PROGRAMMING MANUAL

brio3

Espresso / Instant

English

| **Code:** | P2595EN01 | **Date:** | 08 - 2007 |

INTRODUCTION

This "Programming Manual" is a very useful tool for those operators who want to get the most out of the potential of the installed software and know in detail all of the available software functions.
This document is available in PDF format in the Reserved Area of our internet site www.nwglobalvending.com or, on request, through our after-sales service.

The Manual is divided into 3 parts:

The First Part regards *Normal Vending Mode*; it describes the operations to be carried out during the vending machine normal use:
- Power-on
- Operations with the door closed
- Messages for the user.

The Second Part descries the *Filler Menu*, the programming part that is used for changing individually the sales prices of the selections and for simple controls on the functioning and on the machine sales.

The Third Part describes the *Technician Menu*, the programming part that is meant for technical personnel, used for changing the machine performance.
The operations described can modify the functioning cycles, therefore they must be carried out only by personnel who have the specific knowledge of the machine functioning from a point of view of electrical safety and health regulations.

The appendix contains the *List of Failures*, which describes the possible error signals and the self-diagnosis conditions of the machine; it also describes the functions concerning the coin mechanism communication protocols.

NORMAL VENDING MODE

POWER ON

When closing the machine door, the display indicates the version number of the installed software.
The machine can be programmed for displaying, for a few second, the number of selections made.

After a few seconds the display will show the message "*HEATING*" and when the normal operating temperature is reached, the machine goes into normal vending mode.

OPERATIONS WITH THE DOOR CLOSED

During Normal Vending Mode it is possible to carry out certain operations with the door closed, keeping button A pressed for more than 2 seconds (see figure). The push-buttons take on numeric values as shown in the figure:
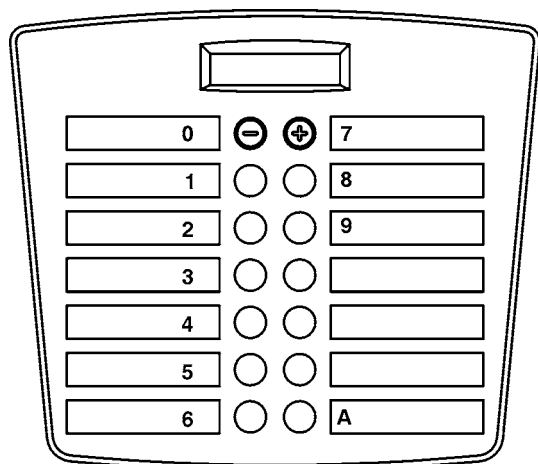
The machine waits a few seconds for the entry of a 5-digit code that will allow the following operations if enabled in the Password option within the Technician Menu:
- Reset counters

- Wash

By default all passwords are disabled.

The following table indicates the most common strings that may be shown on the machine display in normal vending mode.

| String	Description
HEATING	It is not possible to make selections. The boiler heating element is switched on and is heating the water to bring it to normal operating temperature.
SELECT THE DRINK	The machine waits for the user to make a drink selection by pressing the relevant selection button.
NO CHANGE	The machine signals that, in the event the money in the tubes is lower than the required minimum, the change is not guaranteed.
DRINK SELECTED / (SCROLLING BAR)	The machine is preparing the selected drink.
DRINK SELECTED / TAKE THE PRODUCT	The machine has completed the preparation of the selected drink.
VENDING MACHINE OUT OF ORDER	It is not possible to make selections. Besides this message, the failure that caused this condition is displayed alternating.
SUSPENDED SERVICE	It is not possible to make selections. This condition occurs when the machine is in Energy Saving mode or while dispensing a product from the slave machine.
ESPRESSO OUT OF ORDER	It is not possible to make espresso coffee based selections, because of a failure in the coffee unit. All other selections remain available.
SELECTION DISABLED	It is not possible to make the selection chosen, as such selection was disabled in the programming menus.
EMPTY GROUNDS TRAY	The maximum number of coffee based selections has been reached and the machine signals that the coffee grounds tray is full and must be emptied with the machine on, to allow the software to recognise the operation.
INSERT TRAY	The machine signals that the specific sensor does not detect the presence of the coffee grounds tray.

PROGRAMMING MENU

In order to access the programming menu, open the front door of the vending machine, switch on the machine and insert the yellow key supplied in the relevant slot located on the left-hand side of the machine.
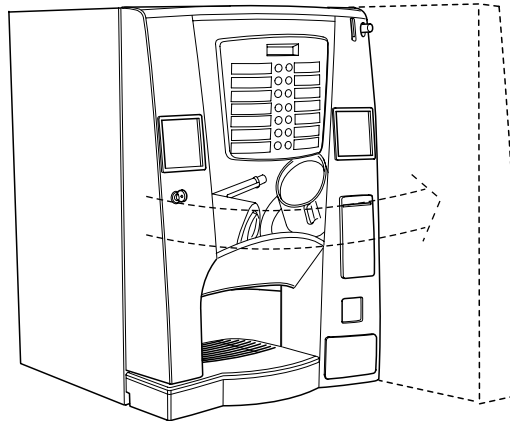
Press the programming access button as shown in the figure:
The machine goes into "Filler Menu" mode.
The buttons shown in the figure are used for surfing through the different menus:
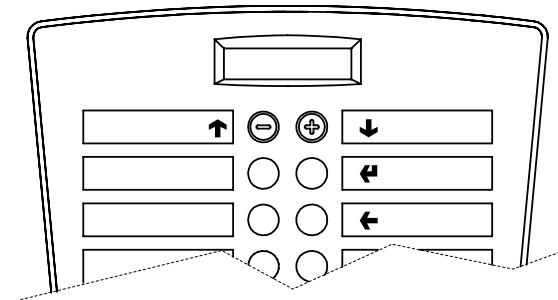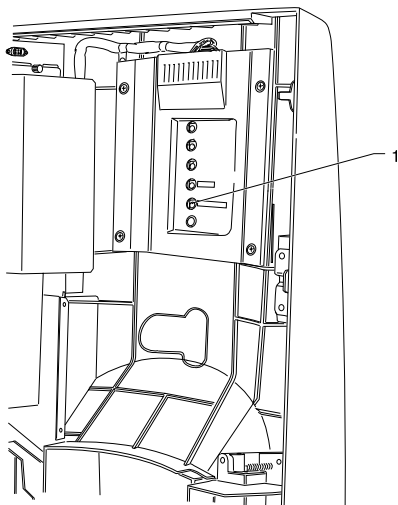
Scrolling buttons UP "↑"and DOWN "↓"
The UP and DOWN scrolling buttons are used for moving from one programming menu item to the next one, located in the same level, and at the same time change the status or the numeric value of the corresponding functions.

Confirm / Enter button "↵"
The confirm / enter button is used for moving to the lower level or for confirming a value after being entered or changed.

Exit button "←"
The exit button is used for returning to the higher level or for exiting a change field of a function. When reaching the highest level in the menu, this button is pressed for going from the Technician menu into the Filler menu and vice versa..

FILLER MENU

1 - STATISTICS	**1** **S**TATISTICS

1.1 - PRINT STATISTICS	**1.1** **P**RINTING THE **S**TATISTICS

1.1.1 - PARTIAL PRINTOUT	**1.1.1** **P**ARTIAL PRINTOUT

1.1.1.1 - PRINT SEL. COUNT	**1.1.1.1** **P**RINTING THE SELECTION COUNTERS When confirming this function, the counters regarding the different selections are printed.

1.1.1.2 - PRINT BAND COUNT	**1.1.1.2** **P**RINTING THE TIME BAND COUNTERS When confirming this function, the counters regarding the different time bands are printed.

1.1.1.3 - PRINT DISC COUNT	**1.1.1.3** **P**RINTING THE DISCOUNT COUNTERS When confirming this function, the counters regarding discounts and overprice are printed.

1.1.1.4 - PRINT FAIL COUNT	**1.1.1.4** **P**RINTING THE FAILURE COUNTERS When confirming this function, the counters regarding the different failure are printed.

1.1.1.5 - PRNT C MECH DATA	**1.1.1.5** **P**RINTING THE COIN MECHANISM DATA When confirming this function, the counters regarding the coin mechanism data are printed.

FILLER MENU

1.1.2 - TOTAL PRINTOUT

1.1.2
TOTAL PRINTOUT
When confirming this function, all statistics are printed.

1.2 - PRINT REL. STATS

1.2
PRINTING THE RELATIVE STATISTICS

1.2.1 - PARTIAL PRINTOUT

1.2.1
PARTIAL PRINTOUT

1.2.1.1 - PRINT SEL. COUNT

1.2.1.1
PRINTING THE SELECTION COUNTERS
When confirming this function, the relative counters regarding the different selections are printed.

1.2.1.2 - PRINT BAND COUNT

1.2.1.2
PRINTING THE TIME BAND COUNTERS
When confirming this function, the relative counters regarding the different time bands are printed.

1.2.1.3 - PRINT DISC COUNT

1.2.1.3
PRINTING THE DISCOUNT COUNTERS
When confirming this function, the relative counters regarding discounts and overprice are printed.

1.2.1.4 - PRINT FAIL COUNT

1.2.1.4
PRINTING THE FAILURE COUNTERS
When confirming this function, the relative counters regarding failures are printed.

1.2.1.5 - PRNT C MECH DATA

1.2.1.5
PRINTING THE COIN MECHANISM DATA
When confirming this function, the relative counters regarding the coin mechanism data are printed.

FILLER MENU

1.2.2 - TOTAL PRINTOUT

1.2.2
TOTAL PRINTOUT
When confirming this function, all relative statistics are printed.

1.3 - DISPLAY STATS

1.3
DISPLAYING THE STATISTICS

1.3.1 - DIS. SEL. COUNT.

1.3.1
DISPLAYING THE SELECTION COUNTERS

1.3.1.1 - DIS. SIN. COUNT.

1.3.1.1
DISPLAYING THE SINGLE COUNTERS
This function is used for displaying the counters regarding each selection, divided by price band (0, 1, 2, 3, 4, Free, Test).

1.3.1.2 - DIS. TOT. COUNT.

1.3.1.2
DISPLAYING THE TOTAL COUNTERS
This function is used for displaying the total counters regarding each selection.

1.3.1.3 - DIS. SEL. COUNT.

1.3.1.3
DISPLAYING THE SELECTION COUNTERS IN NORMAL VENDING - /MAINTENANCE
This function is used for displaying the total counters regarding the selections made while in normal vending mode and maintenance mode.

1.3.2 - DIS. BAND COUNT.

1.3.2
DISPLAYING THE TIME BAND COUNTERS
When selecting the desired price band (0, 1, 2, 3, 4, Free, Test), the total number of selections made for that price band is displayed.

1.3.3 - DIS. DISC. SEL.

1.3.3
DISPLAYING THE DISCOUNT COUNTERS
This function is used for displaying the total amount of discounts and overprice accumulated for the dispensed selections.

FILLER MENU

1.3.4 - DIS. FAIL.COUNT.

1.3.4
DISPLAYING THE FAILURE COUNTERS

This function is used for displaying the number of times each possible failure occurred in the vending machine.

1.3.5 - DIS. C MECH DATA

1.3.5
DISPLAYING THE COIN MECHANISM DATA

1.3.5.1 - DIS. AUDIT DATA

1.3.5.1
DISPLAYING THE AUDIT DATA

This function is used for displaying the number of coins inserted in the vending machine, differentiated by the type of coin.

1.3.5.2 - DIS. CASH COUNT.

1.3.5.2
DISPLAYING THE CASHED AMOUNT

This function is used for displaying the value of:
- Total cashed
- Total sold
- Total cashed by credit

1.4 - DIS. REL. STATS

1.4
DISPLAYING THE RELATIVE STATISTICS

1.4.1 - DIS. SEL. COUNT.

1.4.1
DISPLAYING THE SELECTION COUNTERS

1.4.1.1 - DIS. SIN. COUNT.

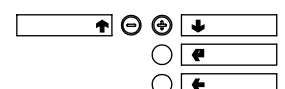**1.4.1.1**
DISPLAYING THE SINGLE COUNTERS

This function is used for displaying the counters regarding each selection, divided by price band (0, 1, 2, 3, 4, Free, Test).

1.4.1.2 - DIS. TOT. COUNT.

1.4.1.2
DISPLAYING THE TOTAL COUNTERS

This function is used for displaying the total counters regarding each selection.

FILLER MENU

`1.4.1.3 - DIS. SEL. COUNT.`	**1.4.1.3** **D**ISPLAYING THE SELECTION COUNTERS IN NORMAL VENDING - MAINTENANCE This function is used for displaying the total counters regarding the selections made while in normal vending mode and maintenance mode.
`1.4.2 - DIS. BAND COUNT.`	**1.4.2** **D**ISPLAYING THE TIME BAND COUNTERS When selecting the desired price band (0, 1, 2, 3, 4, Free, Test), the total number of selections made for that price band is displayed.
`1.4.3 - DIS. DISC. SEL.`	**1.4.3** **D**ISPLAYING THE DISCOUNT COUNTERS This function is used for displaying the total amount of discounts and overprice accumulated for the dispensed selections.
`1.4.4 - DIS. FAIL.COUNT.`	**1.4.4** **D**ISPLAYING THE FAILURE COUNTERS This function is used for displaying the number of times each failure occurred in the vending machine.
`1.4.5 - DIS. C MECH DATA`	**1.4.5** **D**ISPLAYING THE COIN MECHANISM DATA
`1.4.5.1 - DIS. AUDIT DATA`	**1.4.5.1** **D**ISPLAYING THE AUDIT DATA This function is used for displaying the number of coins inserted in the vending machine, differentiated by the type of coin.
`1.4.5.2 - DIS. CASH COUNT.`	**1.4.5.2** **D**ISPLAYING THE CASHED AMOUNT This function is used for displaying the value of: - Total cashed - Total sold - Total cashed by credit
`1.5 - DEL. REL. STATS`	**1.5** **D**ELETING THE RELATIVE STATISTICS

FILLER MENU

1.5.1 - DELETE PARTIAL

1.5.1
PARTIAL DELETE

1.5.1.1 - DELETE SE. COUNT

1.5.1.1
DELETING THE SELECTION COUNTERS
When confirming this function, the counters regarding the different selections are deleted.

1.5.1.2 - DEL. DISC. COUNT

1.5.1.2
DELETING THE DISCOUNT COUNTERS
When confirming this function, the counters regarding discounts and overprice are deleted.

1.5.1.3 - DEL. FAIL. COUNT

1.5.1.3
DELETING THE FAILURE COUNTERS
When confirming this function, the counters regarding the different failure are deleted.

1.5.1.4 - DEL. C MECH DATA

1.5.1.4
DELETING THE COIN MECHANISM DATA
When confirming this function, the counters regarding the coin mechanism data are deleted.

1.5.2 - DELETE TOTAL

1.5.2
TOTAL DELETE
When confirming this function, all relative statistics are deleted.

FILLER MENU

```
2 - SET SIN. PRICES
```

2
SETTING SINGLE PRICES

This function is used for setting a different price for each selection.

```
2.1 - SELECTION PRICE
```

2.1
SELECTION PRICE

```
2.2 - POWDER 2 PRICE
```

2.2
DECAFFEINATED PRICE

This function is used for setting the sales price for each selection during time band 1 (if set).

```
3 - TUBES CONTROL
```

3
CHANGE TUBES CONTROL

```
3.1 - FILL TUBES
```

3.1
FILLING THE CHANGE TUBES

From this function, the change tubes can be filled manually. Confirming the refilling, the display will indicate
"Credit: ——" which is the value of money available in the change tubes; insert the desired coin into the validator and the display will indicate the value of money available in the change tubes.

```
3.2 - RELEASE TUBES
```

3.2
RELEASING THE CHANGE TUBES

From this function, the change tubes can be released manually. When confirming the releasing, it will be possible to decide which tube to release. Each time the confirm button is pressed, a coin is ejected from the active tube.

FILLER MENU

```
4 - BOILER TEMPERAT.
```

4
BOILER TEMPERATURE

This function is used for displaying the operating temperature, expressed in °C, of the boilers actually installed in the machine.

```
5 - TEST
```

5
TEST

```
5.1 - COMP. DISPENSING
```

5.1
COMPLETE DISPENSING

With this function it is possible to obtain, with the door open and without inserting any money, complete dispensing for each selection.

```
5.2 - WATER ONLY
```

5.2
WATER ONLY

With this function it is possible to dispense, with the door open and without inserting any money, only the water doses for each selection.

```
5.3 - POWDER ONLY
```

5.3
POWDER ONLY

With this function it is possible to dispense, with the door open and without inserting any money, only the powder doses for each selection.

```
5.4 - NO ACCESSORIES
```

5.4
NO ACCESSORIES

With this function it is possible to dispense, with the door open and without inserting any money, only the water and powder doses for each selection, without any cup and stirrer.

```
5.5 - ACCESSORIES ONLY
```

5.5
ACCESSORIES ONLY

With this function it is possible to dispense, with the door open and without inserting any money, only the accessories for each selection.

FILLER MENU

`6 - GSM`

6
GSM

`6.1 - RESET PRE-AL CNT`

6.1
RESETTING THE PRE-ALARM COUNTERS

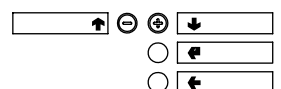With this function the counters that control the pre-alarms are reset.

`7 - EVADTS`

7
EVADTS

`7.1 - CONNECTION`

7.1
CONNECTION

This function places the machine in wait mode for connection to retrieve data.

TECHNICIAN MENU

1 - FAILURES

1.

FAILURES

1.1
READING THE FAILURES

1.1 - READING FAILURES

When the "Failure" function is displayed, press the confirm button "↵" to display the present failures.
If no failures are currently present, after pressing the confirm button "↵" the message "End failures" will be displayed.
A detailed description of the possible failures present in these models is indicated in the appendix of this manual.

1.2
RESETTING THE FAILURES

1.2 - RESET FAILURES

By confirming this function all current failures will be reset.

TECHNICIAN MENU

`2 - SET PARAMETERS`	**2** **SETTING THE PARAMETERS**

2.1
CASH

`2.1 - CASH`

This set of functions controls all parameters regarding the payment systems and the sales prices.

2.1.1
PRICES

`2.1.1 - PRICES`

Four different prices can be set for each selection according to the programmed time bands for when the time table option is enabled. For each of the 4 time bands prices (0 to 65,535) can be programmed globally (same price for all selections) or for the single selections.

2.1.1.1
SETTING SINGLE PRICES

`2.1.1.1 - SET SIN. PRICES`

2.1.1.1.1
SELECTION PRICE

`2.1.1.1.1 - SELECTION PRICE`

This function is used for setting a different price for each selection in each price band that was set.

2.1.1.1.2
DECAFFEINATED PRICE

`2.1.1.1.2 - POWDER 2 PRICE`

This function is used for setting a different price for each decaffeinated coffee based selection.

2.1.1.2
SET GLOBAL PRICES

`2.1.1.2 - SET GLOB. PRICES`

2.1.1.2.1
SELECTION PRICE

`2.1.1.2.1 - SELECTION PRICE`

This function is used for setting one price for all available selections

2.1.1.2.2
DECAFFEINATED PRICE

`2.1.1.2.2 - POWDER 2 PRICE`

This function is used for setting one price for all decaffeinated coffee based selections.

TECHNICIAN MENU

2.1.1.3 - TIME BANDS

2.1.1.3
TIME BANDS

Four programmable time bands are provided for selling products at different prices.
Time band 0 is not programmable and covers the 24 hours.

2.1.1.3.1 - SET DATE & TIME

2.1.1.3.1
SET DATE AND TIME

This function is used for setting the reference time given by an internal clock programmable for:
day/month/year/week-day 1-7 (1=Monday, 2=Tuesday, etc…) and then hour/minutes/seconds.

2.1.1.3.2 - TIME BAND 1

2.1.1.3.2
TIME BAND 1

The time bands are programmable for beginning and end time by hours (00 to 23) and minutes (00 to 59). If the values for start and end of the time band are set to 00.00 the time period is disabled.

2.1.1.3.3 - TIME BAND 2

2.1.1.3.3
TIME BAND 2

The time bands are programmable for beginning and end time by hours (00 to 23) and minutes (00 to 59). If the values for start and end of the time band are set to 00.00 the time period is disabled.

2.1.1.3.4 - TIME BAND 3

2.1.1.3.4
TIME BAND 3

The time bands are programmable for beginning and end time by hours (00 to 23) and minutes (00 to 59). If the values for start and end of the time band are set to 00.00 the time period is disabled.

2.1.1.3.5 - TIME BAND 4
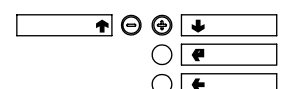
2.1.1.3.5
TIME BAND 4

The time bands are programmable for beginning and end time by hours (00 to 23) and minutes (00 to 59). If the values for start and end of the time band are set to 00.00 the time period is disabled.

TECHNICIAN MENU

2.1.2 - COIN MECHANISMS

2.1.2
COIN MECHANISMS

2.1.2.1 - COIN MECH SETT.

2.1.2.1
SETTING THE COIN MECHANISMS

It is possible to decide which of the payment system protocols available are to be enabled for the functions.
The available payment systems are:
- Executive
- Validators
- BDV
- MDB
By selecting one of the systems it is possible to control its functions.
A detailed description of the functions related to the communication protocols is indicated in the appendix of this manual.

2.1.2.2 - IMMEDIATE CHANGE

2.1.2.2
IMMEDIATE CHANGE

This function is valid only in the case where a change-giver coin mechanism is installed in the machine.
Normally the amount for a selection is cashed after the machine sends the message "Selection successful", consequently the change is returned at the end of dispensing the selected product.

By enabling this function, disabled by default, the cashed signal is sent at the beginning of dispensing, consequently the change owed to the user is returned at the same time of dispensing the product.

2.1.3 - DECIMAL POINT

2.1.3
DECIMAL POINT

Press the confirm button "⏎" to display the position of the decimal point, i.e.:

0	decimal point disabled
1	XXX.X
2	XX.XX
3	X.XXX

Press the confirm button "⏎", these values will start blinking and can then be modified as necessary.

TECHNICIAN MENU

2.1.4 - MASTER SLAVE

2.1.4
MASTER SLAVE

The machine control system is pre-arranged for the connection in a bank of vending machines (Minisnakky, Snakky and Snakky SL)

2.1.4.1 - SET UP

2.1.4.1
SETTINGS

This function is used for setting the hierarchies of master/slave relationships between connected vending machines.
This machine can be configured a "Master", i.e. having control over the second machine, or as "Slave", i.e. leaving the control to the other machine.
2-digit (XX) or 3-digit (0XX; 9XX) selection numbers will also be set. The master/slave function is not enabled by default.

2.1.4.2 - SLAVE PRICE HOLD

2.1.4.2
SLAVE PRICE HOLDING (EXE. PROTOCOL)

In the event an Executive payment system in "Price Holding" mode is set, this function is used for setting the same mode also in the software of the slave machine.

2.1.4.3 - VIRT. PRICE RET.

2.1.4.3
VIRTUAL PRICE RETURN (EXE. / BDV PROTOCOL)

In the case of combined or virtual selections (with the related menus present in the slave machines), this function is used for setting whether to keep (OFF) or not (ON) the partial amount, should the second selection/dispensing fail.

2.1.4.4 - RESET SNAKKY SL

2.1.4.4
Reset snakky sl
This function is used for resetting all settings related to the master/slave function on the slave machine.

2.1.4.5 - MONITOR SLAVE

2.1.4.5
MONITOR SLAVE

This function is used for scrolling through all the information of a slave being connected.
When switching on the slave with the display showing this function, the display will indicate in a sequence all information on the slave regarding:
- software version
- type of slave (XX, 0XX, 9XX)
- presence of dispensing detection photocells
- number of trays and compartments
- presence of dispensing compartment lock device
- temperature detected by the internal probe
To exit the function it will be necessary to switch the master machine off.

TECHNICIAN MENU

2.2 - SELECTIONS

2.2
SELECTIONS

2.2.1 - SET WATER

2.2.1
SETTING THE WATER

2.2.1.1 - WATER DOSES

2.2.1.1
WATER DOSES

With this function the water doses that compose the drink can be set for each selection button.
These are expressed in:
- cc for instant products;
- fmp (number of pulses of the volumetric counter) for Espresso (coffee or tea).
The display will indicate the number of the water dose being set (water 1, water 2, etc.) and the water value blinking. In order to verify the correspondence between the water doses refer to the "Selection dose table".

2.2.1.2 - SET WHIP DOSES

2.2.1.2
SETTING THE WHIPPER

2.2.1.2.1 - SET DOSES

2.2.1.2.1
SETTING THE WHIPPER DOSES

The whipping time can be set for each selection button, for each water dose that composes such selection.
The duration can be set in two different modes:

2.2.1.2.2 - SET MODALITY

2.2.1.2.2
SETTING THE WHIPPER MODE

It is possible to choose between two different modes:
Absolute
i.e. independent from the solenoid valve opening time. The whipping duration is set as tenths of a second for Instant models and as volumetric counter pulses for Espresso models.
Relative
i.e. based on the difference, plus or minus, from the moment the solenoid valve closes.
The whipping duration is always expressed in tenths of a second.

TECHNICIAN MENU

2.2.1.3 - SOLENOID SETTING

2.2.1.3
SOLENOID VALVE SETTINGS

It is possible to set the water flow rate of the single solenoid valves expressed in cc/s (the default value setting in cc/s is indicated in the selection dose table) to calculate the amount of water to be dispensed.

2.2.1.4 - DRIPPING TIME

2.2.1.4
SET DRIPPING TIME

The wait time (programmable from 0 to 2000 hundredths of a second) to the emission of an "end of dispensing" warning sound can be set for each selection in order to allow the tubes to drain.

2.2.2 - SET POWDER

2.2.2
SETTING THE POWDERS

2.2.2.1 - POWDER DOSES

2.2.2.1
POWDER DOSES

This function is used for setting, for each selection button, the instant product powder doses that compose the drink.
These are expressed in gr. (grams).
The display will indicate the combination of water and powder being set (water 1 - powder 1, etc.) and the powder dose value blinking.
In order to verify the correct correspondence refer to the "Selection dose table".

2.2.2.2 - DOSER SETTINGS

2.2.2.2
SETTING THE DOSER UNITS

This function is used for setting the flow rate of the single doser units, expressed in g/s, to calculate the amount of powder to be dispensed, for correct conversion of product dose values.

2.2.3 - SET ACCESSORIES

2.2.3
SETTING THE ACCESSORIES

2.2.3.1 - ENABLE CUP

2.2.3.1
ENABLING THE CUP

This function is used for enabling or disabling cup dispensing for each selection button.

TECHNICIAN MENU

2.2.3.2 - ENABLE SUGAR

2.2.3.2
ENABLING THE SUGAR
This function is used for enabling or disabling sugar dispensing for each selection button.

2.2.3.3 - ENABLE STIRRER

2.2.3.3
ENABLING THE STIRRER
This function is used for enabling or disabling stirrer dispensing for each selection button.

2.2.4 - SELECTION STATUS

2.2.4
SELECTION STATUS
Each single selection button can either be enabled or disabled.

2.2.5 - SELECTION BUTTON

2.2.5
BUTTON <--> SELECTION
This function permits the association of a selection number, indicated in the selection dose table, to a button in the direct selection keypad.

2.2.6 - SEL. ARRANGEMENT
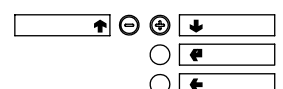
2.2.6
CHECKING THE SELECTION NUMBER
Verifying the selection number (for direct selection models only) associated to a button.

2.2.7 - PRODUCT CODE

2.2.7
SETTING THE PRODUCT CODE
This function is used for assigning a 4-digit code to each selection for processing the statistics.

TECHNICIAN MENU

`2.3 - MACHINE PARAM.`	**2.3** **VENDING MACHINE PARAMETERS**
`2.3.1 - BOILER TEMPERAT.`	**2.3.1** **BOILER TEMPERATURE** This function is used for setting the operating temperature, expressed in °C, of the boilers actually installed in the machine. After selecting the boiler, press the confirm button "⏎", the temperature value on the display will start blinking and can be modified as necessary.
`2.3.2 - TANK`	**2.3.2** **TANK** The machine water supply can be from the mains or from an internal tank. For some applications it is also possible to use two internal tanks at the same time. With this function it is possible to define whether the machine water supply is from the mains (tank = 0) or from the tanks (tank = 1 or 2).
`2.3.3 - MIXER HEATING`	**2.3.3** **MIXER HEATING** With this function it is possible to heat the mixer with a small amount of hot water before dispensing, as long as the following conditions are met: - the first water dose composing the drink is below 60 cc; - no hot drinks have been dispensed from the mixer in the last 3 minutes, or no cold drinks have been dispensed in the last 5 minutes.
`2.3.4 - MIXER COOLING`	**2.3.4** **MIXER COOLING (ONLY FOR MACHINES WITH A COLD UNIT)** With this function it is possible to cool the mixer with a small amount of cold water before dispensing, if no cold drinks have been dispensed from the mixer in the last 5 minutes, or no hot drinks have been dispensed in the last 3 minutes.
`2.3.5 - FAST CYCLES`	**2.3.5** **FAST CYCLES** When this function is enabled, some of the time that is useful for improving the drink quality is eliminated: all products that compose the drink are dispensed at the same time, eliminating the "post-whipping" time.

TECHNICIAN MENU

2.3.6 - SET DISP. MAINT.

2.3.6

SETTING THE REGENERATION COUNTER

It is possible to display the message "Regenerate the water softener" upon accessing "Filler" mode after a programmable number of drinks dispensed.

2.3.7 - PHOTOCELL

2.3.7

PHOTOCELL

The machine can be fitted with a "cup sensor" composed of photocell that detects the presence of an object in the dispensing compartment.
When the function is enabled, if an object is detected in the dispensing compartment, a cup is not released and the display indicates the message "Without cup".
It is also possible to define whether, after two attempts to release a cup without the photocell detecting any objects in the dispensing compartment; the failure should lock the machine or leave it to operate using a ceramic cup.
A lighting lamp inside the dispensing compartment is controlled by the cup sensor.
If the cup is still inserted, when the next selection is made the message "Remove cup" is displayed.

2.3.8 - NEON TIME

2.3.8

EQUIPPED BASE CABINET

In the event the machine is equipped with a dispensing compartment lamp. With this function it is possible to define how long (programmable between 0 and 300 t/s) the lighting lamp inside the dispensing compartment is to stay on, if the cup sensor is not fitted.

2.3.9 - SET CUP SETTLING

2.3.9

CUP SETTLING TIME

This function is used for setting the delay time in stopping the cup column rotation in order to compensate any inertia due to the cup type.

2.3.A - EN. WASH BUTTON

2.3.A

ENABLING THE WASH BUTTON

With this function it is possible to enable the operation of the mixer wash button.
Normally the button is disabled.

2.3.B - EN.AUT.MIX.WASH

2.3.B

AUTOMATIC MIXER WASH

It is possible to set the time when performing an automatic mixer wash cycle. When setting the time to 24.00 the function is disabled (default).

TECHNICIAN MENU

`2.3.C - DEC. CYCLE`

2.3.C

DECAFFEINATED CYCLE

For the purpose of improving the appearance of the drink the lyophilised instant product powder (if present) is dispensed before dispensing water into the mixer.

`2.3.D - NUM. MAX CONTAT.`

2.3.D

COUNTER MAXIMUM NUMBER

This function is used for setting the maximum number of selections to be reached for the purpose of disabling the machine. The counters can be set for the following selections:
- Espresso
- Instant
- Espresso + Instant

When setting a new value for the counter, the previous count is cancelled.

This function is active if the counter reset password was set before hand.

`2.3.E - PREGRINDING`

2.3.E

PRE-GRINDING

This function is used for enabling/disabling the grinding of coffee for the next selection. This permits the reduction of dispensing time for a coffee selection. The function is disabled by default.

`2.3.F - INFUSION TIME`

2.3.F

BREWING TIME (FRESH-BREW TEA)

This function (enabled only in fresh-brew tea models) permits opening of the tea dispensing solenoid valve for a length of time, set in tenths of a second, and delivering of a small amount of water onto the product in order to dampen it before the actual brewing cycle.

TECHNICIAN MENU

```
2.4 - DISPLAY
```

2.4
DISPLAY

2.4.1
LANGUAGE

```
2.4.1 - LANGUAGE
```

With this function it is possible to select the language used for surf-ing within the programming menus and while in normal vending mode. The list of available languages is indicated in the dose table.

```
2.4.2 - PROMOT. MESSAGE
```

**2.4.2**
PROMOTIONAL MESSAGE

```
2.4.2.1 - EN. PROM. MESS.
```

2.4.2.1
ENABLING THE PROMOTIONAL MESSAGE

This function is used for enabling or disabling a promotional mes-sage appearing on the display during the machine normal vending mode.

```
2.4.2.2 - SET PROM. MESS.
```

2.4.2.2
SETTING THE PROMOTIONAL MESSAGE

This function is used for writing the 4-line promotional message; by pressing the confirm button "⏎" the first character starts blinking; this can then be changed using the "⬆" and "⬇" buttons, scrolling through the available characters.
Once the message is completed, it can be stored by pressing button "⏎".

```
2.4.3 - CONTRAST CONTROL
```

2.4.3
CONTRAST CONTROL

This function is used for adjusting the LCD display contrast from 5% to 99%.
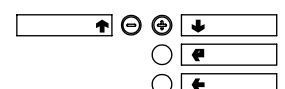
TECHNICIAN MENU

2.5 - PRE-SELECTIONS

2.5
Pre-selections

This function is used for setting the pre-selections present in this model, enabling or disabling the pre-selection for a certain selection, changing dose and price.
An example for the first pre-selection is indicated below; the operations to be carried out are identical for each selection.

2.5.1 - NO CUP

2.5.1
without cup

This pre-selection is used for dispensing the selected product and excluding the dispensing of the cup.

2.5.1.1 - SELECTION ENABL.

Enabling the selection

Press the confirm button to select the selection button for which the pre-selection is to be enabled.

2.5.1.2 - DOSE VARIATION

2.5.1.2
Changing the dose

This function is used for changing the percentage of product dispensed with the pre-selection (function valid only for some pre-selections).

2.5.1.3 - PRICE VARIATION

2.5.1.3
Changing the price

This function is used for assigning a discount or overprice to the selection set with the pre-selection.

2.5.2 - EXTRA SUGAR

2.5.2
Extra Sugar

This pre-selection is used for dispensing the maximum dose of sugar set together with the drink..

2.5.3 - SUGAR

2.5.3
Sugar

This pre-selection is used for increasing or decreasing in a cyclical manner the amount of sugar to be dispensed.

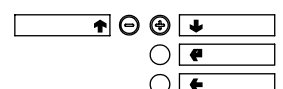2.5.4 - SUGAR -

2.5.4
Sugar -

This pre-selection is used for decreasing by a modifiable dose the amount of sugar to be dispensed.

2.5.5 - SUGAR +

2.5.5
Sugar +

This pre-selection is used for decreasing by a modifiable dose the amount of sugar to be dispensed.

TECHNICIAN MENU

2.5.6 - WATER +	**2.5.6** **WATER +** This pre-selection is used for increasing by a modifiable amount the water in the coffee or tea based selections.
2.5.7 - WATER -	**2.5.7** **WATER -** This pre-selection is used for decreasing by a modifiable amount the water in the coffee or tea based selections.
2.5.8 - STRENGHT +	**2.5.8** **POWDER +** Pre-selection not available in these models.
2.5.9 - STRENGHT -	**2.5.9** **POWDER -** Pre-selection not available in these models.
2.5.A - COFFEE PWD. DOSE	**2.5.A** **DECAFFEINATED** This pre-selection is used for making a coffee-based selection with the second type of available coffee (if present).
2.5.B - EXTRA MILK	**2.5.B** **EXTRA MILK** This pre-selection is used for increasing by a modifiable amount the milk dose (powder only) in the milk-based selections.
2.5.C - JUG +	**2.5.C** **JUG +** Pre-selection not available in these models.
2.5.D - JUG -	**2.5.D** **JUG -** Pre-selection not available in these models.
2.5.E - MOKKA	**2.5.E** **MOKKA** This pre-selection is used for decreasing by a modifiable amount the water dose in the coffee selections for the purpose of obtaining a "mokka" type drink.

TECHNICIAN MENU

2.6 - MISCELLANEOUS

2.6
MISCELLANEOUS

2.6.1 - JUG FACILITIES

2.6.1
JUG FACILITIES

This function is used for setting a programmable number (1 to 9; 5 by default) of consecutive selections to fill a jug.

2.6.2 - PASSWORD

2.6.2
PASSWORD

This function is used for setting a password for accessing the "Technician menu" mode.

2.6.2.1 - SET PASSWORD

2.6.2.1
SETTING THE PASSWORD

Enter a 5-digit numeric code to be set as the password.

2.6.2.2 - ENABLE PASSWORD

2.6.2.2
ENABLING THE PASSWORD

This function is used for enabling or disabling the password request when accessing the "Technician menu" mode (disabled by default).

2.6.2.3 - PWD AZZ. CONTAT.

2.6.2.3
COUNTER RESET PASSWORD

This function is used for setting the password for resetting the counters set with the function "Counter maximum number".

2.6.2.4 - PWD LAVAGGI

WASH PASSWORD

This function is used for setting the password that must be entered while in normal vending mode (with the door closed) for performing a mixer wash cycle

2.6.3 - ENABLE FILL MENU

2.6.3
ENABLING THE FILLER MENU

This function is used for determining which of the "Filler menu" functions are to be left active and which are to be disabled. The reference numbers of the menus do not change even if some are disabled.

TECHNICIAN MENU

2.6.4 - ENERGY SAVING

2.6.4
ENERGY SAVING

This function is used for saving electric power when the machine is not in use.

2.6.4.1 - SET ENER. SAVING

2.6.4.1
SETTING THE ENERGY SAVING

This function is used for enabling or disabling the automatic switch-off of the vending machine boiler during the time when it is believed the machine would not be used.

2.6.4.2 - PARAM. EN.SAVING

2.6.4.2
ENERGY SAVING PARAMETERS

This function is used for setting the days of the week (1 Monday, 2 Tuesday, 3 Wednesday, etc.) and the time bands (band 1 and 2) when the boiler is to be switched off for energy saving.

2.6.5 - GRUPPO ES

2.6.5
ESPRESSO UNIT

This function is used for setting the standby position of the Z3000 espresso unit.
- OPEN   brewing chamber open;
- CLOSED   brewing chamber closed.
By default the position is set to OPEN.

2.6.6 - LAV. GRUPPO AUT.

2.6.6
AUTOMATIC UNIT WASH

This function is used for setting the daily unit wash of the espresso unit by setting the time when it is to be performed. If setting the time to 00.00 the function is disabled.

2.6.7 - FAN CONTROL

2.6.7
EXHAUSTER CONTROL

This function is used for setting the continuous operation of the exhauster fans for instant products:
- ON   fans always on;
- OFF   fans on only during dispensing and for the following 30 seconds.

2.6.8 - BREWER WARMING

2.6.8
ESPRESSO UNIT HEATING

This function is used for setting the espresso coffee based selection for which the brewer unit heating must be enabled, permitting the dispensing of hot water in the brewer unit before brewing the coffee.

2.6.9 - BREW. WARM. TIME

2.6.9
ESPRESSO UNIT HEATING TIME

This function is used for setting the length of time from the last espresso coffee selection after which the brewer unit heating must be performed (30 minutes by default).
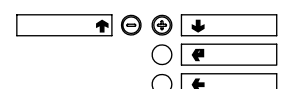
TECHNICIAN MENU

3 - STATISTICS

3
STATISTICS

3.1 - ELECTRIC COUNTER

3.1
ELECTRONIC COUNTER

3.1.1 - DIS. COUNTERS

3.1.1
DISPLAYING THE SELECTION COUNTERS

This function is used for displaying the total number of selections dispensed by the vending machine.

3.1.2 - RESET COUNTER

3.1.2
RESETTING THE COUNTERS AT POWER-ON

This function is used for resetting the general selection counter.

3.2 - DISPLAY STATS

3.2
DISPLAYING THE STATISTICS

3.2.1 - DIS. SEL. COUNT.

3.2.1
DISPLAYING THE SELECTION COUNTERS

3.2.1.1 - DIS. SIN. COUNT.

3.2.1.1
DISPLAYING THE SINGLE COUNTERS

This function is used for displaying the counters regarding each selection, divided by price band (0, 1, 2, 3, 4, Free, Test)

3.2.1.2 - DIS. TOT. COUNT.

3.2.1.2
DISPLAYING THE TOTAL COUNTERS

This function is used for displaying the total counters regarding each selection..

3.2.1.3 - DIS. SEL. COUNT.

3.2.1.3
DISPLAYING THE SELECTION COUNTERS IN NORMAL VENDING - MAINTENANCE

This function is used for displaying the total counters regarding the selections made while in normal vending mode and maintenance mode.
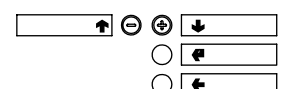
TECHNICIAN MENU

3.2.2 - DIS. BAND COUNT.

3.2.2

DISPLAYING THE TIME BAND COUNTERS

When selecting the desired price band (0, 1, 2, 3, 4, Free, Test), the total number of selections made for that price band is displayed.

3.2.3 - DIS. DISC. SEL.

3.2.3

DISPLAYING THE DISCOUNT COUNTERS

This function is used for displaying the total amount of discounts and overprice accumulated for the dispensed selections.

3.2.4 - DIS. FAIL.COUNT.

3.2.4

DISPLAYING THE FAILURE COUNTERS

This function is used for displaying the number of times each possible failure occurred in the vending machine.

3.2.5 - DIS. C MECH DATA

3.2.5

DISPLAYING THE COIN MECHANISM DATA

3.2.5.1 - DIS. AUDIT DATA

3.2.5.1

DISPLAYING THE AUDIT DATA

This function is used for displaying the number of coins inserted in the vending machine, differentiated by the type of coin.

3.2.5.2 - DIS. CASH COUNT.

3.2.5.2

DISPLAYING THE CASHED AMOUNT

This function is used for displaying the value of:
- Total cashed
- Total sold
- Total cashed by credit

TECHNICIAN MENU

3.3 - DEL. STATISTICS

3.3
DELETING THE STATISTICS

3.3.1 - DELETE PARTIAL

3.3.1
PARTIAL DELETE

3.3.1.1 - DELETE SE. COUNT

3.3.1.1
DELETING THE SELECTION COUNTERS

When confirming this function, the counters regarding the different selections are deleted.

3.3.1.2 - DEL. DISC. COUNT

3.3.1.2
DELETING THE DISCOUNT COUNTERS

When confirming this function, the counters regarding discounts and overprice are deleted.

3.3.1.3 - DEL. FAIL. COUNT

3.3.1.3
DELETING THE FAILURE COUNTERS

When confirming this function, the counters regarding the different failure are deleted.

3.3.1.4 - DEL. C MECH DATA

3.3.1.4
DELETING THE COIN MECHANISM DATA

When confirming this function, the counters regarding the coin mechanism data are deleted.

3.3.2 - DELETE TOTAL

3.3.2
TOTAL DELETE

When confirming this function, all statistics are deleted.

TECHNICIAN MENU

`3.4 - DIS. REL. STATS`

3.4
DISPLAYING THE RELATIVE STATISTICS

`3.4.1 - DIS. SEL. COUNT.`

3.4.1
DISPLAYING THE SELECTION COUNTERS

`3.4.1.1 - DIS. SIN. COUNT.`

3.4.1.1
DISPLAYING THE SINGLE COUNTERS

This function is used for displaying the counters regarding each selection, divided by price band (0, 1, 2, 3, 4, Free, Test).

`3.4.1.2 - DIS. TOT. COUNT.`

3.4.1.2
DISPLAYING THE TOTAL COUNTERS

This function is used for displaying the total counters regarding each selection.

`3.4.1.3 - DIS. SEL. COUNT.`

3.4.1.3
DISPLAYING THE SELECTION COUNTERS IN NORMAL VENDING - MAINTENANCE

This function is used for displaying the total counters regarding the selections made while in normal vending mode and maintenance mode.

`3.4.2 - DIS. BAND COUNT.`

3.4.2
DISPLAYING THE TIME BAND COUNTERS

When selecting the desired price band (0, 1, 2, 3, 4, Free, Test), the total number of selections made for that price band is displayed.

`3.4.3 - DIS. DISC. SEL.`

3.4.3
DISPLAYING THE DISCOUNT COUNTERS

This function is used for displaying the total amount of discounts and overprice accumulated for the dispensed selections.

`3.4.4 - DIS. FAIL.COUNT.`

3.4.4
DISPLAYING THE FAILURE COUNTERS

This function is used for displaying the number of times each possible failure occurred in the vending machine.

TECHNICIAN MENU

3.4.5 - DIS. C MECH DATA

3.4.5
DISPLAYING THE COIN MECHANISM DATA

3.4.5.1 - DIS. AUDIT DATA

3.4.5.1
DISPLAYING THE AUDIT DATA

This function is used for displaying the number of coins inserted in the vending machine, differentiated by the type of coin.

3.4.5.2 - DIS. CASH COUNT.

3.4.5.2
DISPLAYING THE CASHED AMOUNT

This function is used for displaying the value of:
- Total cashed
- Total sold
- Total cashed by credit

TECHNICIAN MENU

3.5 - DEL. REL. STATS	**3.5** **DELETING THE RELATIVE STATISTICS**

3.5.1 - DELETE PARTIAL	**3.5.1** **PARTIAL DELETE**

3.5.1.1 - DELETE SE. COUNT	**3.5.1.1** **DELETING THE SELECTION COUNTERS** When confirming this function, the counters regarding the different selections are deleted.

3.5.1.2 - DEL. DISC. COUNT	**3.5.1.2** **DELETING THE DISCOUNT COUNTERS** When confirming this function, the counters regarding discounts and overprice are deleted.

3.5.1.3 - DEL. FAIL. COUNT	**3.5.1.3** **DELETING THE FAILURE COUNTERS** When confirming this function, the counters regarding the different failure are deleted.

3.5.1.4 - DEL. C MECH DATA	**3.5.1.4** **DELETING THE COIN MECHANISM DATA** When confirming this function, the counters regarding the coin mechanism data are deleted.

3.5.2 - DELETE TOTAL	**3.5.2** **TOTAL DELETE** When confirming this function, all relative statistics are deleted.

3.6 - EN. CNT AT START	**3.6** **ENABLING THE COUNTERS AT POWER-ON** By enabling this function, it is possible to display the total counters when the machine is switched on.

TECHNICIAN MENU

3.7 - PRINT STATISTICS

3.7
PRINTING THE STATISTICS

3.7.1 - PARTIAL PRINTOUT

3.7.1
PARTIAL PRINTOUT

3.7.1.1 - PRINT SEL. COUNT

3.7.1.1
PRINTING THE SELECTION COUNTERS
When confirming this function, the counters regarding the different selections are printed.

3.7.1.2 - PRINT BAND COUNT

3.7.1.2
PRINTING THE TIME BAND COUNTERS
When confirming this function, the counters regarding the different time bands are printed.

3.7.1.3 - PRINT DISC COUNT

3.7.1.3
PRINTING THE DISCOUNT COUNTERS
When confirming this function, the counters regarding discounts and overprice are printed.

3.7.1.4 - PRINT FAIL COUNT

3.7.1.4
PRINTING THE FAILURE COUNTERS
When confirming this function, the counters regarding the different failure are printed.

3.7.1.5 - PRNT C MECH DATA

3.7.1.5
PRINTING THE COIN MECHANISM DATA
When confirming this function, the counters regarding the coin mechanism data are printed.

3.7.2 - TOTAL PRINTOUT

3.7.2
TOTAL PRINTOUT
When confirming this function, all statistics are printed.

TECHNICIAN MENU

3.8 - PRINT REL. STATS

3.8
PRINTING THE RELATIVE STATISTICS

3.8.1 - PARTIAL PRINTOUT

3.8.1
PARTIAL PRINTOUT

3.8.1.1 - PRINT SEL. COUNT

3.8.1.1
PRINTING THE SELECTION COUNTERS
When confirming this function, the relative counters regarding the different selections are printed.

3.8.1.2 - PRINT BAND COUNT

3.8.1.2
PRINTING THE TIME BAND COUNTERS
When confirming this function, the relative counters regarding the different time bands are printed.

3.8.1.3 - PRINT DISC COUNT

3.8.1.3
PRINTING THE DISCOUNT COUNTERS
When confirming this function, the relative counters regarding discounts and overprice are printed.

3.8.1.4 - PRINT FAIL COUNT

3.8.1.4
PRINTING THE FAILURE COUNTERS
When confirming this function, the relative counters regarding failures are printed.

3.8.1.5 - PRNT C MECH DATA

3.8.1.5
PRINTING THE COIN MECHANISM DATA
When confirming this function, the relative counters regarding the coin mechanism data are printed.

3.8.2 - TOTAL PRINTOUT

3.8.2
TOTAL PRINTOUT
When confirming this function, all relative statistics are printed.

TECHNICIAN MENU

4 - TEST	**4.** **T**EST
4.1 - TEST DISPENSING	**4.1** **T**EST DISPENSING
4.1.1 - COMP. DISPENSING	**4.1.1** **C**OMPLETE DISPENSING With this function it is possible to obtain, with the door open and without inserting any money, complete dispensing for each selection.
4.1.2 - WATER ONLY	**4.1.2** **D**ISPENSING WATER ONLY With this function it is possible to dispense, with the door open and without inserting any money, only the water doses for each selection.
4.1.3 - POWDER ONLY	**4.1.3** **D**ISPENSING POWDER ONLY With this function it is possible to dispense, with the door open and without inserting any money, only the powder doses for each selection.
4.1.4 - NO ACCESSORIES	**4.1.4** **W**ITHOUT ACCESSORIES With this function it is possible to dispense, with the door open and without inserting any money, only the water and powder doses for each selection, without any cup and stirrer.
4.1.5 - ACCESSORIES ONLY	**4.1.5** **A**CCESSORIES ONLY With this function it is possible to dispense, with the door open and without inserting any money, only the accessories for each selection.

TECHNICIAN MENU

|	
`4.2 - SPEC. FUNCTIONS`	**4.2** **SPECIAL FUNCTIONS**
`4.2.1 - UNIT ROTATION`	**4.2.1** **UNIT ROTATION** This function is used for operating the espresso brewer unit (if fitted).
`4.2.2 - RELEASE DOSE`	**4.2.2** **RELEASING A DOSE** This function is used for starting the grinder e release a coffee dose.
`4.2.3 - EMPTY BOILER`	**4.2.3** **EMPTYING THE BOILER** This function is used for opening a solenoid valve to allow the intake of air in the event of emptying the boiler for maintenance.
`4.2.4 - MANUAL INSTALL.`	**4.2.4** **MANUAL INSTALLATION** This function is used for manually installing the boilers and filling the water system.

TECHNICIAN MENU

4.3 - AUTOTEST

4.3

AUTOTEST

This function allows testing, in a semiautomatic way, of the main machine components. When pressing the confirm button, the message "AUTOTEST" will be start blinking.

It is possible to cancel each operation and go to the next one by pressing the exit button, but confirming with the confirm button to start the autotest routine. Some checks occur automatically, others need the manual operation of the monitored component.

In a sequence:

- Fan functioning test for 2 seconds.
- The doser units are activated for 2 seconds
- The mixers are activated for 2 seconds
- A cup is released
- A stirrer is released
- Rotation of the brewer unit
- Wash button test
- Waste container switch; the machine awaits until the waste container micro-switch is manually operated
- Switching on of the dispensing compartment lamp (if fitted)
- Push-button panel test; the machine will display the number of the button which must be pressed and awaits the actuation before going to the next button and to the boiler control
- Buzzer functioning test
- Coin mechanism functioning test
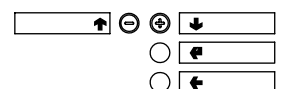
TECHNICIAN MENU

5 - MISCELLANEOUS	**5** **M**ISCELLANEOUS
5.1 - MACHINE INFO	**5.1** **V**ENDING MACHINE INFORMATION
5.1.1 - INSTALL. DATE	**5.1.1** **I**NSTALLATION DATE This function is used for storing the current date of system as installation date of the vending machine. This date will be indicated on the statistics printout.
5.1.2 - PROG. MACH. CODE	**5.1.2** **S**ETTING THE MACHINE CODE This function is used for changing the 8-digit numeric code identifying the machine (set to 0 by default).
5.1.3 - PROG. OPER. CODE	**5.1.3** **S**ETTING THE OPERATOR CODE This function is used for changing the 6-digit numeric code identifying the group of machines (set to 0 by default).

TECHNICIAN MENU

5.2 - INITIALIZ. DB

5.2
INITIALISING THE DATA-BASE

This function is used for "initialising" the machine, resetting all data to default values. This function should be used if there is a memory data error or when the software is replaced. Except for the general electronic counter, all statistical data is reset.

When confirming this function some parameter settings are requested, and namely:

- COUNTRY

Intended as type of basic doses for the different selections. The available "countries" vary according to the models.

- LAYOUT

A number of Button/Selection combinations to choose from is provided for each dose type model (the combinations available for each layout are indicated in the dose selection table supplied with the machine).

- TANK

Defining whether the water supply is:
0 - from the mains
1 - from an internal tank
2 - from two internal tanks .

TECHNICIAN MENU

`5.3 - EVADTS`

5.3
EVADTS

The EVADTS (European Vending Association Data Transfer System) communication protocol has 2 codes for identifying the machine and for recognising the data transfer terminal.

`5.3.1 - PASS.CODE`

5.3.1
PASS CODE

It is a four-digit alphanumeric code (0-9; A-F) that must be the same as the one in the data transfer terminal to allow its identification. When pressing the confirm button the code is displayed as "0000" regardless of the actual value; then by pressing the confirm button the first digit will start blinking.
Using the scrolling buttons, its value can be changed (during the change operation the value becomes visible).
Repeat this operation for the 4 digits, after which the value is stored and the display will indicate "0000" again.

`5.3.2 - SECURITY CODE`

5.3.2
SECURITY CODE

It is a further alphanumeric code for reciprocal recognition between machine and EVADTS terminal.
Programming works as in the "Pass Code".

`5.3.3 - CONNECTION`

5.3.3
CONNECTION

This function places the machine in wait mode for connection to retrieve data.

`5.3.4 - MODE`

5.3.4
MODE

This function is used for selecting the communication interface to be used with the data transfer terminal.

- "IrDA" or "RS232": for communication with data acquisition devices

- "ALWAYS EVADTS": for communication with data acquisition and transmission (e.g. telemetry).

`5.3.5 - TYPE`

5.3.5
TYPE

This function is used for setting the communication speed to be used, between:

- "ENHANCED": the communication speed is set automatically at the speed of the slowest device

- "STANDARD 9600bps": the communication speed is set to 9600bps.

TECHNICIAN MENU

5.4 - UPKEY	**5.4** **U**P **KEY**
5.4.1 - SETUP MANAGEMENT	**5.4.1** **S**ETUP CONTROL
5.4.1.1 - UPKEY -> MACHINE	**5.4.1.1** **U**P-**K**EY **->** VENDING MACHINE When confirming this function after inserting the Up-Key in the special port located on the C.P.U. board, it will be possible to select the setup file from the list shown on the display using the scrolling buttons, then when confirming with the confirm button the selected setup will be loaded in the vending machine.
5.4.1.2 - MACHINE -> UPKEY	**5.4.1.2** **V**ENDING MACHINE **-> U**P-**K**EY When confirming this function after inserting the Up-Key in the special port located on the C.P.U. board, it will be possible to save the setup file to the Up-Key with the configuration present in that moment in the vending machine, indicating the name to be assigned to the file.
5.4.1.3 - DELETE	**5.4.1.3** **D**ELETE This function is used for deleting one by one the setup files present in the inserted Up-Key.
5.4.1.4 - DELETE ALL	**5.4.1.4** **D**ELETE ALL This function is used for deleting all the setup files present in the inserted Up-Key.
5.4.2 - AUDIT MANAGEMENT	**5.4.2** **S**TATISTICS MANAGEMENT
5.4.2.1 - MACHINE -> UPKEY	**5.4.2.1** **V**ENDING MACHINE **-> U**P-**K**EY When confirming this function after inserting the Up-Key in the special port located on the C.P.U. board, it will be possible to save the statistics file to the Up-Key with all of the statistics files present in that moment in the vending machine, indicating the name to be assigned to the file
5.4.2.2 - DELETE	**5.4.2.2** **D**ELETE This function is used for deleting one by one the statistics files present in the inserted Up-Key.
5.4.2.3 - DELETE ALL	**5.4.2.3** **D**ELETE ALL This function is used for deleting all the statistics files present in the inserted Up-Key.

TECHNICIAN MENU

`5.4.3 - V.M. SELECTION`	**5.4.3** **VENDING MACHINE SELECTION** This function is enabled only if the machine is installed in a bank with one or more Minisnakky / Snakky / Snakky SL. It is used for selecting the vending machine in the bank of machines on which to operate with the Up-Key (Brio3 or Minisnakky or Snakky o Snakky SL).
`6 - GSM`	**6** **GSM** The control software can send, via GSM modem, a signal indicating a machine failure or an "ending product" "pre-alarm", after dispensing a certain (programmable) number of selections of a given product.
`6.1 - GSM PIN CODE`	**6.1** **GSM PIN CODE** This function is used for programming the identification code that will be sent to the GSM modem (optional) when switching the machine on.
`6.2 - GSM PRE-ALARMS`	**6.2** **GSM PRE-ALARMS**
`6.2.1 - PRE-ALARM THRESH`	**6.2.1** **PRE-ALARMS THRESHOLDS** This function is used for defining the number of pieces or grams of powder for a given product, after which a "running-out" "pre-alarm" is signalled via modem.
`6.2.2 - RESET PRE-AL CNT`	**6.2.2** **RESETTING THE PRE-ALARM COUNTERS** With this function the counters that control the pre-alarms are reset.
`6.3 - GROUP NUMBER`	**6.3** **BANK NUMBER** The number in the bank of machines (1 to 7) that identifies the machines that have the "slave GSM" function, therefore sending data via the "master" machine modem . The number 0 identifies the machine that is connected directly to the modem, i.e. the "master GSM"..

LIST OF FAILURES

WATER FAILURE

If the air-break micro-switch is closed for more than one minute, the water inlet solenoid valve will remain energized until the water flow is restored.
If the machine is equipped with an internal water supply tank the pump will be switched off.

WASTE CONTAINER FULL

The espresso coffee based selections are disabled when reaching the number of used coffee doses that the solid waste tray can hold.

AIR-BREAK

The machine is locked if after 10 selections the micro-switch has never signalled the lack of water.

IMPELLER

The machine is locked in the event of failed computation of the volumetric counter (flow-meter) within a max. given time.

INSTANT BOILER

The machine will lock if after 20 minutes of heating from the machine start, or from the last selection, the instant boiler fails to reach the operating temperature set with the function "Boiler temperature" of the Technician Menu.

MACHINE CONTROL BOARD

The machine will lock in the event of failed communication between C.P.U. board and machine control board.

COIN MECHANISM

The machine is locked if it receives a pulse longer than 2 seconds on a validator line or the communication with the serial coin mechanism does not take place for more than 30 seconds (Executive) or 75 seconds (BDV).

MACHINE LOCK

The machine is locked if when reaching the number of selections set with the function "Counter maximum number" of the Technician Menu.

COFFEE RELEASE

If after releasing the ground coffee dose the micro-switch of the coffee doser unit indicates the presence of coffee in the dosing chamber, all coffee-based selections are disabled.

COFFEE UNIT

Due to mechanical blocking of the coffee unit. The machine is not locked, but the espresso coffee-based selections are disabled.

NO COFFEE

If the coffee grinder speed exceeds the value of 1200 rpm for longer than 5 seconds the "no coffee" failure is registered.
It is possible to enable this type of warning and disable the coffee-based selections in the function "Enable no coffee" of the Technician Menu.

GRINDER BLOCKED

If the coffee grinder does not rotate or rotates too slowly, the espresso coffee-based selections are disabled; however, the decaffeinated coffee-based selections remain available.

RAM DATA

One or more areas of the RAM contain wrong data which was corrected with the default values.
The machine will continue to function, but it would be advisable to initialise as soon as possible.

ESPRESSO BOILER

The machine will lock if after 10 minutes of heating from the machine start, or from the last selection, the instant boiler fails to reach the operating temperature set with the function "Boiler temperature" of the Technician Menu.

LIST OF FAILURES

FRESH BREW PISTON

It is due to wrong positioning of the unit. The machine is not locked, but all fresh product based selections are disabled.

FRESH BREW SCRAPER

Wrong positioning of the grounds ejection scraper. The machine is not locked, but all fresh product based selections are disabled.

ESPRESSO LOCK

The machine is locked if when reaching the number of espresso coffee-based selections set separately with the function "Counter maximum number" of the Technician Menu.

INSTANT PROD. LOCK

The machine is locked if when reaching the number of instant product-based selections set separately with the function "Counter maximum number" of the Technician Menu.

Coin Mechanism Settings

OFF

In the event of configuring the machine in a bank, this setting permits the control of 2 payment systems installed in 2 vending machines, so that when one payment system fails or no longer works, automatically the other payment system becomes functional for the bank of machines.

Validators

When the "Validator Lines" function (line programming) of the "programming" menu is displayed, the value of the 6 Validator coin lines, A to F, can be changed.

Executive

The following payments systems are available for the Executive system:
- Standard
- Price Holding
- Coges
- U-Key
- Sida

BDV

The BDV protocol menus are used for defining the following functions:

Type of vending

Setting the operating mode for multiple or single dispensing. With multiple dispensing, the change is not automatically returned after a successful selection; however the credit is available for further selections. When pressing the coin return button, the available credit is returned if its value is lower than the maximum change value.

Change control

This function enables/disables the return of credit if no selections are made.

If enabled, this function allows the return of coins even if the first selection was not dispensed.

If however a selection fails for any reason, the change will be returned if requested.

Maximum credit

This function is used to define the maximum accepted credit.

Maximum change

It is possible to set a limit to the total amount of change returned by the coin mechanism when pressing the coin return button or after a single dispensing serving.

Any credit exceeding the amount programmed with this function will be cashed.

Accepted coins

It is possible to define which, among the coins recognised by the validator, are to be accepted.

Check the label on the coin mechanism for the correct coin to value matching, indicating the position of the coins.

Non accepted coins

This function programs the rejection of coins when in "exact amount" mode.

Check the label on the coin mechanism for the correct coin to value matching, indicating the position of the coins.

Dispensing buttons

This function enables or not the buttons on the coin mechanism used to release the coins in the change return tubes.

COIN MECHANISM SETTINGS

Value of "exact amount"

This value defines the combination of empty coin tubes, setting the coin mechanism in "exact amount" mode.
The possible combinations of empty coin tubes are indicated below.
For greater simplicity, the combination is described with reference to tubes A, B and C, where tube A receives the lower value coins and tube C the greater value coins.

0	=	A or (B and C)
1	=	A and B and C
2	=	A and B only
3	=	A and (B or C)
4	=	A only
5	=	A or B only (default)
6	=	A or B or C
7	=	A or B only
8	=	A or C only
9	=	B and C only
10	=	B only
11	=	B or C only
12	=	C only

C.P.C. device

It dialogues with the coin mechanism if devices are installed or removed from the serial interface (C.P.C.-type devices - the monitoring unit is always enabled by default).

Minimum level of tubes

It brings forward the "Insert exact amount" message for the user, by adding a number of coins between 0 and 15 to the programmed number of coins, to set the "full change tubes" status.

Free Vend VMC

Most payment systems with the BDV protocol control the free vend function.
However, there are some payment systems without such function.
In this case, if free selections are to be dispensed, free vending must be enabled with VMC (vending machine control, enabled by default) and the price of the selections must be set to zero.

MDB

The MDB protocol menus are used for defining the following functions:

Type of vending

Setting the operating mode for multiple or single dispensing. With multiple dispensing, the change is not automatically returned after a successful selection; however the credit is available for further selections. When pressing the coin return button (if the function is enabled), the available credit is returned up to the maximum change value.

Obligation to buy / Change control

This function enables/disables the operation of the coin return button before dispensing a product. After the selection is made, the coin return button will resume its function.

Maximum credit

This function is used to define the maximum credit that can be accepted.

Maximum change

It is possible to set a limit to the total amount of change returned by the coin mechanism when pressing the coin return button or after a single dispensing serving.
Any credit exceeding the amount programmed with this function will be cashed.

Accepted coins

It is possible to define which, among the coins recognised by the coin mechanism, are to be accepted when the change tubes are full.
Check the coin mechanism configuration for the correct coin to value matching.

Returned coins

It is possible to define which, among the coins available in the tubes, are to be used for returning the change.
This parameter is active only with coin mechanisms that do not automatically control the choice of tube to be used (Auto changer payout).
Check the coin mechanism configuration for the correct coin to value matching.

COIN MECHANISM SETTINGS

Minimum level of tubes
This function is used for setting the number of coins (0 to 15) to determine the status of full change tubes and the "Insert exact amount" message for the user.

Accepted bills
It is possible to define which, among the bills recognised by the reader, are to be accepted.
Check the reader configuration for the correct bill to value matching.

Accepted coins with "exact amount"
It is possible to define which, among the coins recognised by the coin mechanism, are to be accepted when the machine is in the "exact amount" condition.
Check the coin mechanism configuration for the correct coin to value matching.

Accepted bills with "exact amount"
It is possible to define which, among the bills recognised by the accepter, are to be accepted when the machine is in the "exact amount" condition.
Check the accepter's configuration for the correct bill to value matching.

Cashless Private / Undefined Credit Control
This function is used for showing or not on the display the credit present in the cashless system, replacing it with the string "-----". The same string is displayed also in the event where the credit of the cashless system is not defined.

Overpay
Thus function is used for setting the management of credit excess.
Credit excess is a credit that cannot be returned to the user; for example in the event of failing to return the change due to insufficient minimum level in the tubes.
If set as MAINTAINED any credit excess remains available to the user.
If set as CANCELLED, it permits to maintain the credit excess for a programmable time before cashing it.

Cash sale
This function is used for setting the management of messages for sales made with cash for statistical purposes.

0	-	The data is sent as per MDB protocol
1	-	The sales data is sent by overriding to the cashless system 1
2	-	The sales data is sent by overriding to the cashless system 2

Parallel Device
This function permits the use of a coin or bill validator in place of an MDB Changer (coins) or MDB Bill Validator (banknotes).
The replaced MDB device, after resetting the machine, will no longer be used.

Exact change equation
This value defines the combination of empty coin tubes, setting the coin mechanism in "exact amount" mode.
The possible combinations of empty coin tubes are indicated below.
For greater simplicity, the combination is described with reference to tubes A, B and C, where tube A receives the lower value coins and tube C the greater value coins.

0	=	A or (B and C)
1	=	A and B and C
2	=	A and B only
3	=	A and (B or C)
4	=	A only
5	=	A or B only (default)
6	=	A or B or C
7	=	A or B only
8	=	A or C only
9	=	B and C only
10	=	B only
11	=	B or C only
12	=	C only

Coin Mechanism Settings

Maximum cash credit

This function is used for setting the maximum credit that can have a key / cashless card to be acceted by the system. If the key has a higher value, it will be rejected.

The value setting must be always greater or equal to the value set with the function "Maximum cash revalue"; in the event it were changed and become lower than such value, it will be set automatically to the same value of the "Maximum cash revalue".

Maximum cash revalue

This function is used for settino the maximum credit that can be loaded in a cashless system.

This value cannot be greater than the value set with the function "Maximum cash credit".