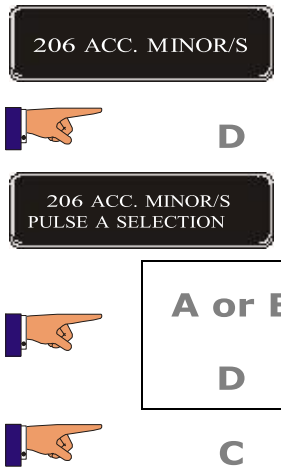
0.50 EURO — Shows the sales price of the product.

A or B — Increases or decreases the value.

D — Access the next digit to be able to modify it.

C — Go back and exit to the menu.

Function 206	**<<ACC. MINOR/S>>**	**It prevents minors from buying product.**
	It is possible to install in the machine a system that prevents the extraction of product, BY CHANNELS (different from F228), unless its operation is previously activated by a remote control, or by inserting a card.	



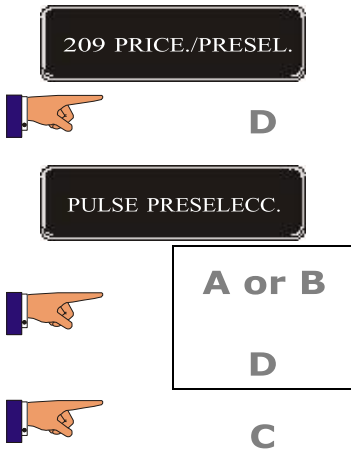
Access the submenu

Pressing the desired selection displays the current programming.

Modify the programming between YES or NO
Saves the programming made and allows to modify another selection.

Go back to the main menu.

Function 209	**<< PRE/PRE-SEL.>>**	**Enables discount or surcharge.**
	Program a discount or a surcharge for each of the hot drink machine presets.	



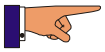
Shows the first pre-selection.

Increases or decreases the value.

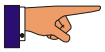
Access the next digit to be able to modify it.

Go back and exit to the menu.

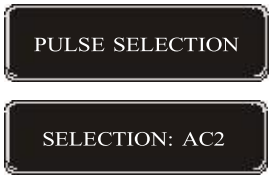
Function 210	<<PULSES>>	Spindle stroke.
	Allows to program the spindle stroke: 180º or 360º.	

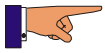


A or B The display shows the values 1 or 2.

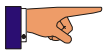


D Record the changes.

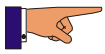




A or B The display shows the values 1 or 2.



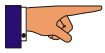
D Record the changes.



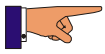
C The machine goes to the working state.

Function 211	<<CADUCITY>>	EXPIRATION DATE.
	It programs the number of days during which a product can be sold once it is loaded in a BRISA or MISTRAL machine.	

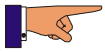
The display shows the first selection that has a programmed expiration date and the number of days



D Access to modify the days of expiration. By programming 0, it disables the function for the chosen selection



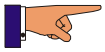
A or B Increases or decreases the programmed value.



D Record the changes.

Allows you to choose another selection to schedule expiration date

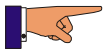
Repeat the operation as many times as necessary



C The machine goes to the working state.

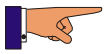
Once the programmed time has elapsed, this selection is disabled, and a fault message is displayed. To restore the selection, an expiry date must be programmed.

Function 220	**<<FREE SALE>>**	**The machine provides free product.**
	By programming this function the machine will elaborate services without the need to introduce money. They will be delivered free of charge.	



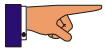
D

Displays current programming.



A Free sale program yes.

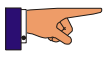
B Free sale program no.



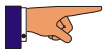
C Go back and exit to the menu.

Over-the-counter sales reach all the product selections that the machine has.

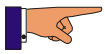
Function 221	**<<SALES MODE>>**	**Sales in simple mode, multi-sale or forced sale.**
	The possible sale modes are programmed: "multi-sale" or "forced sale", maximum credit, maximum return, time for automatic recovery, maximum time to keep the rest of the credit available and AUTO-REC.	



D It accesses the submenu containing the programmable data:
Time for remaining credit Time that credit is maintained
Change the digits.

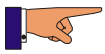


D



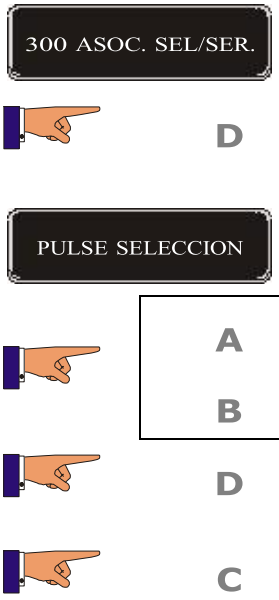
A It increases the value.

B Decreases the value.



C Go back and exit to the menu.

Function 300	**<<ASOC. SEL/SER.>>**	**Associated product selections to products.**
	Allows you to assign a certain service to each keyboard selection. These services are programmed with the standard water and product quantities.	



When you press the product selection, the display shows the product you have assigned.

It shows the products that can be assigned.

Confirm the assigned product.

Return to the Main Menu.

Pre-selections available

More milk. Allows you to select percentages of "more milk", with respect to the one programmed in function 315 for each service. This pre-selection can be modified by means of the "configurator".

Less milk. Allows you to select percentages of "less milk", with respect to the one programmed in function 315 for each service. This pre-selection can be modified by means of the "configurator".

Extra milk. It supplies a higher percentage of milk than the one programmed in function 315 for each service. This pre-selection can be modified by means of "configurator".

Cold milk. In machines with fresh milk module, the milk is not heated.

More sugar. Allows to select percentages of "more sugar" with respect to the one programmed from function 315.

Less sugar. Allows to select percentages of "less sugar" with respect to the one programmed from function 315.

Extra sugar. By pressing this pre-selection, it provides 100% more sugar than the one programmed in F315.

Sugar free. By clicking on this pre-selection, you perform the requested service without any sugar.

Stronger. It acts on the dose of ground coffee, giving more quantity (max. 1 g) than the programmed in F315. It can also be associated with any soluble product. This pre-selection can be modified using the "configurator".

Less strong. It acts on the dose of ground coffee, giving less quantity (max. 0.5 g) than the one programmed in F315. It can also be associated with any soluble product. This pre-selection can be modified using the "configurator".

Soluble coffee. By pressing this pre-selection, the machine provides services with soluble coffee, instead of espresso. This pre-selection can be modified using the "configurator".

Decaffeinated. By pressing this pre-selection, the machine provides services with decaffeinated coffee, instead of espresso. This pre-selection can be modified using the "configurator".

No cup. By pressing this pre-selection, the machine performs services without supplying glass.

Warmer. It allows to make services a little warmer than normal (4-5ºC).

Less hot. Allows to make services a little colder than normal (4-5ºC).

Less water. Perform the services with a lower percentage of water.

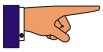
Validate key (Go start). After pressing the key for the desired product, the "validate key" must also be pressed, so that the machine can perform the service.

Group 300: Programming of selections.

Function 302	**<< ASOC. SELECTIONS>>**	**Association of selections for extraction.**
	Allows you to associate selections to serve product alternatively, by clicking on any of the selections associated with each other.	

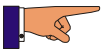
D

Allows to delete the associations made previously; choosing NO, allows to modify the groups already programmed.



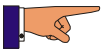
D

You can create up to 5 groups and in each group, up to 10 selections. Once the group has been selected, the associated selections will be displayed. If there are none, the screen is blank.



D

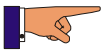
Press the desired selection; if it is already associated, remove the association. Pressing D confirms the selection and allows you to choose other selections to be associated or unassociated.



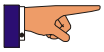
C Allows you to program another group or go back to Main Menu.

Once the programmed time has elapsed, this selection is disabled, and a fault message is displayed. To restore the selection, an expiry date must be programmed.

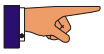
Function 315	<<PROG. SERVICE>>	Amount of product and water for each service.
	In the coffee machine connected to the battery of machines, the quantities of product and water for each service are programmed.	



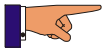
D — Shows the options:
Change step
Add step
Delete step



A / **B** — Select one of the options.



D — Execute the desired option.

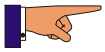


A or B

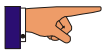
Modify step by step (allows you to modify product and water doses of each product selection).

Add step (allows you to add a step to any product selection).

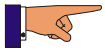
Delete step (allows you to delete a step from any selection).



D — It allows you to modify each of the three options described in the previous point.



A / **B** — Increases or decreases values



C — Go back and exit to the menu.

If a start time is programmed in the water of cut milk, coffee with milk or cappuccino, first the espresso is made and then the milk and chocolate are beaten

If two steps of espresso water are programmed in a service, the machine performs pre-grinding in that service

Function 317	**<<PROG. PRESEL>>**	**Modify the values of some presets.**
	Modifies the percentages of product that the machine doses when one of the presets is activated. It also allows to choose the container from which the product will be extracted when asking for a direct selection if a preselection has been previously activated.	

Origin Hopper: Container from which product is extracted when a "direct selection" is activated.

Destination hopper: Container from which product will be extracted when a "direct selection" is operated, if a "pre-selection" key has been previously pressed.

317 PROG. PRESEL

D

Access the submenu of this programming function and display the first programmable preset.

PRESEL 6 DECAF

A or B

Select the desired preset.

D

Used to change the preset shown on the display.

PERCENTAGE 100%

A or B

Increases or decreases the value.

D

Validates the programmed digit and agrees to modify the original hopper.

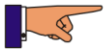
ORIGIN HOPPER BEAN

A or B

Select the desired source hopper.

D

Access to modify the programming of the source hopper.

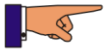
 A or B

Modify between Yes or No the desired origin hopper.

D

Validates the programming and accesses the programming of the destination hopper.

DESTIN. HOPPER DECAF

 A or B

Select the desired destination hopper.

D

Validates as a destination hopper the one shown on the display.

Programmable presets:

Stronger	Decaffeinated
Less strong	Extra milk
More sugar	Less water
Less sugar	Soluble coffee
Variable milk	Decaffeinated

Function 333	<< REFRIGERATOR>>	Configuration of the external cooler for fresh milk.
	Defines if an external cooler is used for the fresh milk, as well as its location next to the machine and the length of the suction tube	

333 REFRIGERATOR

D — Access the submenu of this programming function and display the first programmable preset.

YES / NO

A or B — Select the desired option.

D — Confirm the chosen option. Continue with the next step (2).

RIGHT. – LEFT
UNDER CABINET

Set the location of the cooler in relation to the machine.

A or B — Select the position from the available options.

D — Validate the selected option. Continue with the next step (3).

LENGTH. TUBE MILK
100-120-150 CM

Select the length of the suction tube. It must be measured from the outlet practiced on the panel of the machine to the end of the tube, with the filter incorporated, being inserted inside the tank and touching the end of the base of the container.

A or B — Select the length from the available options.

D — Validation of the selected length.

The actual length of the suction pipe must not in any case exceed that programmed for this function. Failure to heed this warning could result in serious damage to the pump and/or failure to ensure proper cleaning and disinfection of the milk hose, affecting the quality of the cup drink and more importantly, food safety for users.

Group 400: Programming of the machine's operating mode

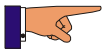
Function 401	**<<MAQ CODE>>**	**Reprogramming the machine with the manufacturer's data.**
	It reprograms the machine with the factory data and allows you to choose one of the 5 "profiles" in your program.	

A "profile" is the configuration of direct selections and pre-selections that the machine loads on the keyboard. The 401 function allows you to choose from 20 different "profiles" for both the Zen and Zensia models. Each machine model; ZEN5, ZEN6, ZENSIA6 and ZENSIA7, VITROS5, have 10 different profiles (5 Espresso and 5 Instan).

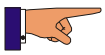
The choice of these profiles means that the espresso models are configured with sugar and popsicles in the door, while the Instan models are without popsicles and with sugar in the cabinet.

When you choose any of the profiles available in the 401 function, the functions indicated in the following table are visible:

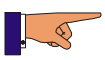
030	Test machine	315	Programming service
110	Money for selection	420	Advertising
120	Total money	490	Hopper name
201	Programming of prices	491	Service name
300	Associated keys to selections	510	Date / Time



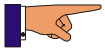
D The display shows the current profile.



A / **B** The other profiles are shown on the display.



D Confirm the selected profile and reboot the machine.

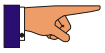


C Go back and exit to the menu.

Function 412	<<CURRENCIES ENTER.>>	Programming of the supported currencies.
MDB or Validator	The coins of legal tender that the wallet will admit are programmed.	

D

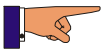
The display shows the current programming.



A

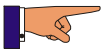
B

The display shows the rest of the coins.



D

Enable the modification YES / NO.

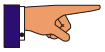


A

YES

B

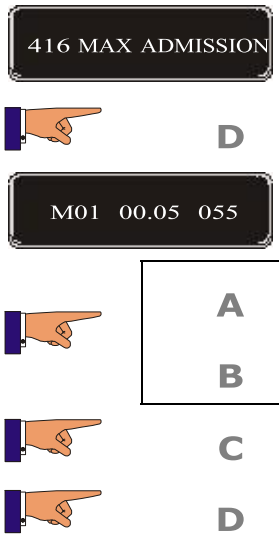
N0



C

Go back and exit to the menu.

Function 416	<<MAX ADMISSION>>	Programming of the maximum number of coins admitted.
MDB or Validator	The maximum number of coins allowed per service is programmed.	



Shows the type of currency.

It shows the coins in an upward direction on the display.

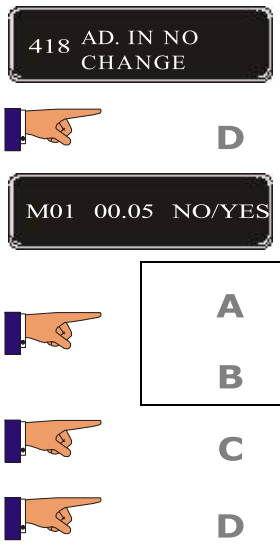
It shows the coins in a descending direction on the display.

Go back and exit to the menu.

Access the type of currency on the display.

The last three figures indicate the number of coins admitted.

Function 418	**<<AD. MON. AGOT>>**	**Coins admitted when the machine is in "out of change".**
MDB or Validator	The coin admission is enabled/disabled according to the value when the machine is in "out of change".	



Displays the type of currency to be enabled/disabled.

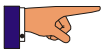
It shows the coins in an upward direction on the display.

It shows the coins in a descending direction on the display.

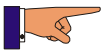
Go back and exit to the menu.

Access the type of currency on the display.

Function 419	<NO. CHANGE COND.>>	Minimum number of coins in each return.
MDB or Validator	Allows you to program the number of coins in each MDB coin mech tube from which you will consider the coins in that tube to be exhausted.	

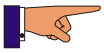


D — The display shows the current programming.



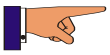
A — The display shows the rest of the coins.

B



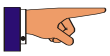
D — Access to modify the programming.

Function 420	<<PUBLICITY>>	Advertising message.
	A message is programmed to be shown on the machine's display, alternating with the messages of temperature, time and the Azkoyen sign. It must have a maximum of 100 characters.	



D

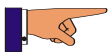
Shows the message of the machine.



A o B — Show in the *display* the characters in an ascending or descending direction.

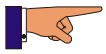
C — Erase the last character programmed.

D — Save the character that is shown in *display*.



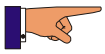
RECOVER — The message is saved.

Function 421	<<MENS. EFFECT>>	Advertising message of effect.
	It allows you to program a message of up to 16 characters to be shown on the display, alternately with the temperature, time and Azkoyen label messages.	

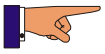


D

Displays the message that the machine has.

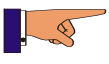


A or B	The display shows the characters in an ascending or descending direction.
C	Deletes the last programmed character
D	Records the character shown on the display.



D or **RECUP** The message is recorded.

Función 424	<<MESS. AVERIA>>	Fault message.
	A message is programmed to display the machine's display. It will have a maximum of 16 characters. This message will be displayed when the machine goes into "out of order" status.	



D

Displays the message that the machine has.

A o B	It shows the characters in an ascending or descending direction on the display.
C	Deletes the last programmed character.
D	Records the character shown on the display.

RECOV. By pressing the machine recovery, the message is recorded.

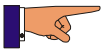
Function 430	**<IDIOMA>>**	**Language in which the machine will work.**
	The language in which the messages will be shown on the machine's display is programmed. It can be selected from English, French, Portuguese, German, Italian and Spanish. Using the appropriate display card and corresponding software, the machine will display messages in Cyrillic or Katakana characters.	

A	It allows the selection of some of these languages: Spanish, French, German, English, Portuguese, Italian.
B	

Displays the message that the machine has.

D It records the changes, and the machine goes to work status.

Function 431	<<NAME. CURRENCY>>	**Name that will have the currency with which the machine will work.**
	The name of the currency to be displayed on the machine is programmed. This name can be up to 3 characters long.	

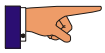


A
B
C
D

A or B modify the blinking digit.

Delete the last character of the message.

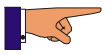
Saves the selected character.



D or **RECUP**.

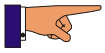
It records the written message, and the machine goes into work mode.

Function 432	<<DECIMALS>>	**Marks the position of the decimal point of the coin.**
	The position of the decimal point to be shown on the display is programmed.	



A
B

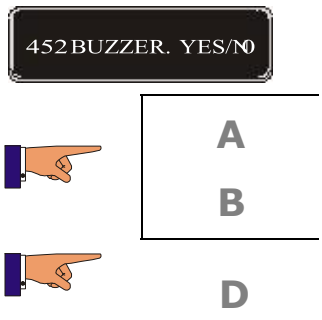
Allows to modify the position of the decimal point: 0, 1, 2.



D

Saves the changes and the machine goes to work status

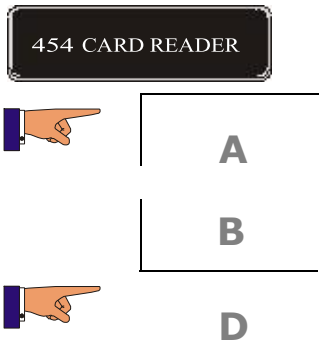
Function 452	<<ZUMBAD. YES/NO>>	Buzzer Yes/No.
	Depending on the programmed option the buzzer will beep or not.	



The display shows the options YES / NO.

It records the changes, and the machine goes to work status.

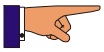
Function 454	<<CARD READER>>	Card reader Yes/No.
	Depending on the option programmed, the "card reader" will be operational or not.	



The display Will show the options YES / NO.

It records the changes, and the machine goes to work status.

Function 455	<<BILL READER>>	Ticket reader Yes/No.
	Depending on the option programmed, the "ticket reader" will be operational or not.	



A

B

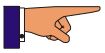
The display will show the options YES / NO.

D

It records the changes, and the machine goes to work status.

Function 458	<<IDETECT>>	Infrared cup detection system
	The presence, or not, of the infrared system is programmed, which allows the detection of the existence of a base in the dispensing of the product.	

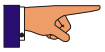
Pressing D displays the first option.



A

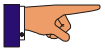
B

Select from
"V module" (heating machine)
"A module" (cold machine).



D

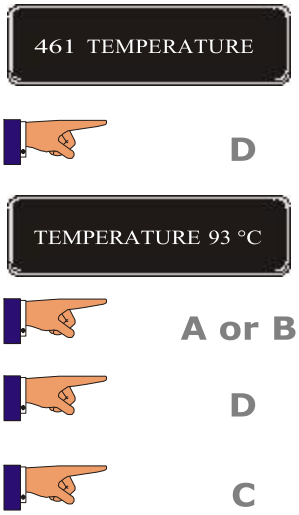
It allows to modify the programming between YES or NO (To snack module and V hot vending machine).



C

Go back and exit to the menu

Function 461	<<TEMPERATURE>>	**Temperature of boiler water and fresh milk for models with milk module**
	In the coffee machine connected to the battery, the water temperature of the boiler is programmed. The programming range is a minimum of 40º C and a maximum of 95º C, increasing or decreasing from degree to degree. In the second temperature to define, the temperature of the milk, the programming range is a minimum of 40ºC and a maximum of 70ºC.	



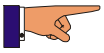
After the setpoint of the first temperature T1 (boiler water), you are asked to set the heating strategy (normal / ECO mode)

- Normal - you always want to have water available in the boiler at the set temperature.
- ECO mode - 1 hour after the last service, the target temperature of the boiler is set at 40°C. It will take some time for the next service to reach the target temperature again.

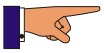
After the heating strategy, the setpoint is configured for the second temperature T2, in machines that have a milk module. The programmable value is in the range of 40°C and 70°C and the programming steps are the same as those described for the boiler temperature.

The programmed heating strategy (Normal / ECO mode) affects both temperatures, T1 and T2.

Function 463	<<AUTOMAT. WASH>>	**Automatic washing of the product mixers.**
	In hot drink machines, it allows to program the automatic washing of all the product mixers after a certain time has passed since the last service was made. The time is programmable in any of the following values: 15 minutes, 30 minutes, 1 hour, 3 hours, 6 hours or 12 hours. You can also program the maximum amount of water that will be consumed in this wash; with a maximum of 50cc.	



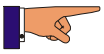
D



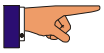
A

B

Modify the programmed time.

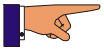


D — Save the changes and go to the Main Menu.



C — Go back and exit to the menu.

Function 465	<<AUTONOMY>>	**Presence of an autonomy kit for water supply to the machine.**
	It allows you to choose between possible working modes: Water connection. Autonomy with external pump. When it has an auxiliary pump that delivers water from the autonomy carafe to the cold-water tank. Autonomy. When the pump takes the water directly from the autonomy carafe.	



D

A	Connection to hydraulic network
B	Autonomy mode Autonomy with external pump

D Save the changes and go to the Main Menu.

C Go back and exit to the menu.

It is important to choose the right working mode, so that when the water in the autonomy is exhausted, the machine is "out of service" and the auxiliary pump does not work in vacuum.

Function 466	**<<STIRRERS>>**	**Supply of stirrers to beat the product in the glass.**
	On the coffee machine connected to the battery, the dosage is programmed, or not, or automatic, for a pallet when the machine makes a service. The automatic option will deliver a stirrer, long as the product chosen by the machine user contains sugar. If the product selection contains sugar, it is not possible to remove the stirrer!	

D

A	The rest of the product selections are shown on the display.
B	

D It allows to modify the programming.

A	Modifies the option programmed in the machine.
B	

D Save the changes and go to the Main Menu.

C Go back and exit to the menu.

Function 467	<<CUPS>>	Supply of cups.
	On the coffee machine connected to the battery, the dosage of a cup is programmed or not when the machine prepares a service.	

D

A

B

The rest of the product selections are shown on the display.

D Record the changes.

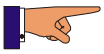
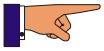
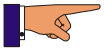
C Go back and exit to the menu.

Function 490	<<HOPPER NAME>>	It allows to name the product hoppers.
	A name can be programmed for the product hoppers. This way the machine display will show the programmed name. A 25% increase in product extraction speed can also be programmed for each of the product hoppers.	

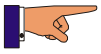
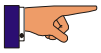
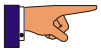
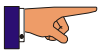
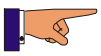
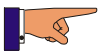
D

A or B Show the rest of the hoppers.

D Allows you to change the name.

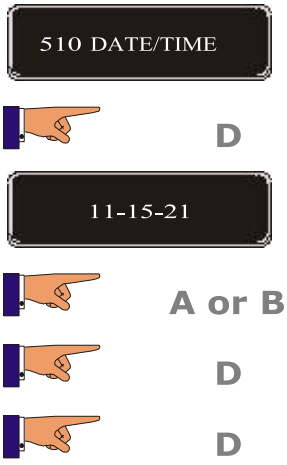
	A or B	It shows the alphabet.
	**D**	Once the new name is written, press and hold the "D" key until it is recorded. You can now program a 25% increase in product extraction speed.
		This function is valid for containers of soluble products.
	A or B	Modify the programming between YES or NO. Record the changes and move to the next hopper Main menu.
	**D**	
	**C**	

Function 491	**<<SERVICE NAME>>**	**Name for each of the product selections.**
	On the coffee machine connected to the battery, a name is programmed for each of the product selections. These names will be shown on the machine display when a product selection key is pressed before credit is entered.	

	**D**	
		Displays the name of product selection number 1.
	**A or B**	Show the rest of the hoppers.
	**D**	Allows you to change the name. When the new name is written, move the cursor to the right and it will be saved.
	**A or B**	It shows the alphabet.
	**D**	Record the name.
	**C**	Go back and exit to the menu.

Group 500: Time functions

Function 510	**<<DATE/TIME>>**	**Date and time.**
	Sets the date and time of the machine's internal clock.	



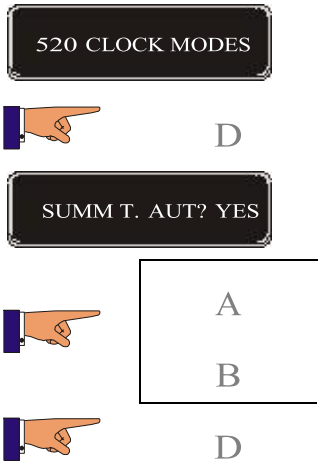
Displays the current date.

Modify the data.

Go to the next digit.

Go back and exit to the menu

Function 520	**<<CLOCK MODES>>**	**Time format.**
	Sets the automatic changeover of winter and summer time, if the time will be shown on the display and the format it will have: 24 hours or AM/PM.	



Automatic changeover YES.

Automatic changeover NO.

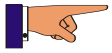
Go back and exit to the menu

Function 530	<<HOUR EVENT>>	Macro hours.
	A series of time ranges are programmed. At the start time of the time range the element in question is electrically switched on and at the end time it is switched off. There are 8 events, and in each one you can program one of the following options: Without programming it will do nothing. Machine: automatic on and off time. Lighting: automatic on and off time. Hot water boiler: automatic on and off time. Refrigeration unit: automatic on/off time. Sale prohibited: start and end time between which the machine will not sell product. Alternative prices: start and end time between which the machine will sell product at the alternative price.	

The *display* shows the different events from EV1 to the EV8

Enter in the submenu.

The *display* shows the 7 options the submenu has.

 **D**

Enter to the function selected in the submenu and allows programming the initial time and ending of the event.

D

Pressing this key, the cursor places over the different digits that make up the switch-on time.

D

By pressing this key, the cursor is placed over the different digits that make up the switch-off time.

D

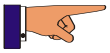
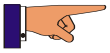
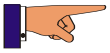
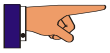
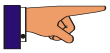
Goes back to the list of events.

C

Saves the changes and the machine goes to work status.

If the start and end schedule of the event is 00:00:00 the event will not be active.

Function 531	**<<C.WEEKLY EV>>**	**Daily macros.**
	The days on which the events programmed in function 530 <EVENT TIME>> will be activated are programmed. The possibilities offered by this function are: LAB: Workdays FDS: Weekends TUE: Tuesdays THU: Thursdays SAT: Saturdays N/A: No Available MON: Mondays WED: Wednesdays FRI : Fridays SUN: Sundays	

531 C. WEEKLY EV.		
EV1: NO PROGRAMMED		
	A o B	The *display* shows the different events from EV1 to the EV8.
EV4: NO PROGRAMMED		
	**D**	Enter in the submenu.
EV4: ON/OFF MACH		
	**A o B**	The *display* shows the 7 options the submenu has.
	**D**	Enter to the function selected in the submenu and allows programming the initial time and ending of the event.
EV4: ON/OFF MACH MON		
	A o B	The *display* shows the different options of this function
	**D**	Set one of the options described in this function.
EV4: ON/OFF MACH MON -> THU		
	**D**	Set one of the options described in this function.
	C	Save changes and the machine switch to work state.

2.5 SPECIAL PROGRAMMING FUNCTIONS

In this section, several functions are extended that, due to their relevance, require a more in-depth treatment. The following Special Functions are described below:

- **FUNCTION 010: SYSTEM EVENT LOG**
    - o A useful tool to know the current and past state of the system (diagnosis)
- **FUNCTION 315: PRG. SERVICE**
    - o Definition of the steps for the elaboration of a recipe.

2.5.1 FUNCTION 010: MACHINE CLEANING LOG (EVENT LOG)

- The 010 function is of vital importance for controlling the cleanliness and health of the machine.
- It is not its exclusive function since it allows the visualization of the incidences or warnings that have taken place since the last erasure of incidences, leaving the temporary track of each one of them.
- This data can be displayed on the screen or sent to a peripheral printer connected to the machine.
- Given the extreme importance of maintaining cleanliness in a fresh milk system, this function becomes indispensable as a monitoring tool.
- Within this function is the record of the last cleaning cycle of the milk module performed.
- Once you access the function, the display asks you to choose the output type where to display the events, press A/B until you reach DISPLAY, press D and then press A/B again to scroll through all the event records.
- The temporary list will show both warnings and states of cleanliness as well as any other events that have left a mark at a given time.

2.5.2 FUNCTION 315: PROGRAMMING OF A SERVICE

We begin by defining what a service is, in a machine-like Vitro M5

What is AND what does make a service?

A service is the result that the machine delivers at the request of the user through the Pressing a selection key.

The process of preparing a recipe involves the sequence of actions through which the ingredients are provided, in the right order and quantity to achieve optimal quality delivery.

Therefore, when programming a service, the steps corresponding to the recipe should be programmed selected. These steps comprise both the dispensing of ingredients and the processes of internal processing.

For example. To prepare a soluble coffee with milk, you must perform several actions:

1º - Dispense the right amount of hot water into the glass.

2º - Dispensing and mixing the freeze-dried coffee product with the water.

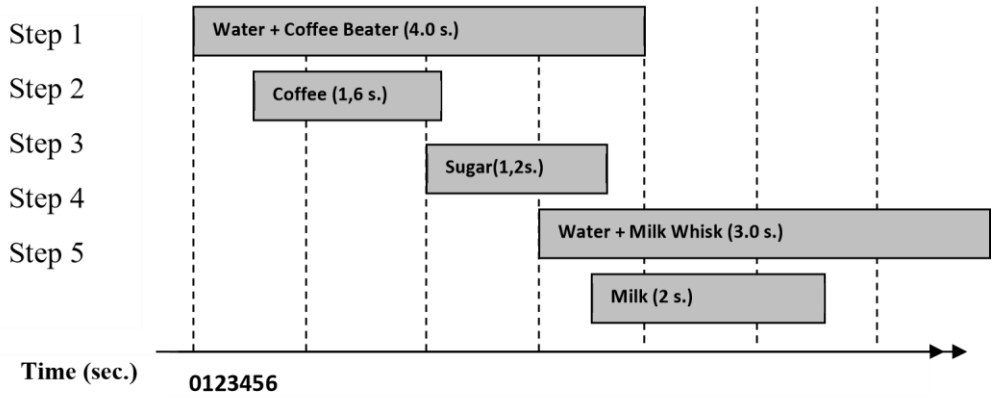
3º - Sugar Dispensing

4º - Dispensing milk

5º - Beaten of the mixture

It is also convenient that the actions overlap one another, to shorten the service time and achieve an optimal mix. At the same time, the order of the ingredients and actions must be respected to achieve an optimum result.

The sequence of the coffee with milk service in the machine could be approximately like this:



FUNCTION 315 parameters

In function 315 you can program the complete configuration of each service.

Choose the service to be programmed, either by pressing the corresponding selection button or by using the A and B keys to locate the service.

Below you will find You can:

- MODIFY an already programmed step
- ADD a new step to a service, or
- DELETE one step of a service

Use the programming keys to change the values. The function of the keys is as follows:

- A or B - Move forward or backward through the sequence of steps
- C or D - Increase or decrease quantities. Water volumes are measured in cubic centimeters.

WARNING!

AFTER A CHANGE IN THE DOSAGE OR GRADUATION OF GROUND COFFEE, CHECK THAT THE SERVICES ARE CORRECT, INCLUDING THE COMBINATIONS WITH PRE-SELECTION OF "EXTRA COFFEE". THE DOSE OF 8 G SHOULD NOT BE EXCEEDED. OF COFFEE IN THE SERVICES WITH THIS PRE-SELECTION.

2.5.3 FUNCTION 333: REFRIGERATOR

The machines equipped with the fresh milk module are programmed to operate as standard, although the chiller is a separate module from it.

Although the machine can be operated with other refrigerators, the refrigerator recommended by AZKOYEN has an integrated system to control the level of the milk and the temperature.

- If you want to deactivate the control of these data access the function **333** and proceed according to the option programming mode to leave the value in **NO**. To activate it again, proceed in the same way and select **YES**.
- With function **333** programmed to **YES**, the machine will detect the level and temperature of the milk and will warn on the display when the minimum value is reached.
- If the programmed value is **NO** and your machine has a milk cooler installed, the machine will not control the level of milk in the tank, avoid it to be empty, the services will not have the right quality in terms of foaming.

Refrigerator position

Can be installed on either side of the machine or under the counter

Milk tube length

The maximum length of the suction pipe must be defined. A value must be selected from the three options shown: 100 cm, 120 cm and 150 cm. Under no circumstances should the selected length be exceeded due to the risk of damage to the pump or other elements of the hydraulic circuit.

Recommended working temperature

The temperature of the refrigerator must **ALWAYS** be above 3°C, otherwise the milk could freeze for long periods of inactivity, such as one night, especially if the amount of milk in the tank is low.

Alternative operation to fresh milk with soluble milk support

- If you do not want the machine to turn off the milk services in the above case, you can program the use of alternative soluble milk until you refill the milk tank. At that time, the machine will use the fresh milk again for servings.

- By activating this function, the machine will also detect the internal temperature of the cooler and if it is above the recommended value, it will leave the machine out of service due to malfunctioning of the cooler.