

LA Cimbali

M200

MANUALE DEL TECNICO

ENGINEER'S MANUAL

MANUEL DU TECHNICIEN

TECHNIKERHANDBUCH

MANUAL DEL TÉCNICO

MANUAL DO TÉCNICO

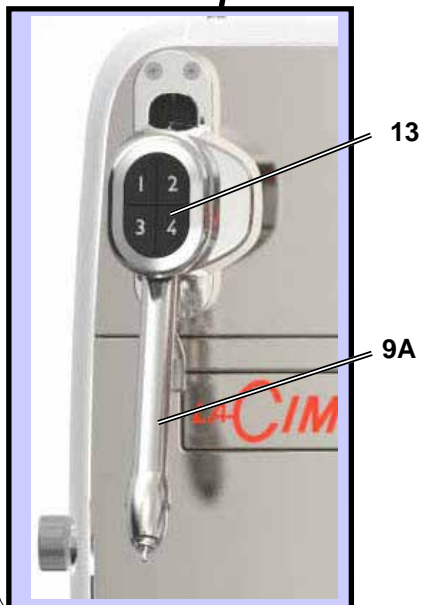
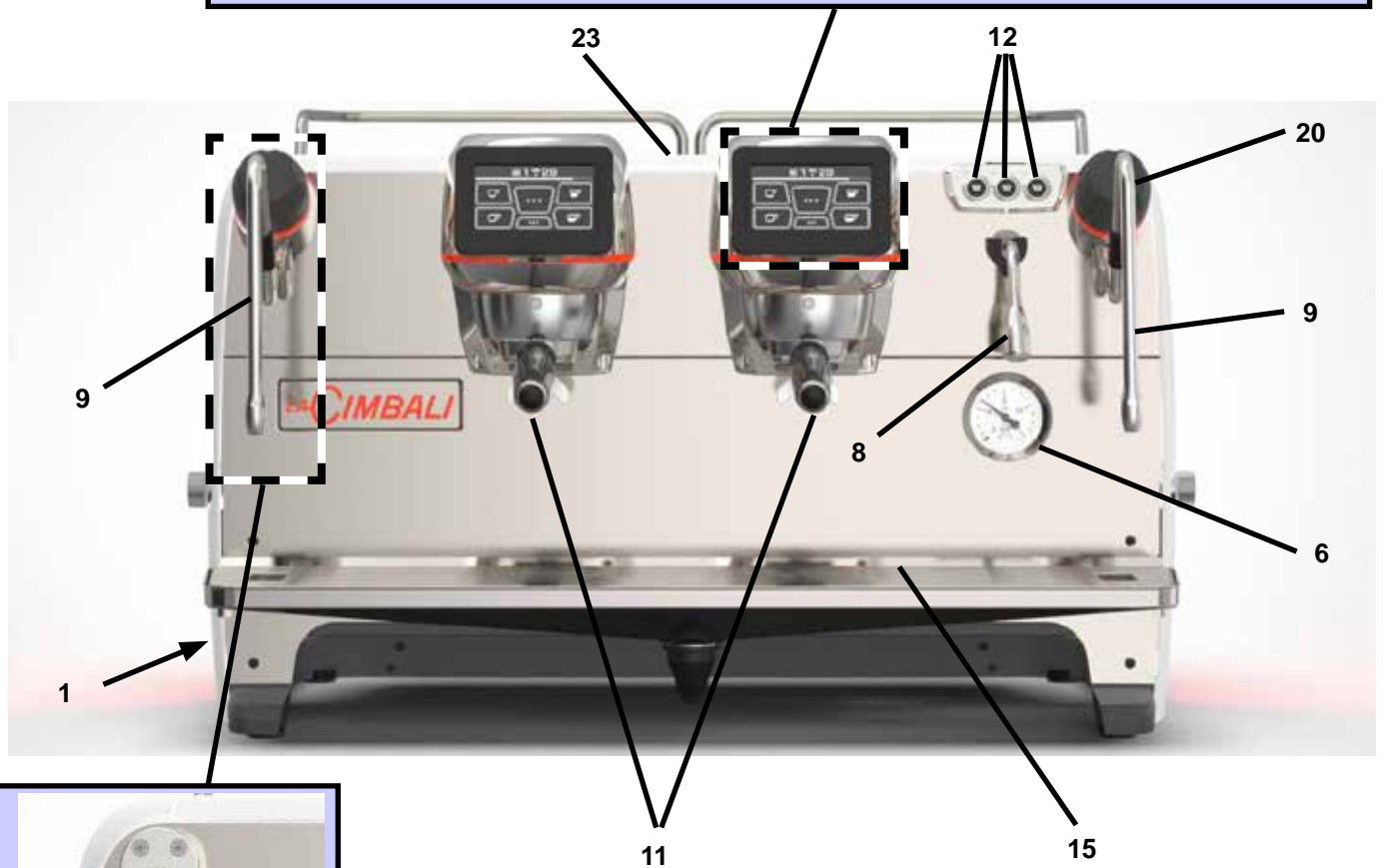
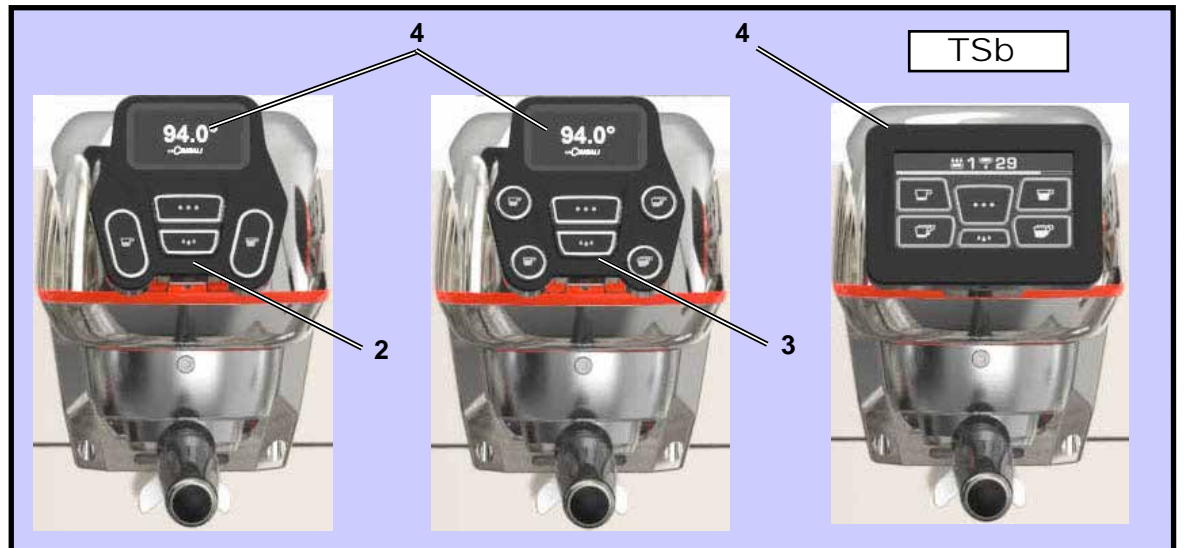


***Touch screen - Touchscreen
Pantalla táctil - Touchscreen
Écran tactile - Ecrã tátil***

***Pulsantiera Automatica
Automatic Push-button Strip
Tableau de commande automatique
Drucktasten
Teclado automático
Painel de botões automático***



M200



IT LEGENDA

- 1** Interruttore generale
- 2** Tastiera 4 selezioni
- 3** Tastiera 6 selezioni
- 4** Display grafico
- 6** Manometro pompa
- 8** Erogatore acqua calda
- 9** Tubo (lancia) vapore
- 9a** Tubo (lancia) Turbosteam (*)
- 11** Portafiltro
- 12** Tasti acqua calda
- 13** Selettore Turbosteam (*)
- 15** Bacinella appoggiatezze
- 20** Manopola erogazione vapore
- 23** Piano appoggiatezze
- TSb** Touch screen di selezione

I componenti - * - sono applicati solo in alcune configurazioni di prodotti.

EN LEGEND

- 1** Main switch
- 2** 4 keys pushbutton
- 3** 6 keys pushbutton
- 4** Graphical display
- 6** Pump pressure gauge
- 8** Hot-water outlet
- 9** Steam pipe
- 9a** Turbosteam pipe (*)
- 11** Filter holder
- 12** Hot-water key
- 13** Turbosteam selector (*)
- 15** Tray
- 20** Steam supply knob
- 23** Cup warmer
- TSb** Selection touch screen

The components - * - are applied only in some product configurations

FR LÉGENDE

- 1** Interrupteur général
- 2** Clavier 4 touches
- 3** Clavier 6 touches
- 4** Ecran graphique
- 6** Manomètre pompe
- 8** Sortie eau chaude
- 9** Buse vapeur
- 9a** Buse Turbosteam (*)
- 11** Porte-filtre
- 12** Touche eau chaude
- 13** Sélecteur Turbosteam (*)
- 15** Bac d'égouttement
- 20** Robinet de débit du vapeur
- 23** Chauffe-tasses
- TSb** Écran tactile de sélection

Les composants accompagnés d'un * ne sont montés que dans certaines configurations de produit.

DE LEGENDE

- 1** Hauptschalter
- 2** Druckknopftafeln 4 Tasten
- 3** Druckknopftafeln 6 Tasten
- 4** Graphisches Display
- 6** Manometer Pumpe
- 8** Heißwasserausgabe
- 9** Dampfausgaberohr
- 9a** Dampfausgaberohr Turbosteam (*)
- 11** Filterhalter
- 12** Heißwasser-Drucktaste
- 13** Wahlschalter Turbosteam (*)
- 15** Auffangschale
- 20** Drehknopf Dampfabgabe
- 23** Tassenerwärmer
- TSb** Wahl-Touchscreen

Die Komponenten - * - sind nur bei einigen Produktkonfigurationen enthalten.

ES LEYENDA

- 1** Interruptor general
- 2** Botoneras 4 teclas
- 3** Botoneras 6 teclas
- 4** Display gráfico
- 6** Manómetro bomba
- 8** Erogador agua caliente
- 9** Tubo (boquilla) vapor
- 9a** Tubo (boquilla) Turbosteam (*)
- 11** Portafiltro
- 12** Tecla suministro agua caliente
- 13** Selector Turbosteam (*)
- 15** Bandeja
- 20** Botón giratorio erogación vapor
- 23** Calientatazas
- TSb** Pantalla táctil de selección

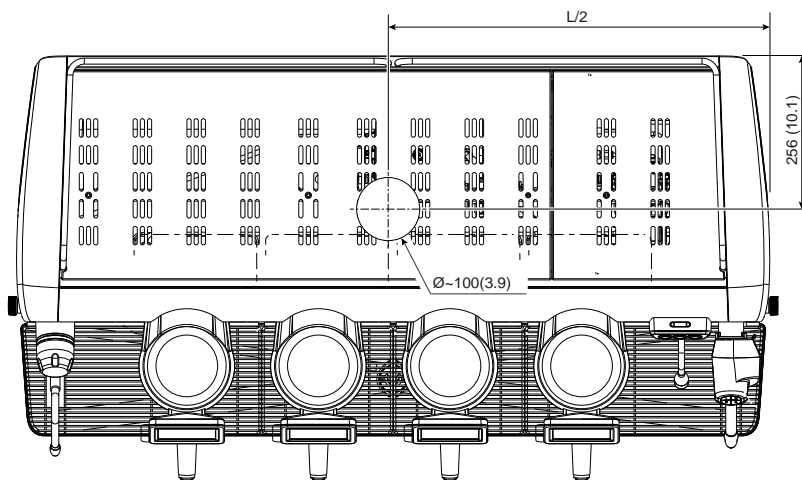
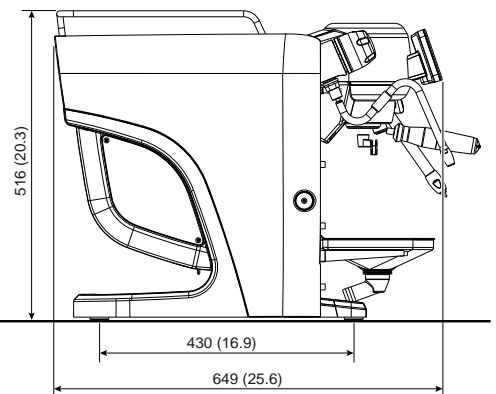
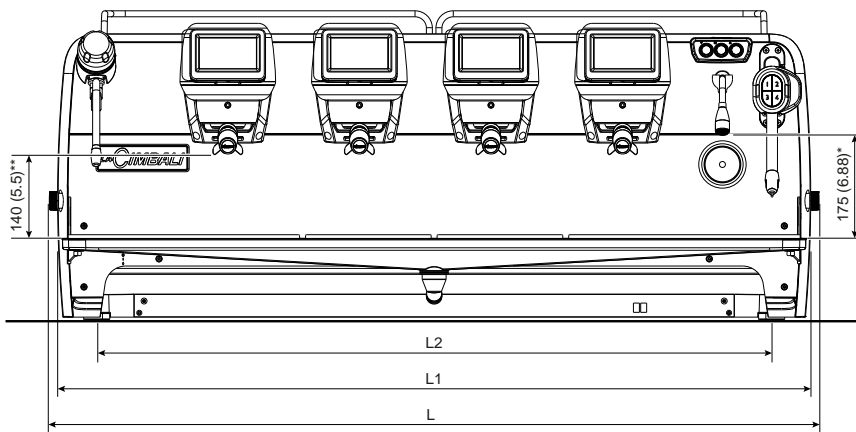
Los componentes - * - se aplican sólo en algunas configuraciones de productos.

PT LEGENDA

- 1** Interruptor geral
- 2** Quadro de 4 botões
- 3** Quadro de 6 botões
- 4** Display gráfico
- 6** Manómetro da bomba
- 8** Distribuidor de água quente
- 9** Tubo do vapor
- 9a** Tubo do vapor Turbosteam (*)
- 11** Porta-filtro
- 12** Botão de distribuição de água quente
- 13** Selector Turbosteam (*)
- 15** Tabuleiro
- 20** Manípulo de distribuição do vapor
- 23** Grelha para aquecer chávenas
- TSb** Touch screen de selecção

Os componentes - * - são aplicados só em algumas configurações de produtos.

PED / DESP	P _{max} [bar]	T _{max} [°C]	tipo di macchina Type of machine type de machine Maschinentyp modelo de la máquina tipo de la máquina	2 gruppi 2 groups 2 groupes 2 Einheiten 2 grupos 2 grupos	3 gruppi 3 groups 3 groupes 3 Einheiten 3 grupos 3 grupos	4 gruppi 4 groups 4 groupes 4 Einheiten 4 grupos 4 grupos
			Fluido - Fluid - Fluide Flüssigkeit - Fluido - Fluido	Capacità - Capacity - Capacité [L] Fassungsvermögen - Capacidad - Capacidade		
Caldaia Service boiler Chaudière Heizkessel Caldera Caldeira	2	133	acqua/vapore water/steam eau/vapeur Wasser/Dampf agua/vapor água/vapor	7	7	7
Boiler caffè - Coffee boiler Chauffe-eau, café Boiler Kaffee Calentador café Boiler do café	15	160	acqua - water eau - Wasser agua - água	0.60 x 2	0.60 x 3	0.60 x 4



**		*	
pos. 1	75 (2.95)	pos. 1	110 (4.33)
pos. 2	115 (4.5)	pos. 2	150 (5.9)
pos. 3	140 (5.5)	pos. 3	175 (6.88)

DIMENSIONI / DIMENSIONS				
		2 gr.	3 gr.	4 gr.
L	mm	887	1087	1287
	inches	34.9	42.8	50.6
L1	mm	859	1059	1259
	inches	33.8	41.7	49.6
L2	mm	740	940	1140
	inches	29.1	37	44.9
Peso netto Net weight	Kg	70	92	105
	pounds	154	203	231

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Description of display symbols

WATER LEVEL



This symbol indicates the boiler water level. During the loading phase, the bottom part of the icon blinks.



When the optimum level is reached, the symbol



looks like this

HEATING ELEMENT



This symbol indicates that the heating element is activated and functioning; a thicker luminous flow passing through the heating element shows the electric heating is on.

When the boiler pressure reaches the set value,



the icon looks like this



This indicates that the boiler heating element has been disabled.



N.B.: the customer cannot switch the electric heating on or off.

When the on/off function is programmed, the electric heating takes place automatically.

BOILER PRESSURE



This symbol indicates the boiler pressure value.



If the icon is pressed, the pressure gauge will be displayed analogically. This will be shown on the display:



Press again the icon to return to the regular display mode.

CUP WARMER



These symbols indicate the power currently selected for the cup warmer.

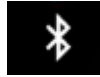
WI-FI



This symbol appears on the display when the Wi-Fi module is in the machine.

BLUETOOTH

These symbols refer to Bluetooth communication:



- the white icon indicates the presence of the Bluetooth module on the machine;



- the white icon on blue background indicates that the machine is communicating with a Bluetooth grinder/dispenser.

USB



This symbol appears on the display when a USB pen drive is connected.

PAYMENT SYSTEMS

This icon indicates that the machine is connected to a payment system interface and is configured to work with it. Dispensing is therefore possible subject to approval by the payment system.



- the red icon indicates that the cash system has denied the transaction;



- the blue icon indicates that the cash system has approved the transaction.

CONTROL OF THE FLOW (ONLY IF IN USE)

When this animated icon appears it means that it is necessary to adjust the grinder/dispenser to tighten or loosen the grinder, in order to return the coffee dose to the correct parameters.

The icons that are shown are:



means that the grinder needs to be loosened. (flow of coffee is lower than the reference).

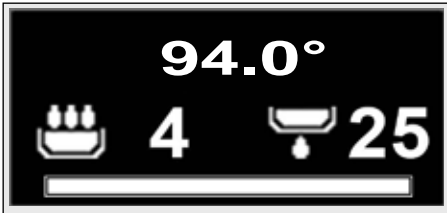


means that the grinder needs to be tightened. (flow of coffee is greater than the reference).


Note. The number next to the icon (1 or 2) indicates the grinder/dispenser that must be adjusted.



The icon appears on the display instead of the level symbol.


Coffee unit symbols (only automatic push-button strip)





94.0° Boiler temperature indication.

 **4** Pre-infusion phase, represented with the symbol  and relative duration.


 **25** Dispensing phase, represented with the symbol  and relative duration.


 bar indicating the total progress of the operation.


 This icon appears when the coffee boiler is switched on and indicates when the set temperature has been reached.


 This icon indicates that the coffee boiler is heating up.


Programming / menu access

Access the machine programming menu by pressing the **SET**  icon, found only on the right-hand group.

NOTE. The **SET**  icon may turn a different colour in some instances:

 **WHITE:** normal operating mode.

 **YELLOW:** service display message requiring user intervention (for example, wash request, grinder adjustment, with the PGS system active, etc.).

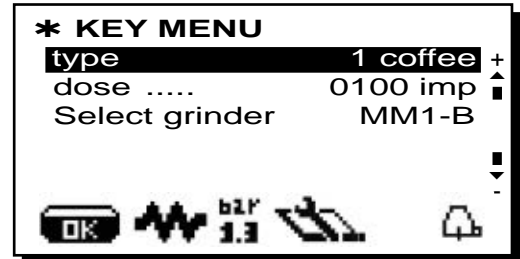
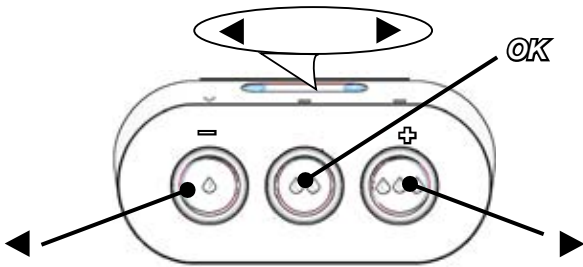
 **RED:** error message



2. TECHNICAL PROGRAMMING (AUTOMATIC PUSH-BUTTON STRIP)

2.1 Technical programming access “Automatic push-button strip”

Changing menus and sub-menus: position the cursor on the desired line using the ▲ and ▼ keys and then press ►



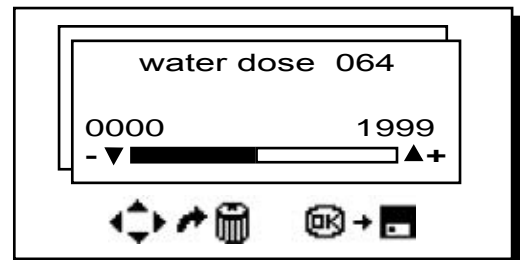
Change the selection or value, again using the ▲ and ▼ keys
Note: when editing data, the cursor becomes "→" or a slider bar appears with the minimum and maximum values that can be set:

To enter programming, press the ◀ key twice and then the ► key for at least 3 seconds. The following message will appear on the display:



Display available menus: using the ▲ and ▼ keys, press the ► key

Accessing the menus: position the cursor on the desired line using the ▲ and ▼ keys, then press the ► key (press a selection key in the case of the “SELECT KEY” menu)



Exiting the programming panels: there are two options:

- 1) Confirm the changes by pressing the “OK” key
- 2) Exit the menu, leaving the data unchanged, by pressing ◀

Enter TECHNICAL programming mode by pressing the ► key; the message below will appear on the display and then the following page by scrolling down.



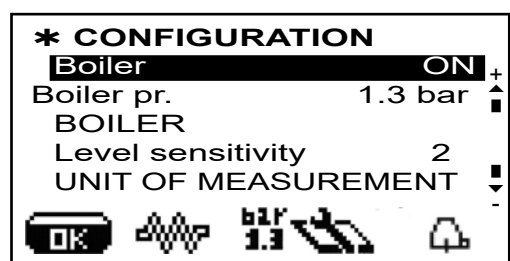
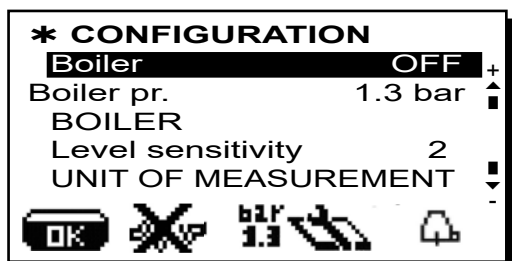
Individual items are detailed below.

Heating element

The technician can activate or deactivate the heating element (if the service boiler heating element is disabled, self-leveller control is inhibited) as follows:

- 1) Access the technical programming panels;
- 2) position the cursor over **"BOILER"** using the ▲ and ▼ keys in the machine's configuration menu and press the ► key;

- 3) adjust the parameter using the ▲ and ▼ keys and confirm the adjustment made by pressing the **OK** key or exit the menu and leave the data unchanged using the ◀ key.



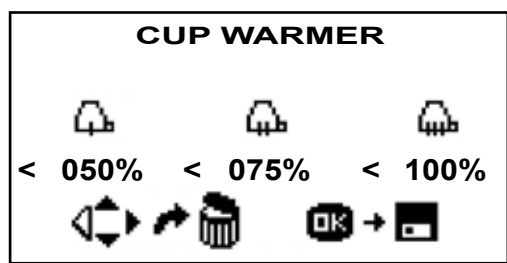
"Boiler" **OFF** = heating element disabled (✗ main menu icon);

"Boiler" **ON** = heating element enabled (☀ main menu icon);

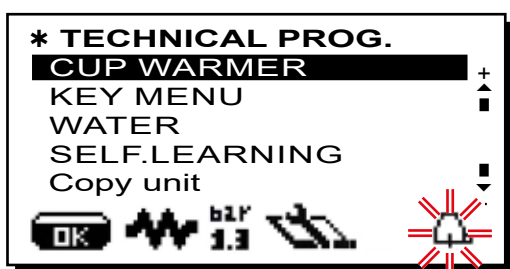
2.2 "CUP WARMER" Menu



Press and hold the ► key to access the configuration screen:



- 1) Select the heating levels to be configured using the keys ►
- 2) adjust the power percentage of the levels according to their own needs with the keys ▲ ▼.
- 3) confirm the selections with the **OK** key or exit the menu leaving the data unchanged by pressing the ◀ key.

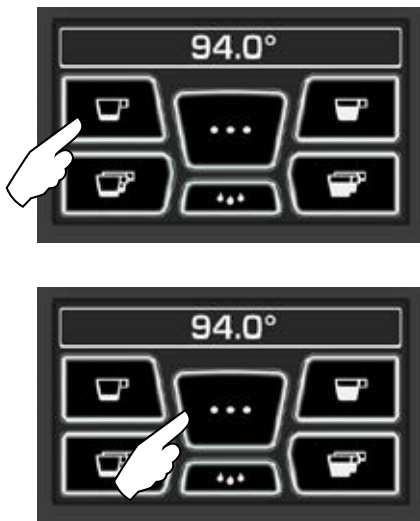
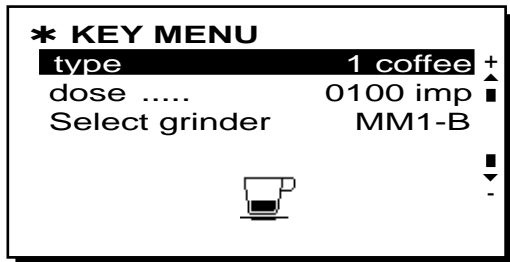


- ☀ = maximum power symbol
- ☀ = medium power symbol
- ☀ = minimum power symbol
- no symbol = OFF

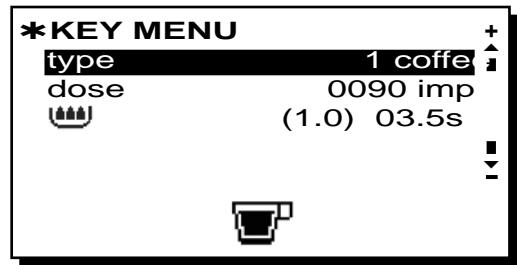
Pressing the key ► several times changes the intensity of the cup warmer's heating element. Select one of the three power levels.

2.3 Key Menu - Coffee Selection

- 1 Press one of the coffee dispensing keys (the associated LED will remain lit). The display will show:
A Version:

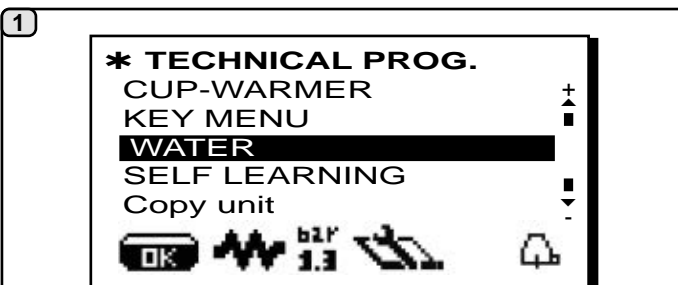


- 2 GTI version:

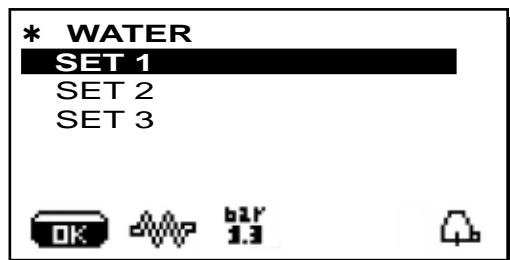


- The coffee selection settings that can be changed are:
- **type** (key customisation, e.g. 3 espressos for 1 "short, normal, long", 3 espressos for 2 "short, normal, long", stop, disabled).
 - **water dose** (volumetric dosing device impulses, 0 - 1999 in steps of 1).
 - **select grinder**(grinding-machine customisation) - A vers. - - **MM1- MM2** Option to associate with different types of filter holders for one or two grinder/ dispensers
 - **pre-infusion and wetting time** - vers. **03.5s** shows the duration in seconds of the pre-infusion phase. **(1.0)** shows the duration in seconds of the wetting phase.

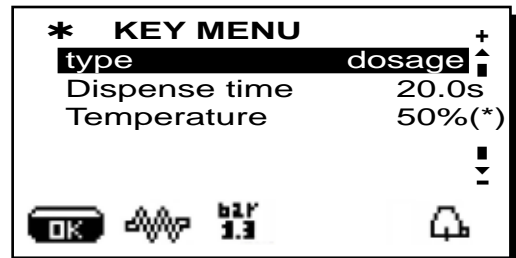
2.4 "WATER" Menu



The programmable **SET** keys will appear on the display and the LED light of the corresponding key will remain on.



- 2 Press the ► key to set the following parameters.



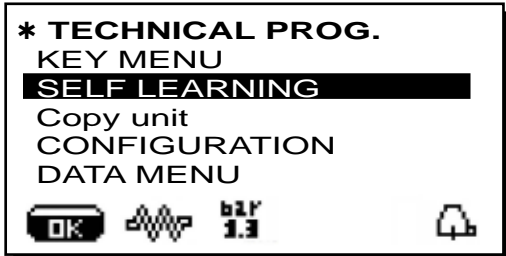
The hot water selection settings that can be changed are:

- **Water dispensing time** (water dispensing time).
 - **Temperature** (water temperature). GTI version only
- The **TEST** phase for the water keys is similar to the one for the coffee keys.

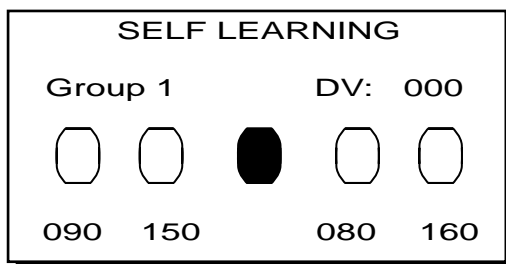
Press the "OK" to confirm the information entered.

2.5 Programming measurements using the “self-learning” function

The doses of water for coffee and the hot water doses can also be programmed using the “SELF-LEARNING” function.



Use the ▲ and ▼ keys to position the cursor (black line) on the desired line and then press the ► key. The following message will appear on the display:



Coffee doses

- 1 - Connect the filter holder with the dose of ground coffee to the unit.
- 2 - Place the cup or cups underneath the nozzle(s) of the filter holder and press the key to be programmed. Keep the key pressed until the desired level is reached in the cup or cups.

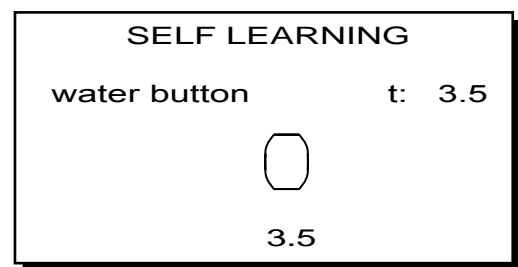
During this phase, the value of the pulses of the volumetric dispensing device (at the top right-hand side of the display ^(*)) increases. When the button is released, the value reached is recorded and appears under the key programmed.

- 3 - Continue to programme all the coffee keys, repeating the steps from number 1.

Hot water doses

- 1 - Press the button to be programmed. Keep the button pressed until the desired level is reached in the cup.

During this phase, the time in seconds (at the top right of the display) increases. On releasing the button, the value reached is stored and appears under the key programmed.

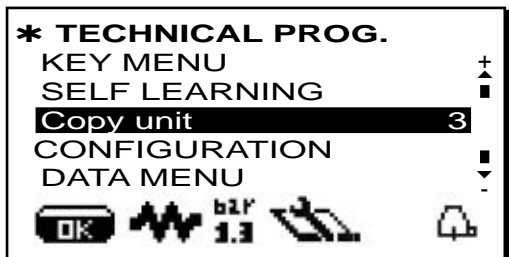


- 2 - Continue to program all the water buttons, repeating the steps starting with number 1.

When finished, confirm the changes by pressing the “OK” key.

2.6 “Copy group” function

This feature allows you to copy the selected coffee group settings for all other machine units.

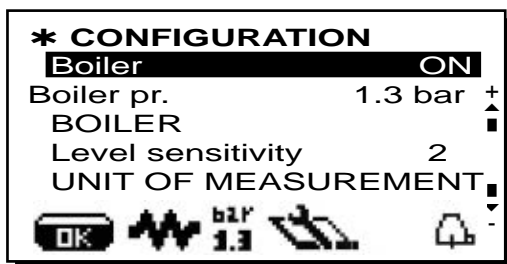


Operate as follows:

- 1) position the cursor over “Copy group” using the ▲ and ▼ keys and press the ► key;
- 2) set the group to be copied to the other machine groups by using the ▲ and ▼ keys and confirm by pressing “OK” key.

- 3) at the end of the process, all the units will have the same parameters.

2.7 Configuration Menu



Boiler- The heating element and the self-leveller feature of the boiler are activated or deactivated with the “Boiler” ON/OFF function.

Boiler Pressure- indicates the pressure of the boiler; 0.6–1.6 bar (9–23 psi).

BOILER - this parameter includes the entries for setting the temperature of the boilers, values that can be set are 60 to 110°C (140 to 230°F) in steps of 0.5°C. In this menu there is the possibility of programming a temperature offset for the boilers, adjustable in a range of +/- 2°C. The standard setting is the current value of +1.5°C.

Level Sensitivity - indicates the degree of sensitivity of the level probe, which then operates the filling of the boiler with water. For safety reasons, automatic level control of the self-leveller service-boiler is disabled when the service-boiler heating element is turned off.

- Note: set a value of 1 if the machine is installed with very conductive water.

Set a value of 3 if the water used is not very conductive (very soft).

UNIT OF MEASUREMENT - Includes 2 sub-menus:

temperature - can be set to: °C, centigrade - Celsius or °F, Fahrenheit.

pressure - can be set to bar or psi.

Time control - shows dispensing time on display: YES/NO (from 1 sec to 1 hour).

Buzzer - enables/disables all acoustic signals when keys are pressed or messages are displayed: YES/NO.

Flush - Adjusts the duration of the FLUSH function, adjustable between 0 and 3 seconds.

Low power - YES/NO

WASHING OPTIONS - - Allows the user to select the run time and block time for the “Wash” and “Water change” functions.

Customer programming - Customer programming: YES/NO.

By activating the function (YES), it is possible to provide the user with additional functions:

- change the cup warmer level (but not the level settings)
- turn the coffee boiler on/off.
- activate energy saving mode.

Programming lock - Lock programming lock: YES/NO. By activating the function (YES), all the keys on the programming keypad are locked, including the cup-warmer key. The only actions permitted are the key sequence for technical access, pressing the arrow key ◀ to perform softener regeneration and message removal.

Drying - Varies drying time from 0 to 5 with intervals of 0.1 seconds “if Drying kit is present”.

Payment systems - allows a payment system to be configured, when connected.

SOFTENER REGENERATION - Includes the parameters for softener regeneration: litres of softener (between 0.1L and 25L), hardness (between 0 and 45°F). The decreasing softener efficiency level is also indicated.

Once softener regeneration has been performed, return to the main view and press and hold ◀ for about 8 seconds to cancel the message.

FILTER REPLACEMENT - When the litre level on the display is reached, a message is displayed for replacement the filter. For both functions, an efficiency percentage is displayed (Softener/Filter), decreasing from 100% to 0%. Once the filter has been replaced, return to the main view and press and hold ◀ for about 8 seconds to cancel the message.

MAINTENANCE - includes 5 settings for maintenance parameters:

Max cycles - the number of cycles initially set: 40000.

Max days - the number of days initially set: 185.

No. cycles - the number of cycles until the next maintenance activity.

No. days - the number of days until the next maintenance activity.

Reset - options are:

NO, countdown of the cycles and days until the next maintenance activity

YES, the number of cycles (40,000) and days (185) remaining are reset

OFF, all controls related to scheduled maintenance are disabled and the "No. cycles" and "No. days" on the maintenance panel are reset.

Once maintenance has been performed, in order to remove the message a reset must be performed in technical mode.

Standard data - loads standard data: YES/NO.

Wi-Fi - See section "*Wi-Fi Configuration*" on the following pages.

BLUETOOTH - see section "*Bluetooth Connection*" on the following pages.

BDS - see section "*BDS Activation*" on the following pages.

GRINDER CONTROL

The following parameters can be set:

- **Enabled** - MM1 - MM2

- **Adjustment threshold** - see section "Steps for Bluetooth Coffee Machine-Grinder/Dispenser Communication" on the following pages.

Weighing system - It activates/deactivates the weighing system (if the "Scales Kit" is installed).

Log reset - clears faults (Wash log, Faults log and Water change) that occurred and were stored by the machine: YES/NO.

Wi-Fi Menu - configure the following Wi-Fi settings as shown below:

- **CONNECT** - to connect to the access point selected.

- **RSSI** - signal intensity:

Values of less than -70 dB indicate poor coverage with probable difficulty in transmitting data.

- **IP** - displays the IP address assigned to the machine by the wireless access point.

- **MAC** - indicates the Mac address of the machine Wi-Fi module. This parameter is read-only and cannot be modified.

- **NETWORK** - enter the name of the access point.

- **SECURITY** - indicate the type of wireless network security:

Open: no protection;

WPA: wpa2-psk protection;

WEP: WEP 128 protection.

- **KEY** - enter the password to access a protected Wi-Fi network (WPA or WEP)

- **URL** - enter listener.gruppocimbali.com.

- **Port** - enter 10000.

- **fTX** - reduces data traffic to the remote server:

☒ - transmits all data daily upon machine start-up, and faults/washings when they occur;

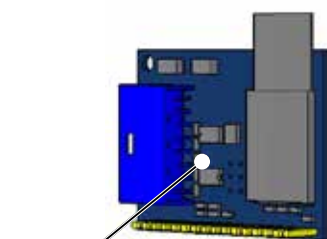
☒ - as per level 1 plus hourly counts;

☒ - as per level 2 plus pings every 10 min. (default);

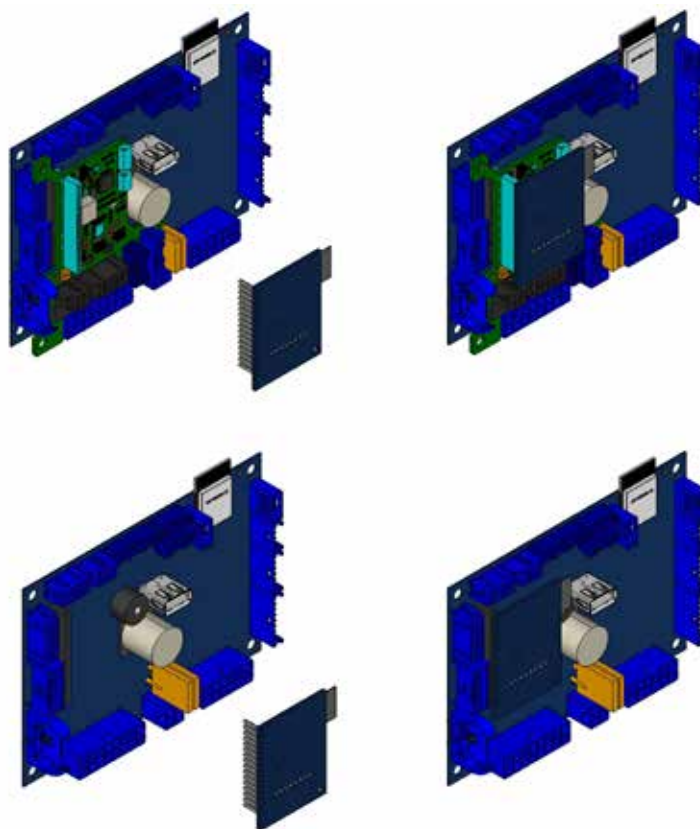
☒ - as per level 3 with the addition of sending information on coffee dispensing and washing.

- **RESET** - To restore the parameters to the standard parameters.

Bluetooth Connection



Bluetooth Card



Bluetooth Menu - The parameters that can be set are:

- **MM1-MM2** - 1 to 2 grinders can be connected.

- **Search** - the machine will find all Bluetooth devices within 10 m.


- **Reset** - cancels the connection with the associated device.

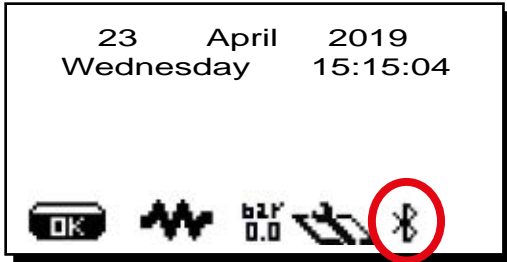
Note: during connection with bluetooth grinders/dispensers, the first one connected is set as MM1.

Operations for Machine-Grinder/Dispenser Bluetooth communication

English

English

- 1 Turn the machine on; the initial menu appears on the display. The  symbol indicates that the machine can be linked to a Bluetooth device.

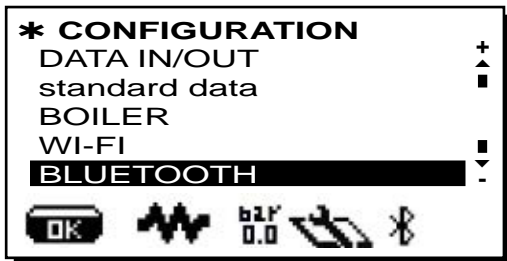


To enter TECHNICAL programming, press the ◀ key and then the **OK** key for at least 3 seconds. The message in Point (2) will appear on the display after pressing ▶.

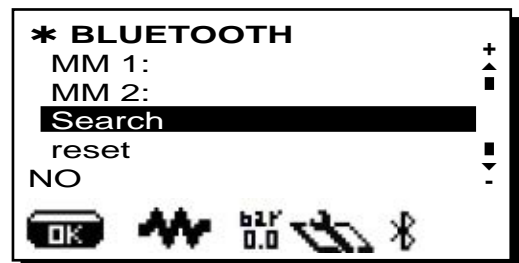
- 2 With the ▲ and ▼ keys, place the cursor on: "CONFIGURATION" in the machine Technical Prog. menu and press the ▶ key:



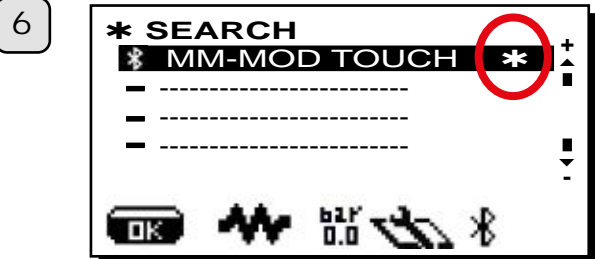
- 3 Position the cursor on the item "BLUETOOTH" in the machine's configuration menu and press the ▶ key.



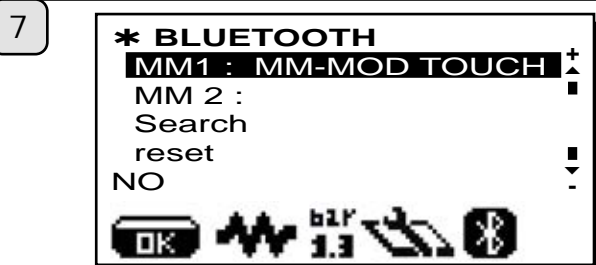
- 4 Position the cursor on "SEARCH" and press ▶:



The machine will find all Bluetooth devices within a range of 10 metres.




- 1) Scroll through the items by pressing ▲ and ▼.
- 2) Press **OK** to confirm the device selected; an asterisk * will appear next to the grinder/dispenser line indicating that the Bluetooth connection has been made with the machine:



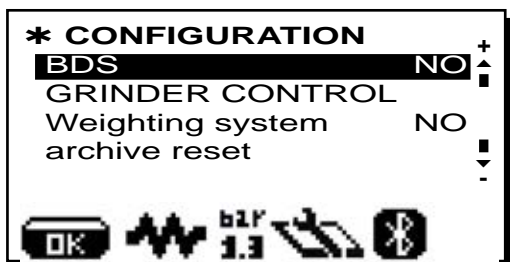
Exit programming by pressing the ◀ key.



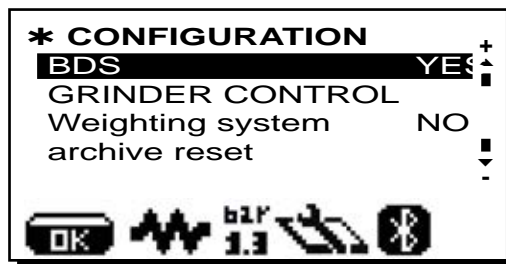
The  icon indicates that the machine and grinder/dispenser are communicating.

In the event of communication problems, the "COMMUNICATION FAILURE" message will appear on the display followed by the name of the disconnected grinder/dispenser. The message disappears automatically when the Bluetooth connection is restored. A common cause of this failure is the grinder/dispenser being turned off with the machine turned on.

- 1 Return to the "CONFIGURATION" parameters by pressing the ◀ key; using the ▲ and ▼ keys, move the cursor to "BDwS" and press ▶:



- 2 Using the ▲ and ▼ keys, move the arrow to "YES", then press **OK** to confirm:

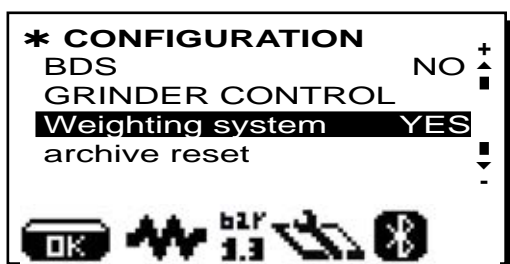


Weighing system

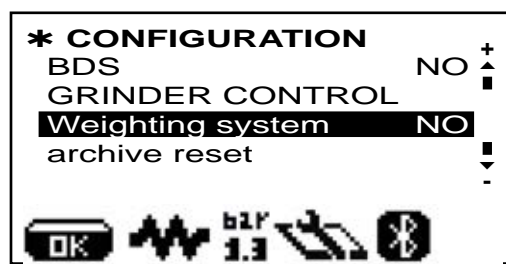


The system is active only if the "Scale kit" has been installed as illustrated in the specific documentation.

- 1 Return to the "CONFIGURATION" parameters by pressing the ◀ key; using the ▲ and ▼ keys, move the cursor to "Weighting system" and press the ▶ key:



- 2 Using the ▲ and ▼ keys, move the arrow to "NO" or "YES", then press **OK** to confirm:



Setting recipes and connections with grinder/dispenser

- NOTE: ALSO POSSIBLE TO CONNECT WITH GRINDER/DISPENSER 2


The filter holder-key and machine association logic is the following:
1-A or 2-A = activation of the first actuator (filter-holder with single delivery spout)
1-B or 2-B = activation of the second actuator (filter-holder with double delivery spout)
1-C or 2-C = activation of the third actuator with filter-holder with dedicated filter

With the number **1** the first grinder/dispenser **MM1** is identified
 With the number **2** the second grinder/dispenser **MM2** is identified


With the letters **A-B and C** the filter-holders are identified

GRINDER/DISPENSER 1


* KEY MENU	
type	1 coffee
water dose	0100
Select grinder	MM1-A




* KEY MENU	
type	1 coffee
water dose	0100
Select grinder	MM1-A



* KEY MENU	
type	1 coffee
water dose	0100
Select grinder	MM1-A




* KEY MENU	
type	1 coffee
water dose	0100
Select grinder	MM1-A




← MEDIUM →

* KEY MENU	
type	2 coffee
water dose	0200
Select grinder	MM2-B




← SHORT →

* KEY MENU	
type	2 coffee
water dose	0200
Select grinder	MM2-B



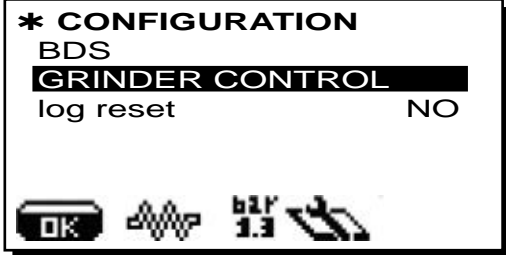
← LONG →

* KEY MENU	
type	2 coffee
water dose	0200
Select grinder	MM2-B



Grinder control parameters configuration

- 1 Position the cursor on the item "GRINDER CONTROL." in the machine's configuration menu and press the ► key.



Grinder Control-1

Grinder Control-2

The parameters that can be set are:

- Enabled

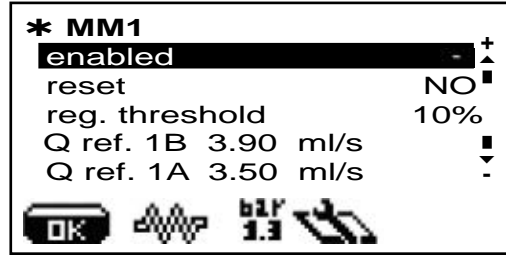
- ☐ : not in use.
- ☒ : manual grinder control (for grinder/dispensers with no Bluetooth connection option).
- ☒ : automatic grinder control (Bluetooth connection with grinder/dispenser).

2



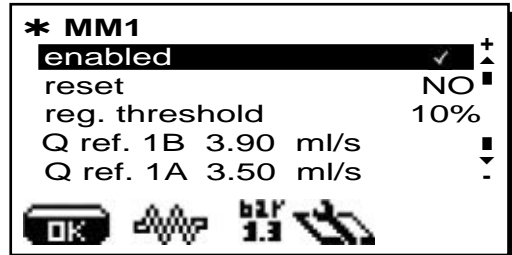
Position the cursor on the item "MM1" of the machine and press the ► key.

3



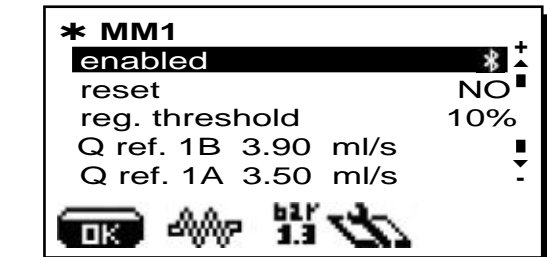
☐ : not in use

4



☒ : manual grinder control (for grinder/dispensers with no Bluetooth connection option).

5



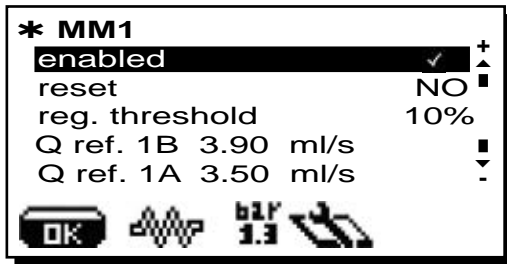
☒ : automatic grinder control (Bluetooth connection with grinder/dispenser).

The parameters can be manually changed using the ▲ and ▼ keys.

After completing operations, confirm the values by pushing the **OK** key or exit and leave the previous data using the ◀ key.

Grinder control parameters configuration

✓: manual grinder control (for grinder/dispensers with no Bluetooth connection option).



When this animated icon appears, it is necessary to adjust the grinder/dispenser to tighten or loosen the grinder in order to return the coffee dispensing to the default parameters.



The icons that are shown are:
means that the grinder needs to be loosened.
(flow of coffee is lower than the reference).




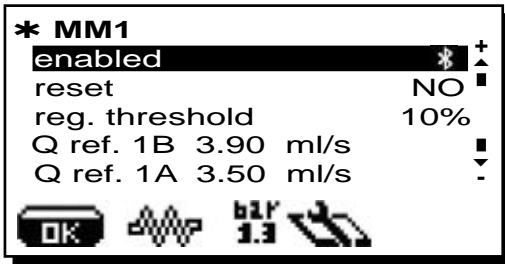
means that the grinder needs to be tightened.
(flow of coffee is greater than the reference).

Note. The number next to the icon (1 or 2) indicates the grinder/dispenser that must be adjusted.
The icon appears on the display instead of the level symbol.

1. disable grinder control, if in use.
2. set and calibrate the machine and grinder/dispenser as desired.
3. dispense into the test square all the types of beverages to be used (double coffee, single coffee and any special blend - third key).
4. write down the satisfactory flow values of the coffees for each of the possible three types of beverage.
5. go to the grinder control panel and perform reset.
6. set the flow values for each of the beverages.
7. enable grinder control.

Note: Set the Q.ref of double coffees first for proper functioning of grinder control.

 : Method 1: manual setting of Qref.



1. disable grinder control, if in use.
2. connect the machine to the grinder/dispenser via Bluetooth and enable dialogue in the manner already in use.
3. set and calibrate the machine and grinder/dispenser as desired.
4. dispense into the test square all the types of beverages to be used (double coffee, single coffee and any special blend - third key).
5. write down the satisfactory flow values of the coffees for each of the possible three types of beverage.
6. go to the grinder control panel and perform reset.
7. set the flow values for each of the beverages.
8. enable grinder control.

 : Method 2: setting of Qref in fully self-learning mode.



1. Disable grinder control, if in use.
2. Connect the machine to the grinder/dispenser via Bluetooth and enable dialogue in the manner already in use.
3. Programme and calibrate the machine and grinder/dispenser as desired, dispensing the beverages until a satisfactory cup result is achieved.
4. Go to the grinder control panel and perform reset.
5. Enable grinder control.
6. Exit programming.
7. Dispense double coffees (5 or more) until the message Qref OK appears on the services display (with audible sound).
8. Dispense single coffees (5 or more) until the message Qref OK appears on the services display (with audible signal).
9. Dispense any special blend coffees (5 or more) until the message Qref OK appears on the services display (with audible sound).
10. Enter programming and check that the Qref values set are present.

Repeat the entire procedure for the second grinder/dispenser if present.

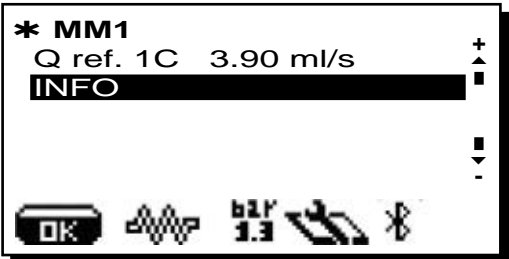
The machine is ready to work with the grinder control on. In the event of problems, dispensing can be performed in the test square with the grinder control in use to see if the symbol * is present beside the flow. Remember that dispensing is deemed valid only if it lasts more than 10 seconds.

Other symbols are used in the test square:

- > if the flow is too high compared to the reference, above the upper limit
- < if the flow is too low compared to the reference, below the lower limit
- * flow within the acceptable range
- dispensing too short (at least 8 s but less than 10 s)
- (3) number of remaining coffees to be dispensed and deducted from the count

INFO : grinder control.

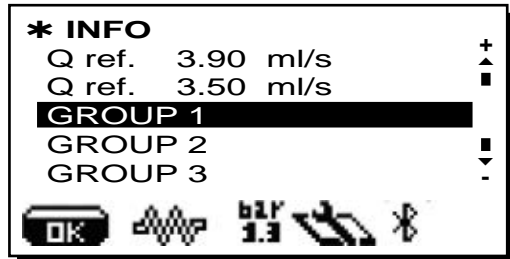
1



*** MM1**
Q ref. 1C 3.90 ml/s
INFO

Position the cursor on the item "INFO" and press the ► key.

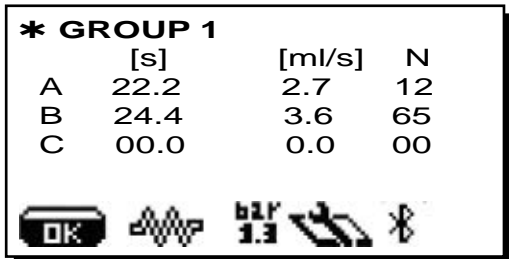
2



*** INFO**
Q ref. 3.90 ml/s
Q ref. 3.50 ml/s
GROUP 1
GROUP 2
GROUP 3

Pressing the ► key at the line "GROUP 1" displays:

3



*** GROUP 1**

	[s]	[ml/s]	N
A	22.2	2.7	12
B	24.4	3.6	65
C	00.0	0.0	00

Example of information on the flows of each single dispensing sent to the Plat-One platform via WIFI.
(A/B) GR 1 single coffee and one double, (C) the filter holder is not used for special coffees.

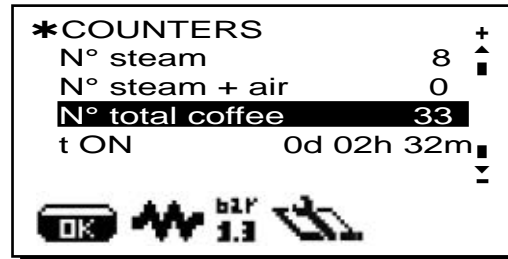
2.8 DATA MENU

COUNTERS

To access the programming menu, press the ► key; the message below will appear on the display:



Positioning the cursor on the line "COUNTERS" and pressing the ▲ and ▼ keys, and then pressing the ► key, the following is displayed:



The listed parameters are:

- **coffee** (number of coffee-based beverages);
- **brewing** (number of times that coffee was dispensed in "brewing" mode);
- **tea infusion** (number of times that tea was dispensed);
- **water** (number of times that water was dispensed);
- **steam** (number of times that steam was dispensed);
- **steam + air** (number of Turbosteam dispensings).
- **total coffee** (total number of coffee-based beverages).
- **total operating time** (period with machine ON).

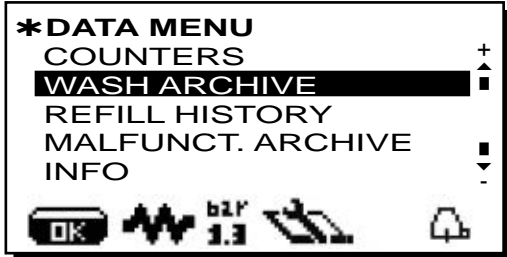
The counters can be reset by positioning the cursor over the specific item, pressing the ► key and then the ▲ or ▼ keys; press "OK" to confirm the reset.

Note: the parameters that cannot be cleared are:

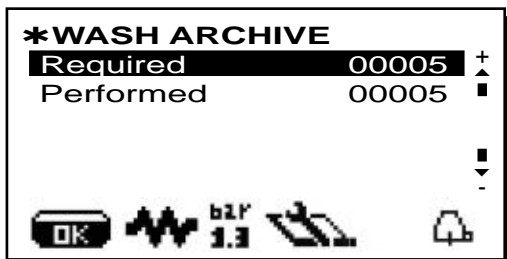
- **tot. coffee**

Pressing the ◀ key again will take you back to the main panel.

WASH ARCHIVE



Pressing the ► key at the line "Wash archive", shows the display:



The wash settings that can be displayed are:

- **Requested:** indicates the number of washes that were requested by the machine.
- **Performed:** indicates the number of washes that were performed within the timeout of 60 minutes.

***WASH ARCHIVE**
 Required 00005
 Performed 00004
 01 23 APRIL 2020

Note: if the requested washes are not performed before the timeout, the list with the last 10 missed washes, numbered and dated, can be viewed under "Performed". The first line refers to the most recent data. Scroll down the list of any missed washes using the ▲ and ▼ keys and then press the ◀ key to go to another menu.

REFILL HISTORY



When you press the ► key at the line "Refill Archive", the display shows:



The Refill parameters that can be displayed are:

- **Requested:** indicates the number of Refills that were requested by the machine.
- **Performed:** indicates the number of Refills that were performed within the 60' timeout period.

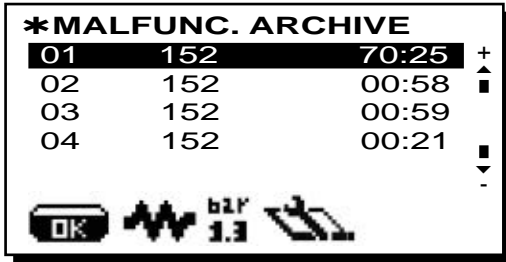
***REFILL HISTORY**
 Required 00005
 Performed 00004
 01 23 APRIL 2020

NOTE: if the requested Refills are not performed before the timeout, the list with the last 10 missed Refills, numbered and dated, can be viewed under "Performed". The first line refers to the most recent data.

Scroll down the list of any missed Refills using the ▲ and ▼ keys, then press the ◀ key to go to another menu.

MALFUNCT. ARCHIVE

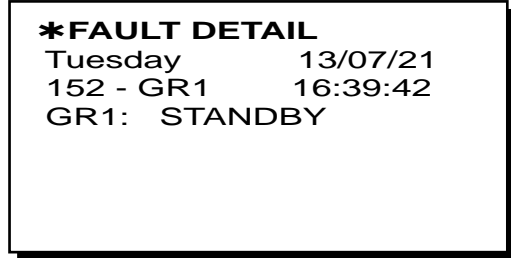
When the user presses the ► key on the "Malfunctions Archive" line, the display shows:



The digits after the "malfunction code" indicate the time elapsed since the last recorded malfunction, in hours and minutes.

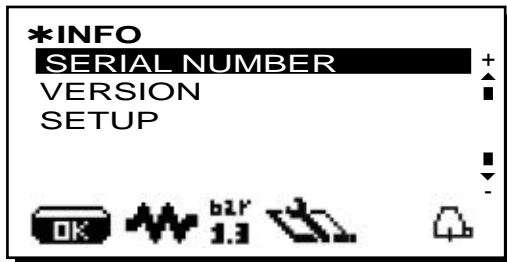
Pressing the ► key is again takes you to a detailed display that shows:

- day and time when the fault occurred
- condition of each group at the time of the malfunction.

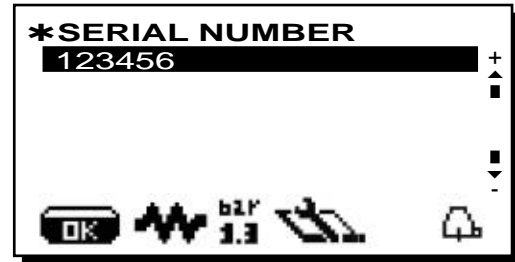


INFO

By positioning the cursor on the "INFO" line, pressing the ▲ and ▼ keys, and then pressing the ► key, the following is displayed:



When you press the ► key at the line "serial number", the display shows:

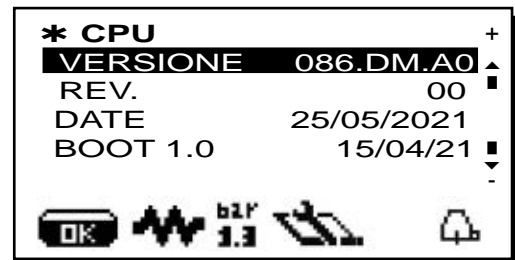
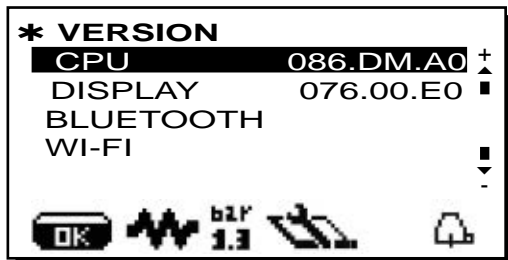


Version

The submenus under "Version" show the memory versions:

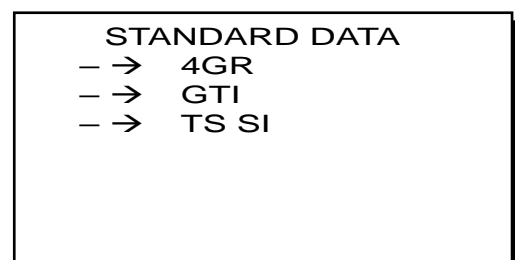
- CPU;
- Display;
- WIFI;
- Bluetooth;

By pressing the ► key on the lines, for some parameters, data on the revision and the date of the memory is displayed in addition to the version.



Setup

The settings entered during the Standard Data entry step are displayed under "Setup":



2.9 MANUAL COMMANDS MENU

To access the manual control panels, position the cursor on the "Manual Commands" line using the ▲ and ▼ keys

MANUAL COMMANDS - allows the components to be activated manually using the ▲ and ▼ keys



When the ► key is pressed again, the box below appears on the display:

Manual panel 1

	G	R	1			G	R	2			G	R	3			G	R	4					
0	0	0	1		0	0	0	1		0	0	0	1		0	0	8	1					
9	5	.	7	°C		9	5	.	7	°C		9	5	.	6	°C		9	5	.	6	°C	
0	0	0	%		0	0	0	%		0	0	0	%		0	0	0	%		0	0	0	%
P		1	.	3	1	b	a	r		S	L	!	O	K	.	0	0	7	%				
R	C	1		O	F	F							E	v	c		O	F	F				
R	C	2		O	F	F							T	V		0	2	5	°	C			
	±		→			▶			→		X	X	X	:									

- Pressing ▲ or ▼ displays the various components;
- Pressing ► selects the component to active and takes you to the next panel M2;
- Pressing ◀ exits manual mode.



Optional symbol: if visible, this indicates the presence of anomalies on the level probe signal.

	G	R	1			G	R	2			G	R	3			G	R	4	
0	0	0	1		0	0	0	1		0	0	0	1		0	0	8	1	
9	5	.7	°C		9	5	.7	°C		9	5	.6	°C		9	5	.6	°C	
0	0	0	%		0	0	0	%		0	0	0	%		0	0	0	%	
P		1	.	3	1	b	a	r		S	L	!	O	K	.	0	0	7	%
R	C	1		O	F	F							E	v	c		O	F	F
R	C	2		O	F	F							T	V		0	2	5	°C
	±		→			◀			→		X	X	X	:		O	N		

- Pressing ▲ or ▼ activates the components:
if they have a direction, use ▲ and ▼ to alternate ("+" Left/"-" Right).
- Pressing ◀ takes the user back to panel M1.

Manual Panel

	G	R	1			G	R	2			G	R	3			G	R	4	
0	0	0	1		0	0	0	1		0	0	0	1		0	0	8	1	
9	5	.7	°C		9	5	.7	°C		9	5	.6	°C		9	5	.6	°C	
0	0	0	%		0	0	0	%		0	0	0	%		0	0	0	%	
P		1	.	3	1	b	a	r		S	L	!	O	K	.	0	0	7	%
R	C	1		O	F	F							E	v	c		O	F	F
R	C	2		O	F	F							T	V		0	2	5	°C
	±		→			◀			→		X	X	X	:		O	F	F	

Level signal:

- Nominal operating range: from 7 to 53% (approximately) (E.g. 8% level OK; 50% no water, level probe uncovered)
- Other values -> signal anomaly, check wiring and connections

Below are the symbols used to define the components that can be accessed for movement:

RC	Boiler heating element
Evc	Charge-boiler solenoid valve
P	Boiler Pressure
SL	Boiler water level
TV:	Steam temperature (this parameter is not shown if the Turbosteam system is not present)

MP	pump motor
G1~G4	Dispense-coffee solenoid valve
Eac	Hot water solenoid valve
Eaf	Cold-water solenoid valve
Ev	Steam solenoid valve
Evc	Charge-boiler solenoid valve
Ets	Turbosteam solenoid valve *
MC	Turbosteam motor compressor *
Em	Milk solenoid valve *
Ein1~Ein4	Infusion solenoid valve *
Eds	Drying solenoid valve *
Em-Erp	Milk solenoid valve/ Pressure reset solenoid valve *
Gp1~Gp4	Proportional solenoid valve *
Ets2	Turbosteam solenoid valve (left) *
MC2	Turbosteam motor compressor (left) *
Ed	Diverter solenoid valve *
Elf1	Water solenoid valve for milk reconstitution *
Edm	Milk diverter solenoid valve *
Edar	Air diverter solenoid valve *
Esm	Milk safety solenoid valve *
Etm	Turbomilk solenoid valve *
Elf	Washing solenoid valve *
Mpl	Milk pump motor *

*The components - * - are only applied with certain product configurations.*