# LA-CIMBALI

## **M200**

MANUALE DEL TECNICO
ENGINEER'S MANUAL
MANUEL DU TECHNICIEN
TECHNIKERHANDBUCH
MANUAL DEL TÉCNICO
MANUAL DO TÉCNICO

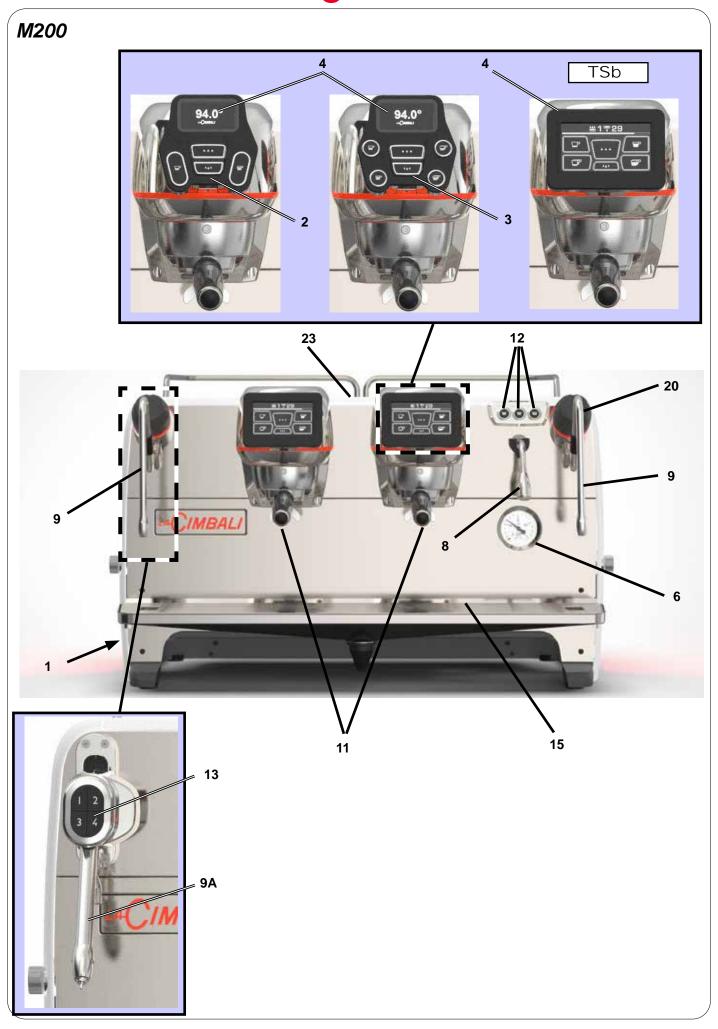


Touch screen - Touchscreen Pantalla táctil - Touchscreen Écran tactile - Ecrã tátil

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



## LACIMBALI



ı



#### **LEGENDA**

Interruttore generale 1 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

Tasti acqua calda 12

Selettore Turbosteam (\*) 13 15 Bacinella appoggiatazze

Manopola erogazione vapore

23 Piano appoggiatazze

TSb Touch screen di selezione

I componenti - \* - sono applicati solo in alcune configurazioni The components - \* - are applied only in some product di prodotti.

### EN LEGEND

Main switch 1

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

configurations

## FR LÉGENDE

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

Les composants accompagnés d'un \* ne sont montés que Die Komponenten - \* - sind nur bei einigen 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
- Wahlschalter Turbosteam (\*) 13
- 15 Auffangschale
- 20 Drehknopf Dampfabgabe
- 23 Tassenerwärmer
- **TSb** Wahl-Touchscreen

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

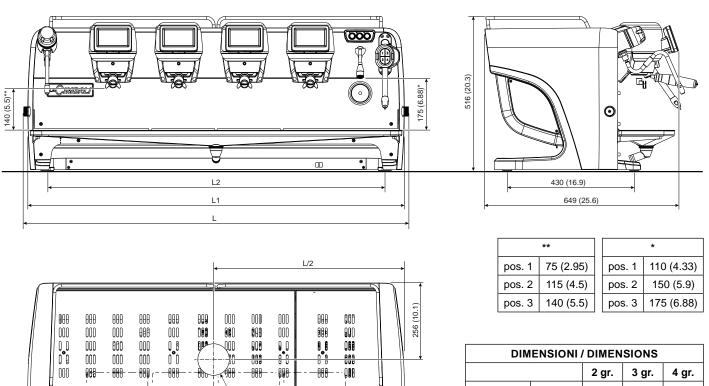
- 1 Interruptor geral
- 2 Quadro de 4 botões
- 3 Quadro de 6 botões
- 4 Display gráfico
- 6 Manómetro da bomba
- 8 Distribuidor de água quente
- 9 Tubo do vapor
- 9a Tubo do vapor Turbosteam (\*)
- 11 Porta-filtro
- 12 Botão de distribuição de água quente
- 13 Selector Turbosteam (\*)
- 15 Tabuleiro
- 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.



#### **M200**

PED / DESP	P <sub>max</sub>	T <sub>max</sub>	tipo di macchina Type of machine type de machine Maschinentyp modelo de la máquina tipo de la màquina	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 cafè	15	160	acqua - water eau - Wasser agua - água	0.60 x 2	0.60 x 3	0.60 x 4



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
LI	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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	RAULIC DIAGRAM	



#### **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 1,3 is pressed, the pressure gauge will be displayed analogically. This will be shown on the display:



Press again the icon regular display mode.

1,3 to return to the

#### **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.

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

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

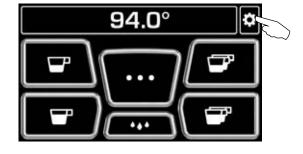
Access the machine programming menu by pressing the **SET** icon, found only on the right-hand group.

**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





#### **Boiler shut off**



Press the temperature on the boiler display.

#### **Touchscreen**



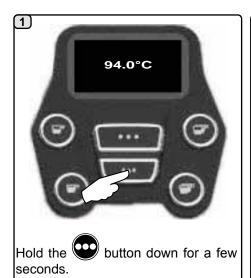
On the boiler display, press the indication .

Note: if not pressed within a few seconds, the boiler returns to normal functioning.



The unit boiler is disabled. Press any part of the display to return to normal functioning.

#### Automatic push-button strip





The coffee group will go into STANDBY mode.



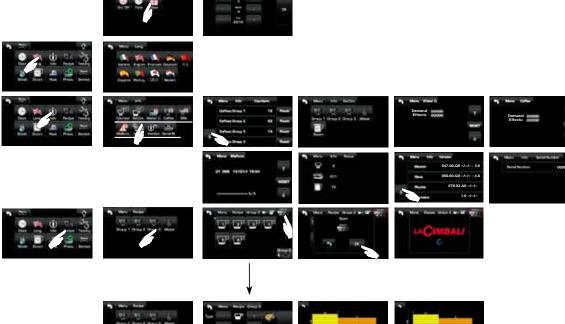
If unused for a further 60 seconds, the coffee group will turn off and dim the display.

Press any button ( twice in a row to return to normal functioning.



#### **Technical programming flow**









(versions with Turbosteam L and Turbosteam R)



Milk (versions with Turbo Milk)











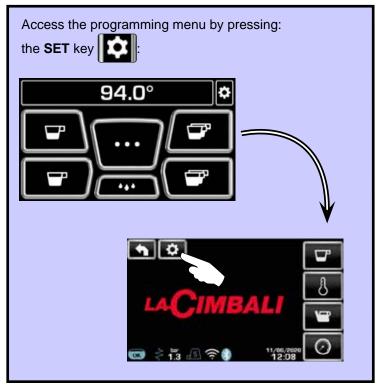






## 1. TECHNICAL PROGRAMMING (TOUCH SCREEN)

#### 1.1 Programming access "Touch screen"



1) the key:



2) type the password and then press



Return to the previous menu or exit the programming menu by pressing the key .





#### 1.2 Service time menu



## AUTOMATIC SWITCH OFF / SWITCH ON

The machine can be set to switch off and switch on at programmed times. During the machine off phase, the display light is dimmed.

Note: When the machine is working in the automatic on/off function do not use the main power switch (1) to switch off the machine. If this happens, the machine will not be able to switch on again automatically.

#### **FORCED SWITCH ON**

Push any dispensing key to turn on.

Note: Forcing the machine on does not change the programmed on/off times.

Note: At this point the machine will remain on until the next switch off time is reached.

To immediately return the machine to the programmed switch off time, switch it off and on again using the main power switch (1).



Access the service hours menu by pressing the icon

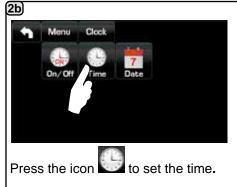


These parameters can be configured: **USE** - timed switch-on/switch-off: YES, NO, Eco (during the switch-off phase, the machine's heating element is not completely disabled and allows the boiler pressure to remain at 0.2 bar).

**ON** - (switch-on time);

**OFF** - (switch-off time);

DAY OFF - (day of closure).





These parameters can be configured: **HOUR, MINUTES, STYLE** - (24:00 or AM/PM).





These parameters can be configured: **DAY, MONTH, YEAR.** 



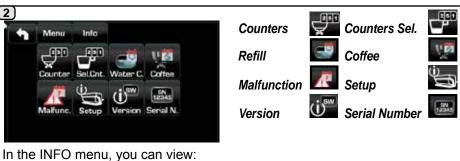
#### 1.3 Language selection





#### 1.4 INFO Menu





#### **Counters**

(3a)

In the **Counters** menu the listed parameters are:

Coffee Group... - (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 using the Turbosteam selector, position TS 1–4 with emulsion 0);

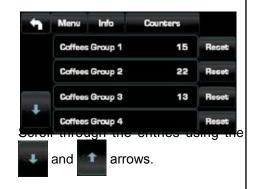
**Steam + Air** - (number of times that steam and air were dispensed using the Turbosteam selector, positions TS 1–4 with emulsion from 10–100);

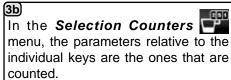
Hot milk - (number of times hot milk was dispensed);

Cold milk - (number of times cold milk was dispensed);

Total Coffee - (total number of coffee-based beverages);

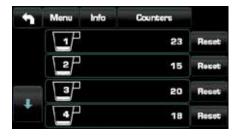
- (time since last start up).







Example of counter selection of a coffee group ::

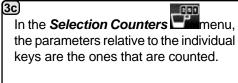


Example of counter selection of water doses .:





#### Counters (versions with Turbosteam L and Turbosteam R)





Example of a Turbosteam key selection counter:







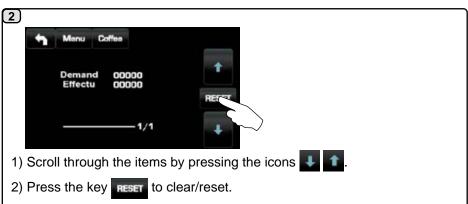
#### Replacement part





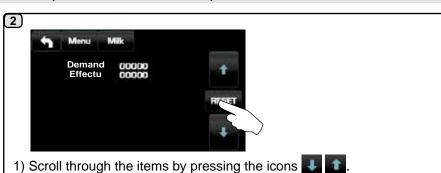
#### Coffee





#### Milk (versions with Turbo Milk)

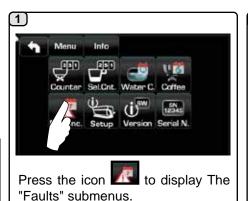


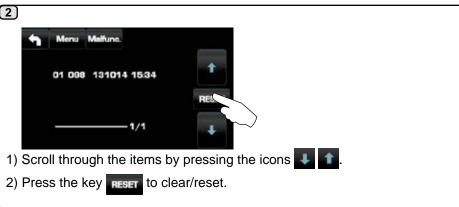


2) Press the key RESET to clear/reset.



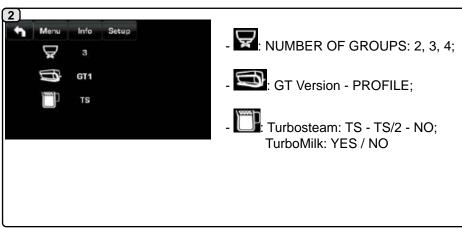
#### Malfunct. Archive



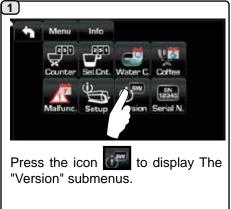


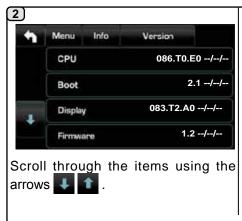
#### Setup





#### Version

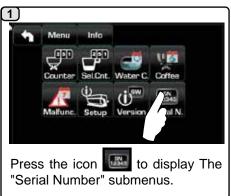




The submenus under "Version" show the memory versions:

- CPU 086.T0.E0;
- Boot 2.1;
- Display 083.T2.A0;
- Firmware 1.2;
- Bluetooth;
- WIFI;
- VEBOX;
- Turbosteam;
- Group.

#### Serial number







#### 1.5 Programming measurements





Press one of the coffee groups (example Group 3).



The programmable keys' icons are shown on the display.





When one of the coffee keys is pressed (for example Key 1), the following parameters are displayed on the services display:

water dose; empre-infusion time; wetting time.

The key in guestion will remain highlighted on the unit

The key in question will remain highlighted on the unit display.

NOTE. THE key can also be programmed as DOSED: press the icon on the parameter display screen:



Press the icon to return to CONTINUOUS mode.

The other functions of the key will remain unchanged in both configurations.

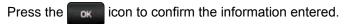


All parameters can be adjusted:

water dose (using the and keys);
pre-infusion time (using the keys

wetting time (pressing the icon will transform the icon into which will allow the time to adjusted with the keys . Press the icon icon

when the adjustment is complete).





EXAMPLE 1.0"3.5"

**3.5** shows the duration in seconds of the pre-infusion phase.

**1.0** shows the duration in seconds of the wetting phase.

Grinder/dispenser selected can be associated with each key type.

By pressing the key , the dispensing starts and

the following screen appears on the services display:

Possibility to change the colour associated with each key type.

TEST

Dv 0011 ±G 002.1s
TB 093.4°C RB 010%

P 1.2bar SL 0K 008%
Ro1 0FF Eve 0FF
Ro2 0FF TV 024°C

The parameters displayed are:

Dv: Volumetric meter incremental counter

tG: dispensing time

**TB**: instant coffee boiler temperature

RB: % activation coffee boiler heating element

P: service boiler pressure

SL: service boiler water level; % level signal

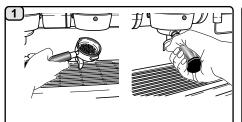
Rc: service boiler heating element

Evc: Boiler-water-supply solenoid valve

TV: Turbosteam wand steam temperature



#### Programming measures using the "SELF-LEARNING" function



Hook the filter holder with the dose of ground coffee to the group.



Press one of the coffee groups (example Group 3).



Press the key and the buzzer indicate the SELF-LEARNING phase.

4

Place the cup or cups underneath the filter holder nozzles.

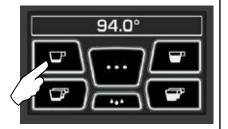
The numbers relative to each key appear on the group display.



5

Push the button to be programmed (e.g. key 1): the icon of the key in question remains selected on the display. When the desired level is reached in the cup or cups, press the key again.

Continue with any additional programming of the coffee buttons.







By pushing the coffee buttons on the services display, the doses entered can be viewed, with the values of the impulses of the volumetric dosing devices.

The doses entered with the self-learning function can be corrected manually using the +/- keys.

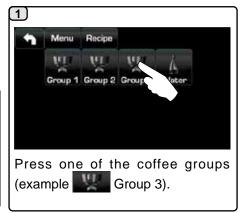
Afterwards, confirm the values by pressing the key



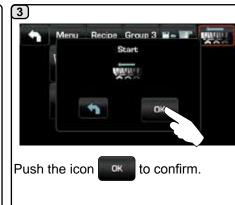


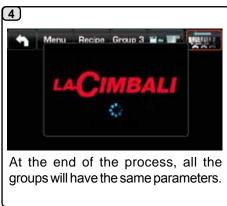
#### Clone function

This feature allows you to replicate the selected coffee unit settings for all other machine groups.











#### Water dose programming







Press the icon . These parameters can be configured:

SET... - to set the dispensing time;

% - to set the water temperature.

NOTE: - the red border around the icon indicates the key being changed.

- the TEST phase for the water keys is similar to the one for the coffee keys.

Press the icon to confirm the information entered.

#### Water dose programming using the "self-learning" function



Place a container suitable for the amount you wish to fill beneath the hotwater outlet and press the icon.



The buzzer sound and the red border around the icon indicate the SELF-LEARNING STAGE.



Press key to be programmed. When the desired level is reached in the container press the key again.

Continue with any additional programming of the keys.



Press to exit the SELF-LEARNING phase.



The buzzer sound will stop and the red border at the top left of the icon will disappear.

The dispensing time and temperature of the water added will be displayed which can be corrected manually using

the buttons

Afterwards, confirm the values by pressing the ok icon.



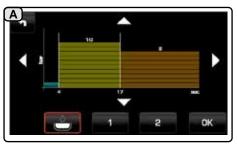
#### Pressure profile (only on "PROFILE" machines)

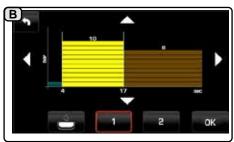
This function allows you to set the pressure profile with which the coffee is dispensed.

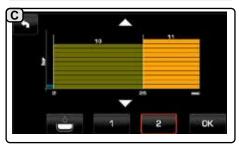






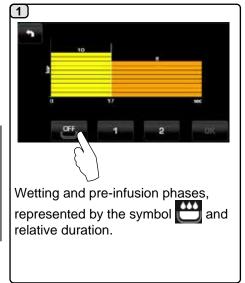


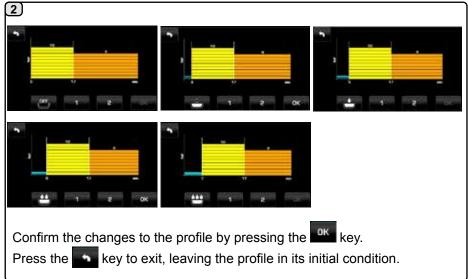






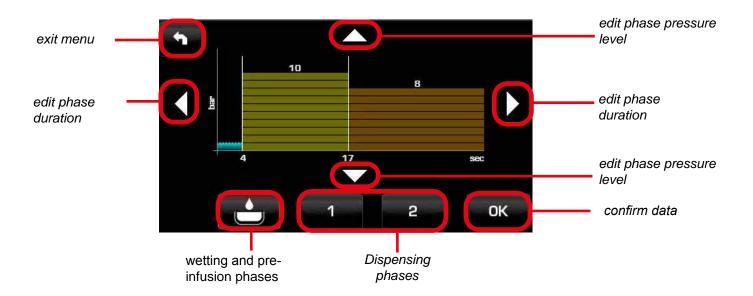
#### Available profiles



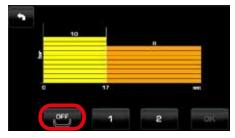


Edit profiles

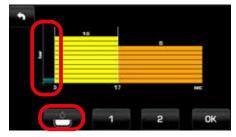
The profiles are customisable by changing the duration and pressure of the individual dispensing phases.



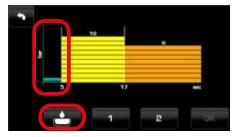
The numbers which appear on the graph identify the phase parameters. For example, **phase 1** will have a duration of 17 seconds at 10 bar.



wetting and pre-infusion OFF



wetting OFF pre-infusion active



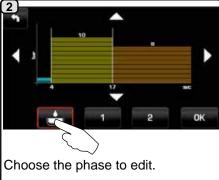
wetting and pre-infusion active

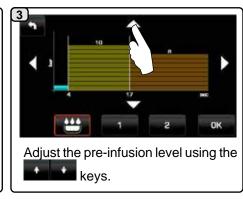


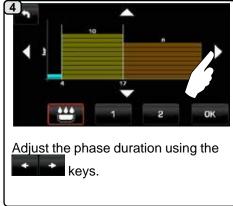
#### Edit profiles (CONTINUE)

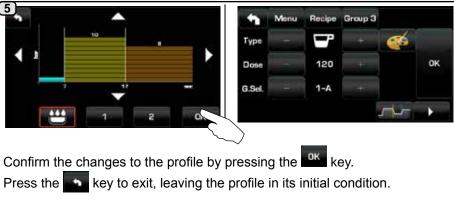
The following illustrates, in detail, how to proceed; the individual phases of the 3 short coffees key of unit 3 will be edited.

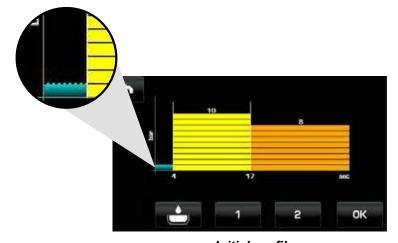




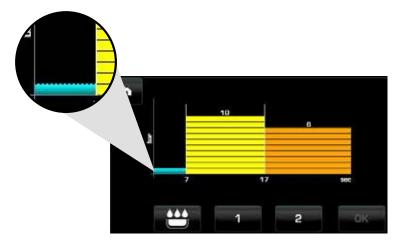








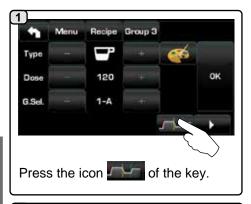
Initial profile

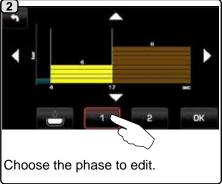


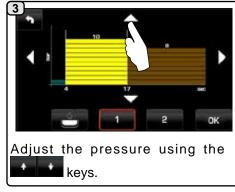
Edited profile

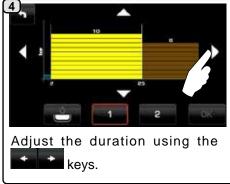


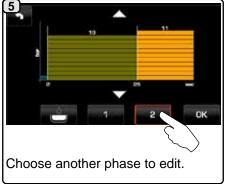
#### Edit profiles (CONTINUE)

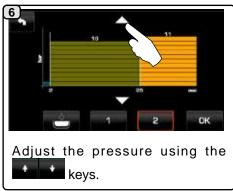


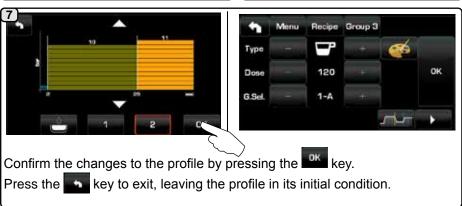




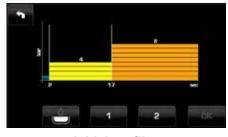




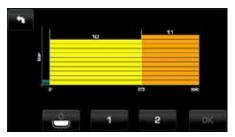




The change in pressure profile associated with the 3 short coffees key of group 3 can be seen when comparing the initial profile with the edited profile:



Initial profile

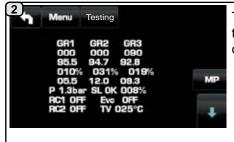


Edited profile

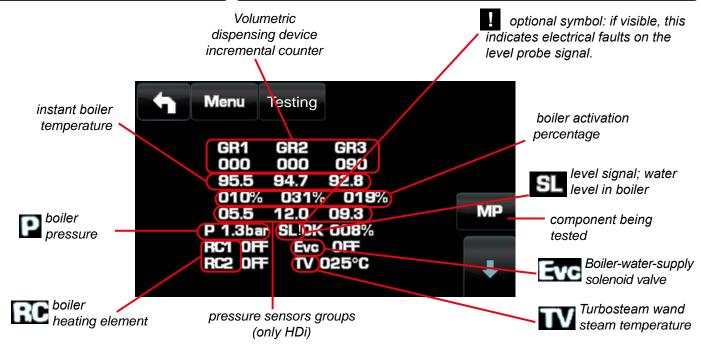


#### 1.6 Testing





The testing screen makes it possible to manually operate the machine components.

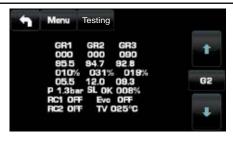


Boiler activation percentage: Modulation percentage of the heating power of the boiler.

**Boiler resistance:** Activation of resistance elements based on power selected.

Total power divided into: RC1 =  $\frac{2}{3}$  - RC2 =  $\frac{1}{3}$ 

Full power cycle: RC1 ON / RC2 ON Lower power cycle: RC1 ON / RC2 OFF
RC1 OFF / RC2 OFF
RC1 OFF / RC2 OFF



Press the icons to select the parts to be moved; the operation is performed by pushing the button which indicates the name of the part.

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

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*
Eds	Drying solenoid valve*
Em Ern	Milk colonaid valva/ Proceure recet

Em-Erp Milk solenoid valve/ Pressure reset solenoid valve\*

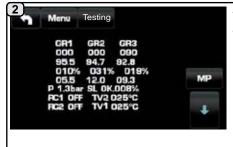
**Gp1–Gp4** Proportional solenoid valve\*

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

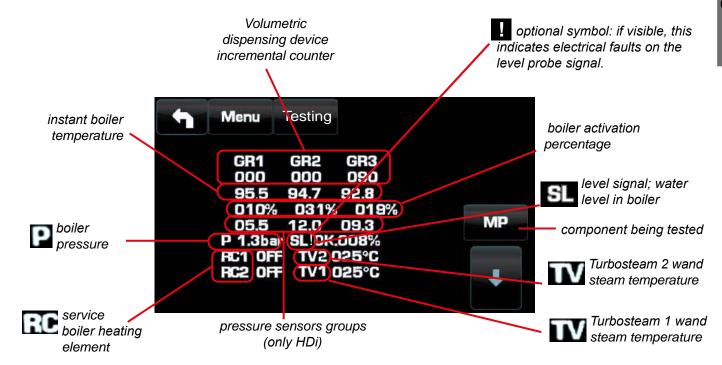


#### (versions with Turbosteam L and Turbosteam R)





The testing screen makes it possible to manually operate the machine components.



Boiler activation percentage: Modulation percentage of the heating power of the boiler.

**Boiler resistance:** Activation of resistance elements based on power selected.

Total power divided into RC1 =  $\frac{2}{3}$  - RC2 =  $\frac{1}{3}$ 

Full power cycle: RC1 ON / RC2 ON Lower power cycle: RC1 ON / RC2 OFF RC1 OFF / RC2 OFF RC1 OFF / RC2 OFF



Press the icons to select the parts to be moved; the operation is performed by pushing the button which indicates the name of the part.

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

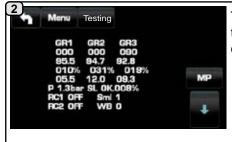
MP	pump motor
G1~G4	Dispense-coffee solenoid valve
Eac	Hot water solenoid valve
Eaf	Cold-water solenoid valve
Ev	Steam solenoid valve
Evc	Charge-boiler solenoid valve
Ets	Turbosteam solenoid valve (right)*
MC	Turbosteam motor compressor (right)*
Ets2	Turbosteam solenoid valve (left)*
MC2	Turbosteam motor compressor (left)*
Eds	Drying solenoid valve*
Em	Milk solenoid valve
Gp1-Gp4	Proportional solenoid valve*

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

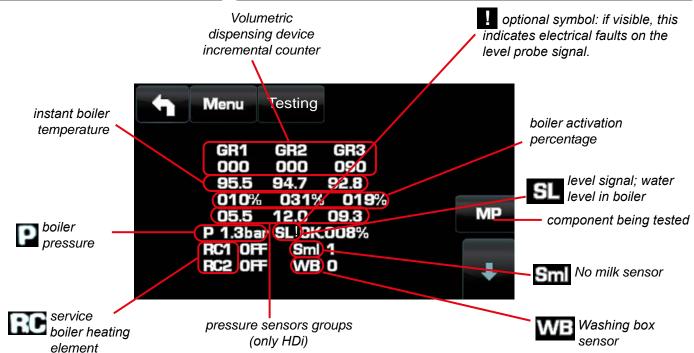


#### (versions with Turbo Milk)





The testing screen makes it possible to manually operate the machine components.

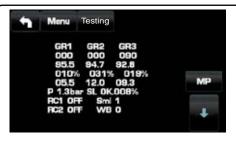


Boiler activation percentage: Modulation percentage of the heating power of the boiler.

Boiler resistance: Activation of resistance elements based on power selected.

Total power divided into: RC1 =  $\frac{2}{3}$  - RC2 =  $\frac{1}{3}$ 

Full power cycle: RC1 ON / RC2 ON Lower power cycle: RC1 ON / RC2 OFF
RC1 OFF / RC2 OFF
RC1 OFF / RC2 OFF



Press the icons to select the parts to be moved; the operation is performed by pushing the button which indicates the name of the part.

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

MP	pump motor	Edm	Milk diverter solenoid valve
G1-G3	Dispense-coffee solenoid valve	Edar	Air diverter solenoid valve
Eac	Hot water solenoid valve	Esm	Milk safety solenoid valve
Eaf	Cold-water solenoid valve	Etm	Turbomilk solenoid valve
Ev	Steam solenoid valve	Elf	Washing solenoid valve
Evc	Charge-boiler solenoid valve	Mpl	Milk pump motor
Em	Milk solenoid valve	•	
Ed	Diverter solenoid valve		

Elf1 Water solenoid valve for milk reconstitution



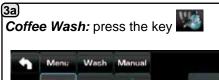
#### 1.7 Washing





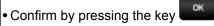
Select from the following wash settings:

- Coffee
- Milk
- Time

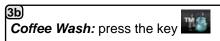




• Select the type of wash cycle to perform



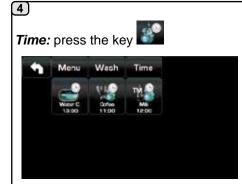
Follow the instructions on the display.





Press the key and follow the instructions on the display.

**NOTE:** More information on the wash cycle can be found in the "Cleaning and Maintenance" chapter."



This menu makes it possible to set the times requests appear for the water change in the boiler, the coffee circuit wash, and the milk circuit wash. Select which of the following times to set:

- Change 🔤
- Coffee
- Milk





Replacement: press the key



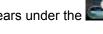




Change the time depending on your requirements.

Confirm by pressing the

The new time appears under the key.



NOTE: The "CHANGE" function with time request is set by the technical personnel who can also enable or disable the "block" function.

With "block" enabled, if the water refill is not done within one hour, the machine prevents the dispensing of the beverages, water and steam.

With a scheduled time request, the user can only change the time the request appears.



Coffee: press the key







Select which type of coffee wash you want to perform. For example

Change the time depending on your requirements and confirm with the key.

The time appears under the key.

NOTE: The scheduled wash request can be cancelled by pressing the key; in this case, no time appears under the key.



Milk: press the key





NOTE. It is NOT possible to cancel the scheduled wash request.

Change the time depending on your requirements and confirm with the key.

The new time appears under the key.





#### Steam dispensing

#### Heating milk for cappuccino

#### General instructions

Milk is an organic product. It is delicate and therefore easily alterable. Heat changes its structure. From the moment the container is opened and for the entire period of use, the milk must be kept at a temperature **not exceeding 5°C (41°F)**; our milk storage appliances are suitable for this purpose.

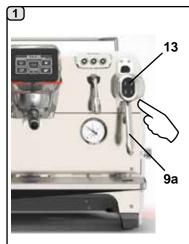
Note: at the end of the business day (or, in any case, not more than 24 hours after opening the container), unused milk must be disposed of.

## **Dispensing with the Turbosteam selector (13)** (where applicable)

Machines equipped with the TURBOSTEAM (STOP STEAM) dispensing system "stop dispensing steam once a specified temperature is reached" for rapid heating and milk frothing.

The Turbosteam keys have different functions based on the following configuration:





Insert the steam nozzle (9a) into a suitable container, making sure the bulb is completely immersed in the beverage.

Using the selector (13) select what type of milk you want from the 4 available settings (1 - 4) and push the appropriate key.

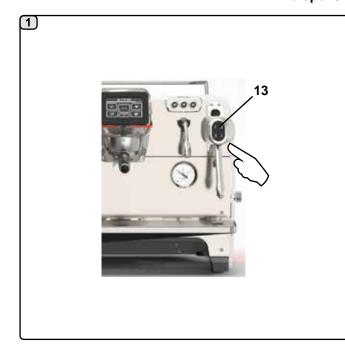


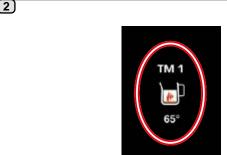
The type of frothing selected is displayed on the touch screen during dispensing.

Once the set temperature is reached, the steam will stop automatically.

Dispensing can be stopped at any time by pressing any of the Turbosteam keys (13).

#### Milk dispensing (where applicable)





The type of milk selected is displayed on the touch screen during dispensing.

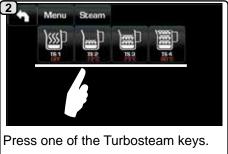
When the dose set is reached, the milk stops dispensing automatically.

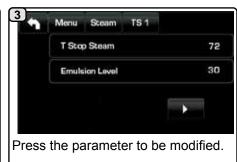
Dispensing can be stopped at any time by pressing any of the keys of the selector (13).



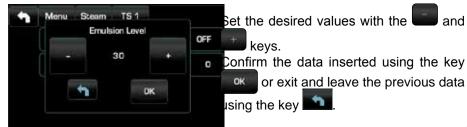
#### 1.8 Turbosteam









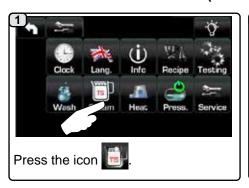




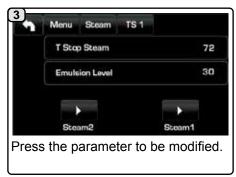


By pressing the key, the following screen appears on the services display.

#### (versions with Turbosteam L and Turbosteam R)

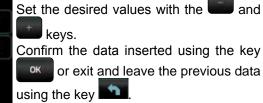


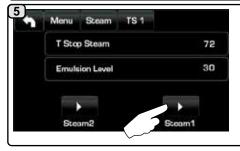














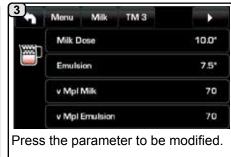
By pressing the key, the following screen appears on the services display.



#### Milk (versions with Turbo Milk)

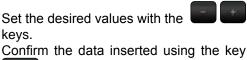












or exit and leave the previous data using the key



Note: pressing the icon possible to edit the type of key ( cold / hot)





By pressing the key, the following screen appears on the services display.











Set the desired values with the

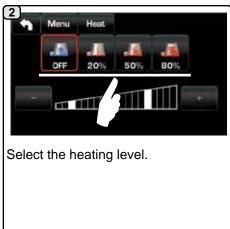
keys. Confirm the data inserted using the key

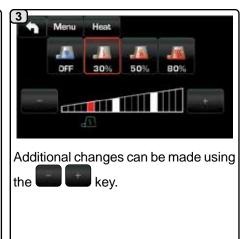
or exit and leave the previous data using the key



#### 1.9 Cup warmer







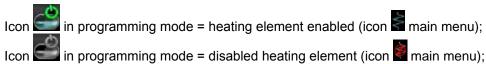
#### 1.10 Heating element

The technician can activate or deactivate the heating element (of the service boiler and the boiler) as follows:

function of the boiler are deactivated.



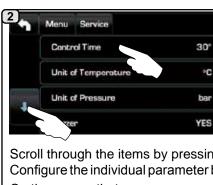






#### 1.11 Programming







Scroll through the items by pressing the

Configure the individual parameter by pressing the box of the parameter itself. On the screen that appears, press the desired icon and confirm with

\*C

bar



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

Temperature Unit - can be set to: °C, degrees centigrade/Celsius, or °F, degrees Fahrenheit.

Pressure Unit - can be set to bar or psi.

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



**Boiler Pressure** - indicates the pressure of the service-boiler; 0.6 to 1.6 bar (9 to 23 psi)

**Boiler Temperature** - this parameter includes the items for setting the coffee boiler temperature; values that can be set are 60°C - 110°C (140°F - 230°F) with intervals of 0.5°C. Programmable group temperature with ability of offset correction (see section on following pages).

Flush - see section "Enabling Flush key" on the following pages.

Low power - YES/NO

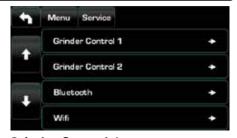


**User Prog.** - user programming: YES/

**Lock Prog.** - block settings: YES/NO.

Weighting system - allows management of the Acaia scales for weighing the amount of coffee dispensed: YES/NO.

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



**Grinder Control-1 Grinder Control-2** (only if the machine is connected to a wireless grinder/dispenser).

The following parameters can be set:

- Enabled - MM1 - MM2

Set to "NO" during the machine configuration phase; "YES" once parameters have been entered.

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

Bluetooth Menu - see section "Bluetooth Connection" on the following pages.

Wi-Fi Menu - see section "Wi-Fi Configuration" in the following pages.



#### 1.11 Programming (CONTINUE)



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

**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.

<u>Filter Replacement</u> - when the litre level on the display is reached, a message is displayed for replacement of the filter.

For both functions, an efficiency percentage is displayed (Softener/Filter), decreasing from 100% to 0%.

<u>Maintenance</u> - includes 4 submenus for setting maintenance parameters:

- Max cycles the number of cycles set.
- Max days the number of days set.
- No. cycles/days this is the number of cycles and days until next maintenance.
- Maintenance YES/NO.

Enables (YES) or does not enable countdown of the cycles and days until the next maintenance activity.



**<u>Bds</u>** - see section "BDS Activation" in the following pages.

<u>Screensaver</u> - possibility of programming the screensaver display time (from 30 sec to 20 min)

<u>Standard data</u> - allows loading of standard data or reconfiguration of the machine. In both cases, the machine is automatically restarted.

<u>Password</u> - allows the code to be changed to access technical programming.



#### **Boiler Temperature**





Scroll through the items by pressing the icons.

Press the icon Coffee Boiler





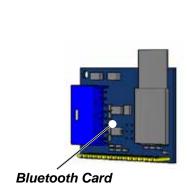
Set the desired values using the "+" and "-" icons.

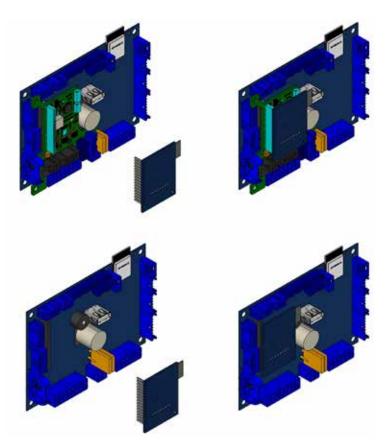
NOTE: a temperature offset can be set for the boiler adjustable by ±2°C.

Each dot corresponds to approximately half a degree centigrade of offset.

Confirm the data inserted using the icon or exit and leave the previous data using the icon.

#### **Bluetooth Connection**





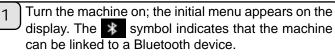
**Bluetooth Menu** - The parameters that can be set are:

- 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



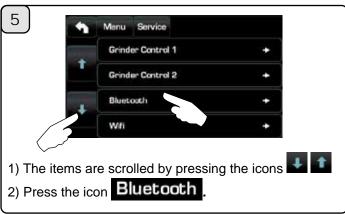


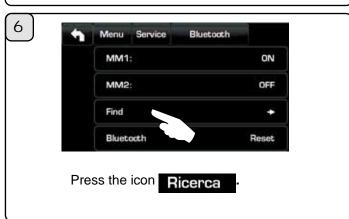
To enter TECHNICAL programming, press the icon

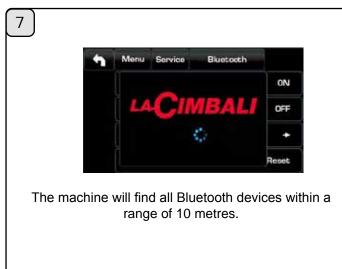








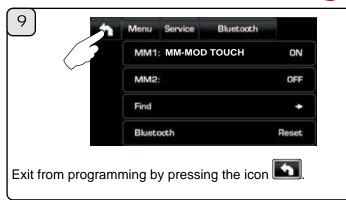






2) Press the icon to confirm the selected device, an asterisk will appear \* next to the line of the grinder/dispenser to indicate the successful Bluetooth association with the machine:



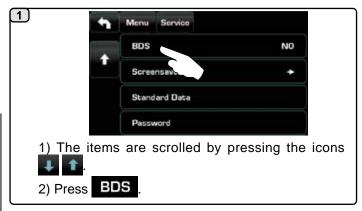


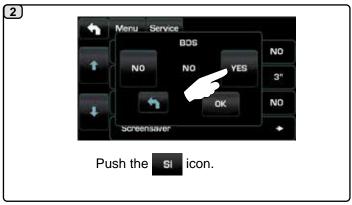


In the event of communication problems, the "COMMUNICATION FAILURE" message will appear on the display followed by the name of the disconnected grinder/dispenser. The message disappears automatically when the Bluetooth connection is restored. A common cause of this failure is the grinder/dispenser being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



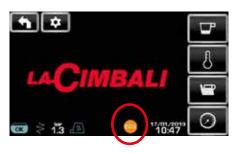
## BDS activation and sensor configuration



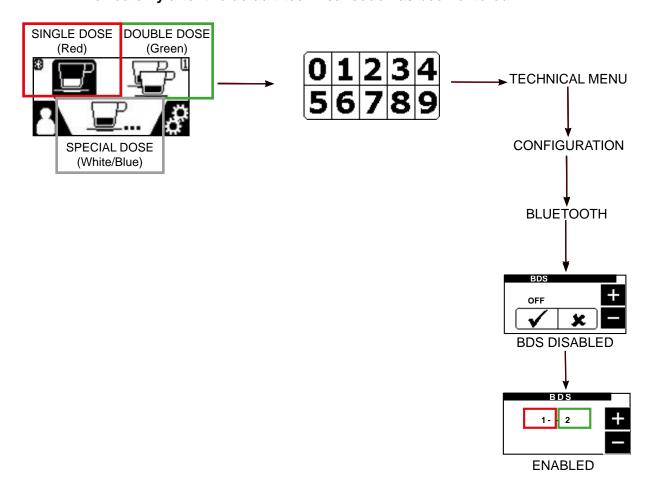




**Note:** With BDS active the payment systems cannot be activated.



All the TECHNICAL MENU items of the "Magnum Bluetooth" grinder/dispenser can be viewed only after the default technical code has been entered.



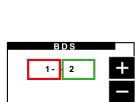


## Configuration of Magnum Bluetooth grinder/dispenser sensors

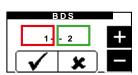
0: sensor disabled

1: single dose (Red)

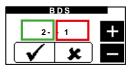
2: double dose (Green)



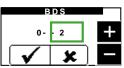




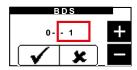
Single dose - Left Sensor (Red) Double dose - Right Sensor (Green)



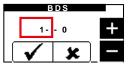
Double dose – Left Sensor (Green) Single dose - Right Sensor (Red)



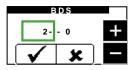
Left Sensor disabled Double dose - Right Sensor (Green)



Single dose - Right Sensor (Red) Left Sensor disabled

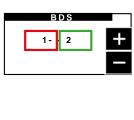


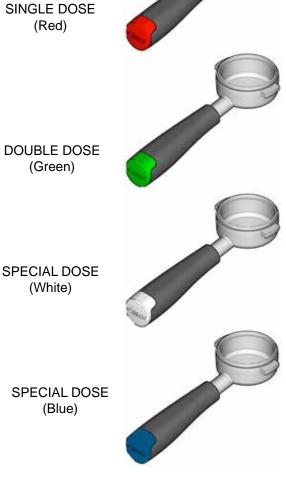
Single dose - Left Sensor (Red) Right Sensor disabled



Double dose – Left Sensor (Green) Right Sensor disabled









### Setting recipes and connections with grinder/dispenser

## -NOTE: ALSO POSSIBILE TO CONNECT WITH GRINDER/DISPENSER 2

#### **GRINDER/DISPENSER 1**



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 o 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





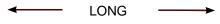








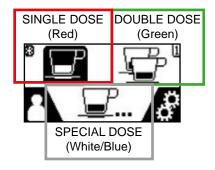






Every button on the machine can be configured based on the type and the relative grinder/dispenser. Not all types can be used with the BDS system. The possible choices are:

- Single type
- Short
- Medium -> SINGLE DOSE (Red)
- Long -> SPECIAL DOSE (White/Blue)
- Double type
- Short
- Medium -> DOUBLE DOSE (Green)
- Long

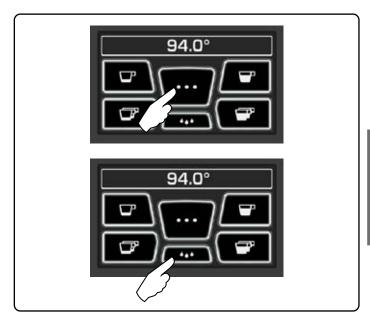




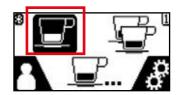
## **Operating logic**

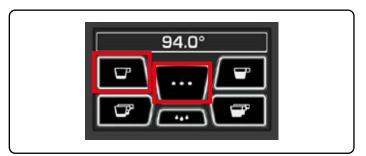
BDS system enabled.

Dispensing disabled (keys off) NOTE: Start/Stop key is always active.



Dose grinding and dispensing activated (key on)





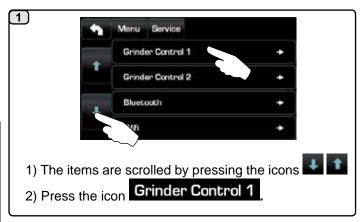
Dispensing will remain active for 2 minutes. During this time, the grinder/dispenser used will be blocked and therefore unable to grind a second dose of coffee.

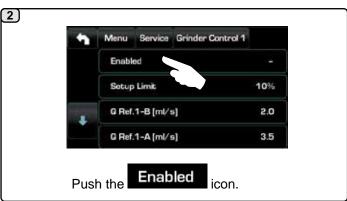
The grinder/dispenser will automatically release when the enabled key is pressed or when the two minutes of waiting time have elapsed.





## Grinder control parameters configuration





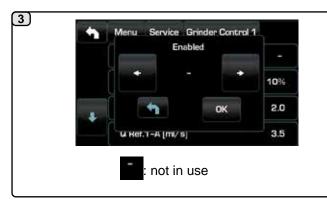
## **Grinder Control-1 Grinder Control-2**

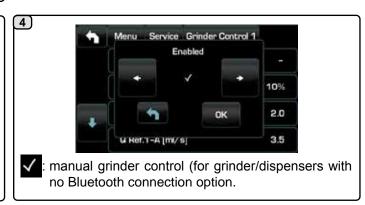
# (only if the machine is connected to a wireless grinder/dispenser).

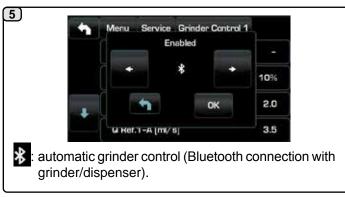
The parameters that can be set are:

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

Note: For proper operation of the grinder control system, keys of the same type (e.g., singular ones relative to grinder/dispenser 1) must be programmed with the same pressure and time parameters in all the phases of the profile.







The parameters can be modified manually using the keys.

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



## **Grinder control parameters configuration (CONTINUE)**



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



- 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.

#### control of the flow (only if in use)

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.

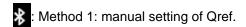
The icons that are shown are:

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. 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 magnum key on demand).
- 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.



## **Grinder control parameters configuration (CONTINUE)**

: 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
- 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.

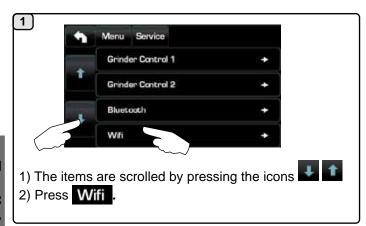
The machine is ready to work with the grinder control on. In the event of problems, dispensing can be performed in the test square with the grinder control in use to see if the symbol \* is present beside the flow. Remember that dispensing is deemed valid only if it lasts more than 10 seconds.

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 brief (at least 8 sec but less than 10 sec) (3) number of remaining coffees to be dispensed and deducted from the count

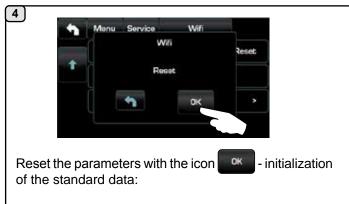


## Wi-Fi configuration









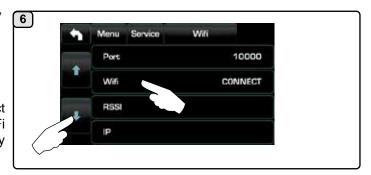
<u>Wi-Fi Menu</u> - configure the following Wi-Fi settings as shown below:

- NETWORK enter the name of the access point.
- **SECURITY** indicate the type of wireless network security:
- **KEY** enter the password to access a protected Wi-Fi network (WPA or WEP)
- URL enter listener.gruppocimbali.com.
- Port enter 10000.
- CONNECT to connect to the access point selected.
- RSSI signal intensity:
- *IP* displays the IP address assigned to the machine by the wireless access point.
- **RESET** To restore the parameters to the standard parameters.
- **MAC -** Represents the Mac address of the machine's Wi-Fi module. This parameter is read-only and cannot be modified.
- fTX reduces data transmission 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).

Place the cursor on the item CONNECT to manually connect to the access point selected; if the configuration of the Wi-Fi module is correct, the following icon appears on the display



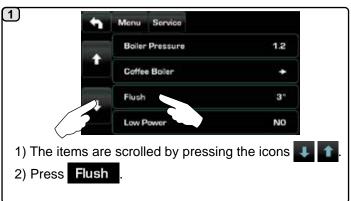
- 1) The items are scrolled by pressing the icons
- 2) Press the icons required to configure the parameters.



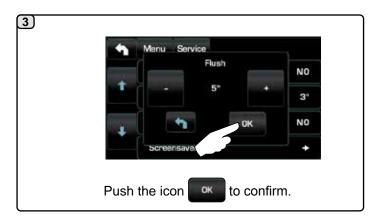


## **Enabling Flush key**

By entering the programming menu you can activate the FLUSH key.





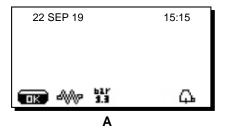


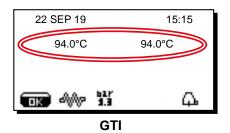
## **Machine configuration**

## Automatic push-button strip

The machine is available in two configurations:

- PROFILE;
- GT.

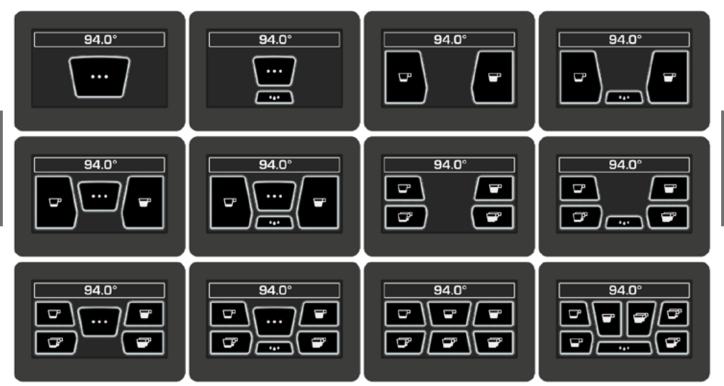




6 keys



The machine can be adjusted with various configurations with dispensing and "flush" buttons set-up as desired.





## Logo

The Cimbali standard logos are shown on all the machine displays after a period of inactivity set in the "Screensaver" menu.



Using any graphics program (e.g. Paint), create a file that meets certain characteristics; the prerequisites for *bitmap* images to be used as a logo are:

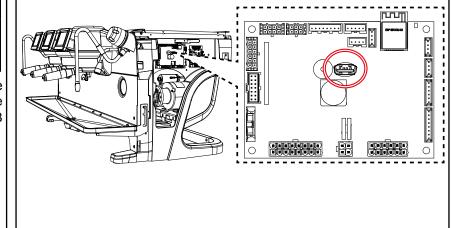
custlogo.bmp

- width less than or equal to 480 pixels;
- length less than or equal to 272 pixels.
- 24-bit bmp colour.

If the user wants to display a logo for the groups display, copy the "custlogo.bmp" files onto a USB pendrive.



After removing the side panel (as indicated in the "DISASSEMBLY" section), insert the USB pen drive into the dedicated port on the machine board:



The The

icon will appear on the display:



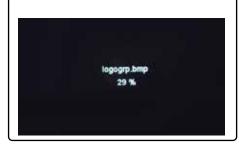
4

Turn the machine off and back on again; when it comes back on the following will appear on the display:



(5)

Press OK and wait for the file to load:



6

Once loading is complete, remove the USB pen drive from the machine.

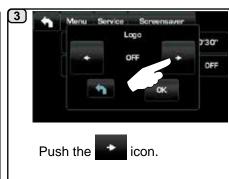
Note: if the screensaver is activated, the logos can be seen immediately, without waiting for the period of inactivity, every time the user turns off the analogic pressure gauge.



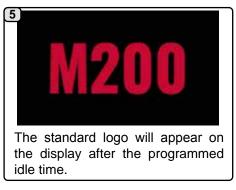
### Standard logo display.



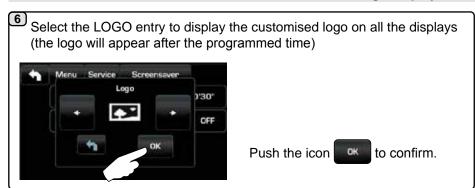








## Customised logo display.



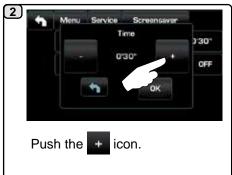


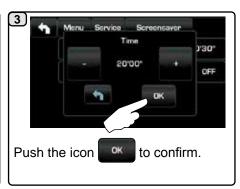
Note: only one custom image can be loaded at a time for the Screensaver function. If a new image is loaded, the previous one will be overwritten.

#### Time

Possibility of programming the screensaver display time (from 30" to 20') with steps of 30 seconds.









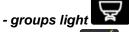
## Lighting





This menu allows adjustment of the machine lights. Specifically:

- rear led bar



- side lights



Set the desired values with the keys:

- lights on at maximum brightness
- · lights off

For the side lights, the user can choose:

- a preferred colour out of those available with the





The changes will be applied after the data entered is confirmed with the icon OK

All machine lights can be adjusted and are activated simultaneously with the start-up of the device.

NOTE. Continuous lighting (24 hours a day, 7 days a week) can be activated

by pressing the



This function is activated when the 24/7 is displayed

