



Fresh-brewed coffee and instant beverages machine

Table top with Touch screen interface

rhTT1 V+, LaRhea V+ Grande Premium, LaRhea V+ Grande 2 Premium

SUM010-2024-pkg6.1-E+

SOFTWARE USER MANUAL

1.0 | 2024/05/16

EN

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Requests for authorization, additional copies of this manual or technical information on the latter, must be addressed to:

Rhea Vendors Group SpA

Registered office: Via Trieste, 49 21042 Caronno Pertusella – Varese (VA) – Italy

Tel. +39 02 966551

Corporate office: Via Trieste, 49 21042 Caronno Pertusella – Varese (VA) – Italy

Tel. +39 02 966551

Web page: www.rheavendors.com

E-mail: rheavendors@rheavendors.com

INFORMATION ON THIS MANUAL

Updates

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SUM010-2024-pkg5.0-E+	1.0	2024/01/19	Updated to 5.0 package, new structure and layout	5.0
SUM010-2024-pkg6.1-E+	1.0	2024/05/16	Updated to 6.1 package	6.1

Provided documentation

Manual	Code	Distribution format
Software user manual (this manual)	SUM010-2024-pkg6.1-E+	Digital manual

Intended users of this manual

Intended user	Main tasks
Installers, maintenance technicians	• Install/export machine configuration files • Configure the machine and selections parameters • Dispense products • Restock the machine with products
Operators	Perform daily and/or periodic maintenance on the machine

MESSAGE CONCEPTS

Safety messages

 **CAUTION**

Indicates a dangerous situation which, if not avoided, may cause slight injury.

Other messages

 **IMPORTANT**

Indicates a risky situation which, if not avoided, may cause data loss.

Note: Neutral and positive information that emphasize or add information to the main text. They provide information that can only be applied in special cases.



Indicates the path in the software to access the page described.



Indicates a basic task that can be performed by an operator. All other tasks should be carried out by more specialized personnel (installers or maintenance technicians).

ASSISTANCE

For technical assistance, contact rheavendors@rheavendors.com or see the **Contacts** section at <https://www.rheavendors.com/network>.

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1 INTRODUCTION

1.1 Overview of operating modes

The machine has the following operating modes:

- Installing/exporting mode
- Programming mode
- Dispensing mode

Installing/exporting mode

This mode allows uploading/downloading files for installing/exporting what follows:

- Software firmware
- Machine configurations
- Software manual
- Interface languages
- Machine interface graphics

See "Installing/exporting mode", page 7.

Programming mode

This mode gives access to the programming menu for doing what follows:

- Configure the machine and the selections parameters.
- Perform the machine cleaning.
- Perform the machine ordinary maintenance.
- Access this manual.

Programming menu pages and related parameters depend on the machine model and may not all be available.

See "Machine programming mode", page 11.

Dispensing mode

This mode allows dispensing all the products available on the machine.

It gives access to the following screens/menu:

- "Standby screen"
- "Dispensing menu"
- "Beverage menu"

See "Machine dispensing mode", page 52.

2 INSTALLING/EXPORTING MODE

2.1 Install/export a file

Introduction

To install the data and configuration files needed on the machine, or to export them, a USB flash drive with a maximum capacity of 8 GB and FAT32 file system is required. Files must be stored on the flash drive in a specific way so that the machine can properly use them for installation or export. See "USB folders contents", page 7.

Install files

! IMPORTANT It is strongly recommended not to downgrade the current CPU and/or GPU and/or GUI and/or DA3.

1. Export the files contained in the `/GPU210`, `/rheaFirmwareGPU01` and `/rheaData` folders to create a backup, as previously installed files will be overwritten.
2. Save the file(s) to be installed in the relevant folder of the USB flash drive.

! IMPORTANT Do not change the original file and folder names as it may cause an installation error.

3. Access the boot menu. See "How to access it", page 8.
4. Tap the **INSTALL** button for the files to be installed.
5. When finished, tap **START VMC** to exit the boot menu.

Export files

This procedure is useful to export individual files or to create a backup of all the files installed on the machine.

1. Access the boot menu. See "How to access it", page 8.
2. Tap the **DOWNLOAD** button for the files to be installed.
3. When finished, tap **START VMC** to exit the boot menu.

2.2 USB folders contents

Folders overview

Files must be stored in the `/rhea` folder, which is the USB main folder. It is organized in sub-folders, each of them containing specific files.

Below a list and description of the folders and files contained in the `/rhea` folder.

Note: If the `/rhea` folder is not present in the USB flash drive, it must be created.

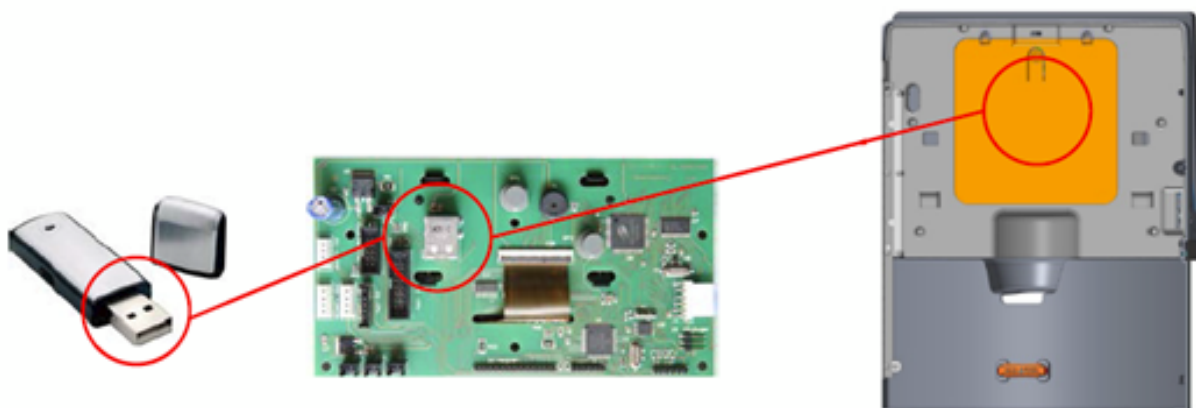
! IMPORTANT Do not change the original file and folder names as it may cause an installation error.

Folder name	Contents	Files extension	Export to other machines
GPU210	"Master" files only for rhTT1 model. These files are the firmware of the GPU card.	mh210	No
lang	Interface language files, one for each language.	lng	No
rheaData	Machine configurations files. It contains parameters to set times, beverages dispensing, payment system protocol, display modes. These parameters can also be edited manually on the machine or with the rheAction tool.	da3	Yes
rheaFirmwareCPU01	"Master" files. It contains information on machine cycles, links among all functions, order of operations (8 master files maximum).	mhx	No
rheaFirmwareGPU01	"Master" files related to the firmware of the GPU card.	mh6	No
rheaDataAudit	Data audit files downloaded from the machine. The folder is automatically created at the first data audit downloading.	txt	No
rheaGUI	Graphics of the machine interface when it is in stand-by mode or in dispensing mode. Files must be organized in folders.	n.a.	Yes
rheaManual	This manual. PDF format is not accepted.	png	No

2.3 Boot menu

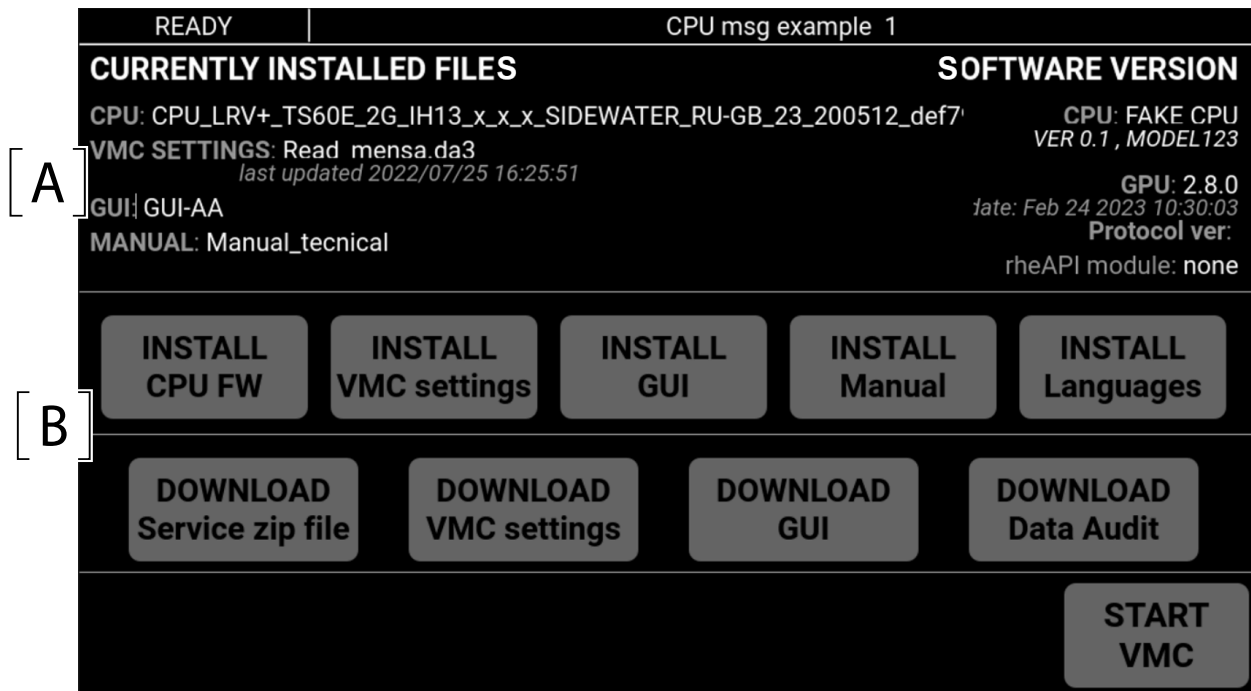
How to access it

1. Switch off the machine and open its cage.
2. Extend the fixing fin and slightly take off the orange protection carter.
3. Connect the USB flash drive to the display board, as shown in the following image:



4. Use the service key on the cover to switch on the machine: the boot menu is displayed.

Menu overview



A Information on the CPU and the GUI

B Menu buttons

Menu buttons

Note: If some buttons are not enabled, contact the technical support.

Button	Function
INSTALL CPU FW	Uploads the CPU firmware file.
INSTALL VMC settings	Uploads the configuration file.
INSTALL GUI	Uploads the machine interface graphics.
INSTALL Manual	Uploads the manual file.
INSTALL Languages	Uploads the software language files.
DOWNLOAD Service zip file	Downloads the package information.
DOWNLOAD VMC settings	Downloads the configuration file.
DOWNLOAD GUI	Downloads the machine interface graphics.
DOWNLOAD Data Audit	Downloads the data audit.
START VMC	Exits the boot menu. The "Startup screen" is displayed.

2.4 Startup screen

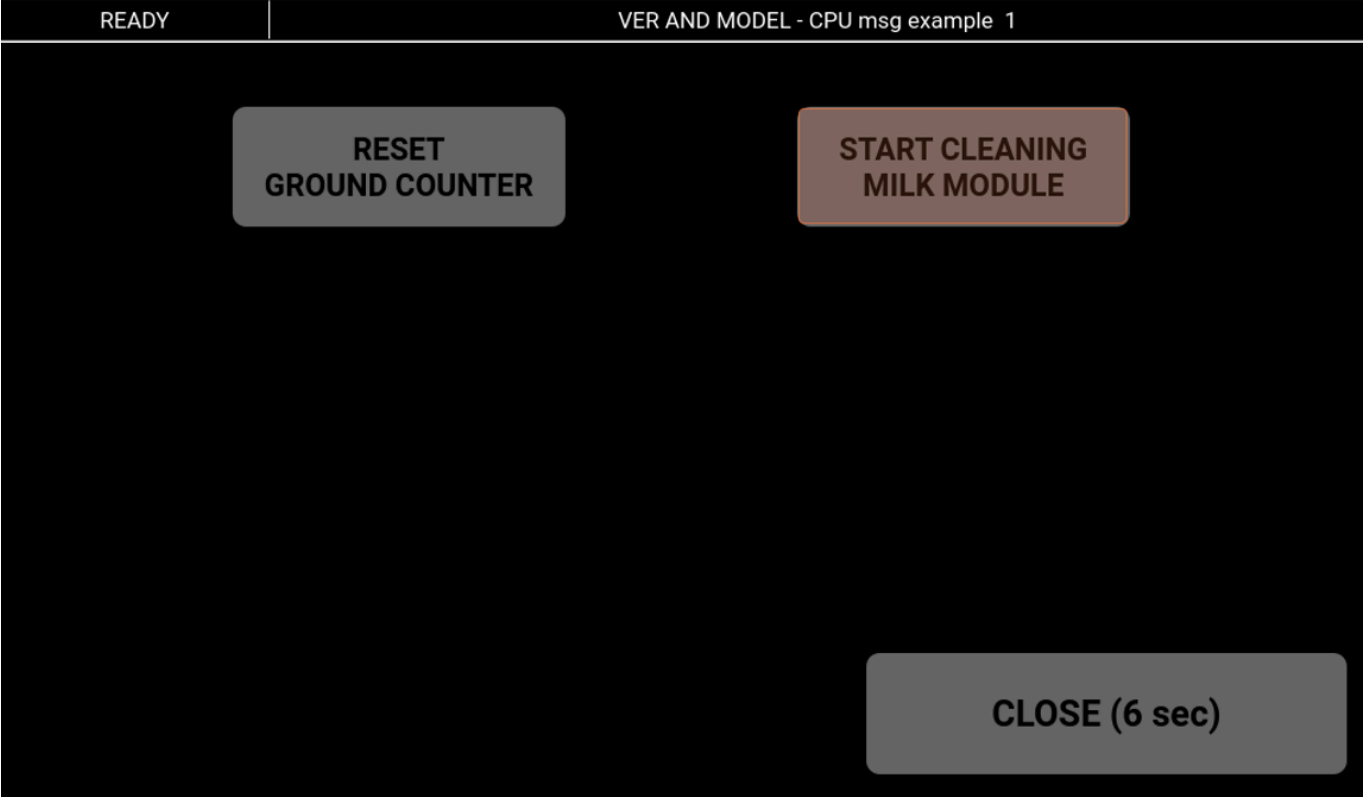
Introduction

The startup screen allows quick access to some machine functions. It is displayed only if these functions have been previously enabled.

How to access it

The startup screen is displayed as soon as the machine is turned on in dispensing mode.
If the machine is in installing/exporting mode, in the "Boot menu", tap **START VMC**.

Screen overview

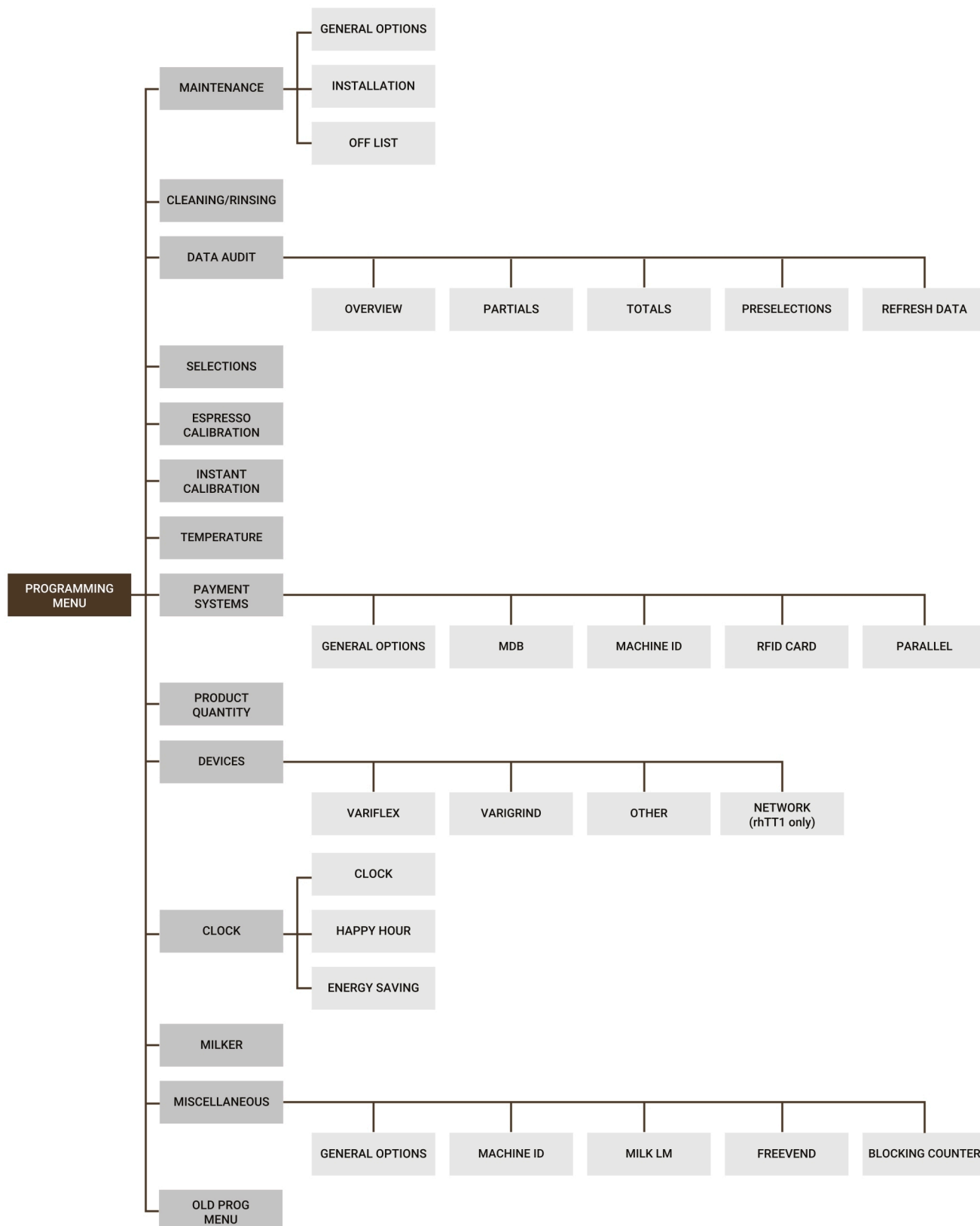


 Actions in the page

Button	Description
RESET GROUND DECREMENTER	Allows resetting the coffee grounds decounter. This button is only displayed if the field COFFEE GROUND DECREMENTER in the "Maintenance page" is set to a value other than zero.
START CLEANING MILK MODULE	Allows starting the milker cleaning procedure. This button is only displayed if the field SHOW RINSE-MILKER BUTTON AT STARTUP in the "Milker page" is set to YES .
CLOSE	Exits the startup screen. The "Standby screen" is displayed. The screen automatically closes if no action is performed.

3 MACHINE PROGRAMMING MODE

3.1 Navigation tree



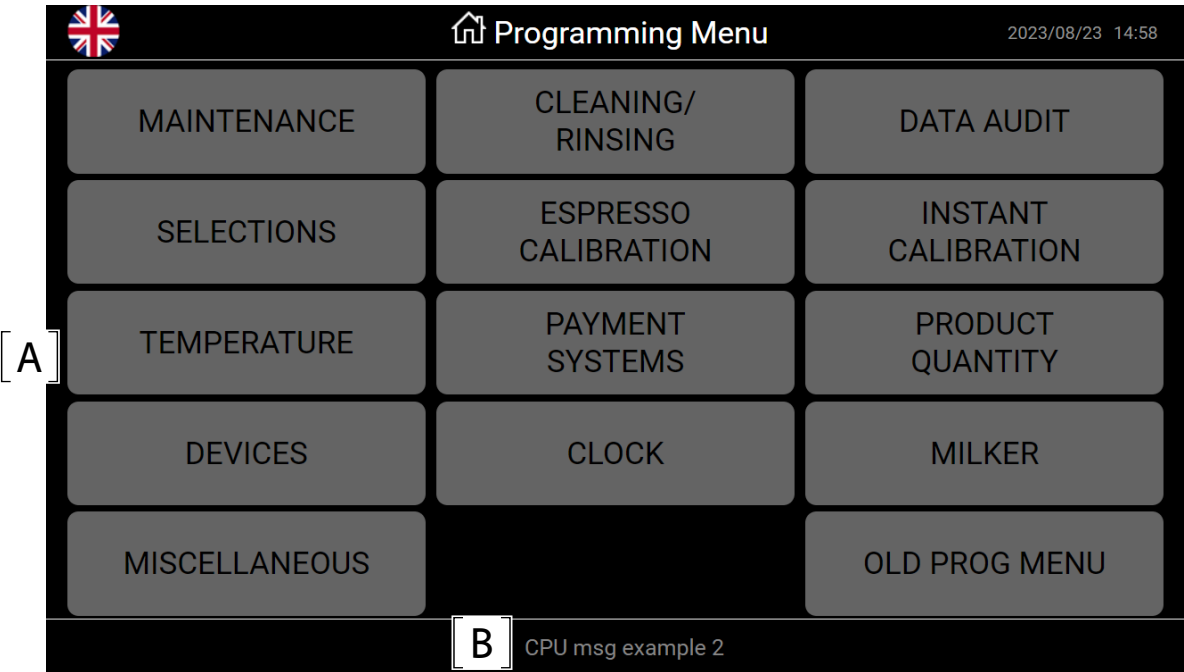
3.2 Programming menu

How to access it

Open the machine door and press the **PROG** button: the menu is displayed.

Menu overview

Pages and related parameters depend on the machine model and may not all be available.



A Menu pages. See "Page description: common elements", page 13.

B Information messages about the machine

Menu pages

Page	Reference
MAINTENANCE	"Maintenance page", page 14
CLEANING/RINSING	"Cleaning/rinsing page ", page 17
DATA AUDIT	"Data audit page", page 21
SELECTIONS	"Selections page", page 23
ESPRESSO CALIBRATION	"Espresso calibration page", page 30
INSTANT CALIBRATION	"Instant calibration page", page 33
TEMPERATURE	"Temperature page", page 35
PAYMENT SYSTEMS	"Payment systems page ", page 35
PRODUCT QUANTITY	"Product quantity page ", page 38
DEVICES	"Devices page", page 39
CLOCK	"Clock page", page 44
MILKER	"Milker page", page 45
MISCELLANEOUS	"Miscellaneous page", page 48
MANUAL	Opens this manual. If not available, the manual has to be installed. See "Boot menu", page 8
OLD PROG MENU	Opens the old interface of the programming menu.

Actions in the page

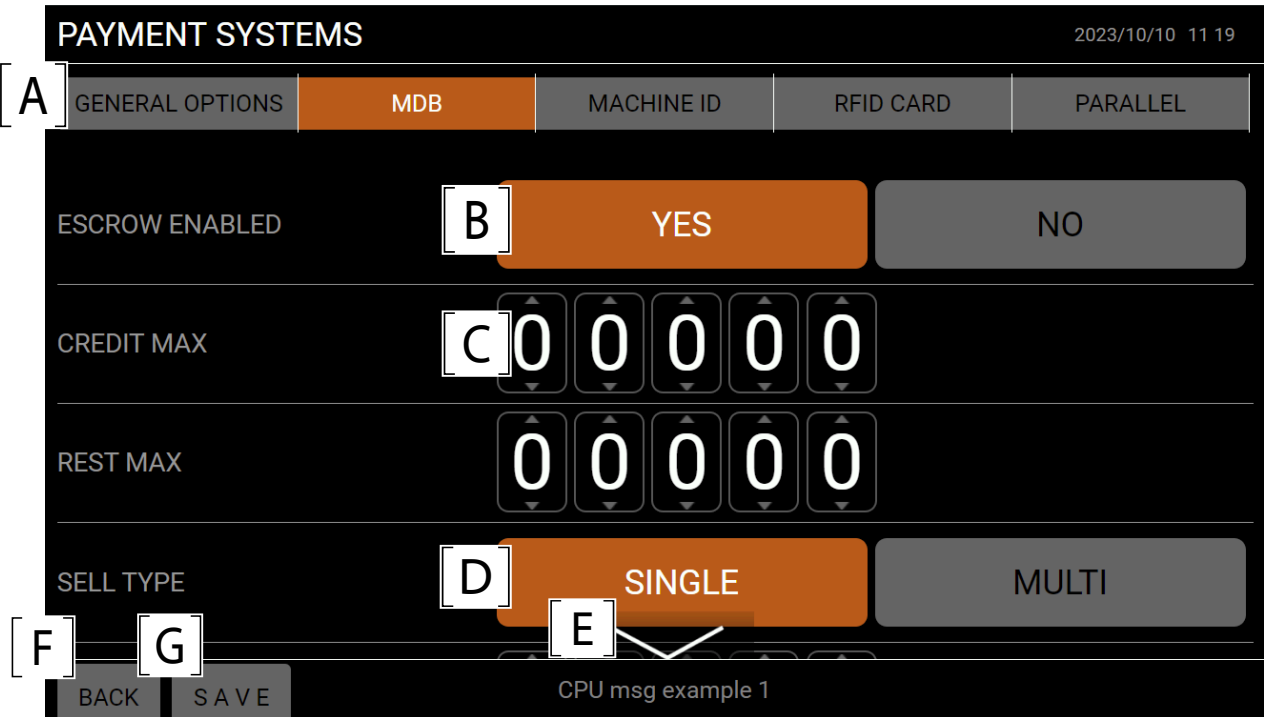
Button	Function
	Changes the interface language.

3.3 Page description: common elements

Introduction

All pages of the programming menu have common elements and behaviors. A typical page and recurring elements are described below.

Overview



- A

Page tabs
- B

YES/NO or **ENABLED/DISABLED**: Enables/disables an option/function.
- C

Counter for setting values.
All digits have to be set individually. To increase a digit, tap its upper side. To decrease it, tap its lower side.
- D

SINGLE/MULTI or **NO/ACCEPTED** or **0/1/2**:
Parameter with multiple possible options.
- E

Arrows for navigating up and down the page.
- F

BACK: Returns to the previous tab or to the programming menu. Changes are not saved.
- G

SAVE: Saves all changes and returns to the programming menu.

Note: Currently selected elements, tabs or options, have an orange background.

3.4 Maintenance

3.4.1 MAINTENANCE PAGE



Programming menu > MAINTENANCE

Introduction

This page allows configuring the machine maintenance interventions.

Page overview

MAINTENANCE

2023/08/24 15 20

GENERAL OPTIONS

INSTALLATON

OFF LIST

ACTIVATE H₂O FILTER RESET

YES

NO

WATER FILTER DECOUNTER
current value: 01011

0

0

0

0

0

RESET

COFFEE BREWER DECOUNTER
current value: 1012

0

0

0

0

RESET

COFFEE GROUND DECOUNTER
current value: 1013

0

0

0

0

RESET

BACK

SAVE

CPU msg example 2

GENERAL OPTIONS tab

Element	Values	Description
ACTIVATE H₂O FILTER RESET	YES NO	Water filter reset
WATER FILTER DECOUNTER	2-60000	Number of dispensing cycles before external filter cartridge needs to be replaced. When 50 cycles are left, the message "Change water filter" is displayed. When the cycles run out, the message "Out of service water filter" is displayed and any dispensing is inhibited. The minimum value is 2.
COFFEE BREWER DECOUNTER	0-1000	Number of espresso dispensing cycles before the coffee brewer needs to be serviced. When 10 cycles are left, the message "Make brewer cleaning" is displayed. When the cycles run out, the message "Out of service cleaning brewer" is displayed and the dispensing of espresso-based beverages is inhibited.
COFFEE GROUND DECOUNTER	0-1000	Number of espresso dispensing cycles before grounds container needs to be emptied. When 10 cycles are left, the message "Remove coffee grounds" is displayed. When cycles run out, the message "Out of service coffee grounds" is displayed and the dispensing of espresso-based beverages is inhibited.
MAINTENANCE DECOUNTER	0-655000	Number of dispensed beverages before general maintenance needs to be performed.
MAINTENANCE DECOUNTER THRESHOLD	0-655000	Warning threshold for the maintenance decounter. When the maintenance decounter reaches the set threshold, the message "Forthcoming scheduled maintenance" is displayed.
DISPLAY TEMPERATURES	YES NO	YES: Stand-by message and the water temperature are displayed.
VOLTAGE	-	Voltage value intended to supply devices at 24 Vdc

Actions in the GENERAL OPTIONS tab

Button	Function
RESET	Confirms the set value.

INSTALLATION tab

Element	Values	Description
UNINSTALLATION	-	Allows emptying the water circuit. See "Water circuit emptying", page 17
FIRST INSTALLATION	YES NO	YES: At the next power on the machine water circuit will be filled. See "Water circuit filling", page 17

OFF LIST tab

This tab shows the list of the last twenty errors occurred in the machine.

3.4.2 WATER CIRCUIT EMPTYING



Programming menu > MAINTENANCE > INSTALLATION

Procedure

1. In **UNINSTALLATION**, tap **START UNINSTALLATION**.
2. Check that the drip tray is empty, then tap **YES-CONTINUE**.
3. Tap **START UNINSTALLATION**: water is dispensed from all nozzles. When finished, the value in **FIRST INSTALLATION** is automatically set to **YES** to make the machine water circuit fill up the next time it is turned on.
4. Switch off the machine.

3.4.3 WATER CIRCUIT FILLING



Programming menu > MAINTENANCE > INSTALLATION

Enable water circuit filling

In **FIRST INSTALLATION**, tap **YES**: the machine water circuit will automatically fill up the next time it is turned on.

Water filling cycle description

Phase	Description
1	The machine is switched on.
2	If present, the Varigrind is set to its standard position (280°).
3	When the cycle is finished, the value in FIRST INSTALLATION is automatically set to NO to prevent the procedure from repeating at next power on.
4	The machine automatically restarts.

3.5 Cleaning/rinsing



3.5.1 CLEANING/RINSING PAGE



Programming menu > CLEANING/RINSING

Introduction

This page allows performing the machine cleaning procedures. It also gives information on the latest and next cleaning cycle of the Indux milker.

Page overview

CLEANING/ RINSING

2024/03/15 09:51

START RINSING

START CLEANING BREWER

START CLEANING MILK MODULE

RINSE (BREWER)

RINSE (MIXER 1)

RINSE (MIXER 2)

RINSE (MIXER 3)

Milker cleaning: last time performed 2024/03/15 09:50:44, next time mandatory 2024/03/16 09:50:44

AUTO RINSING AT TIME

00:00 means disabled

00:00

TAB DISSOLVE PAUSE

Set the time needed to "dissolve tab" during the sanitary washing cycle (HC). Set "000" to use machine default time

000sec

BACK

SAVE

CPU msg example 2

Element	Values	Description
START RINSING	-	" Rinse the hydraulic circuit", page 18
START CLEANING BREWER	-	" Clean the coffee brewer", page 21
START CLEANING MILK MODULE	-	" Clean the milker", page 19
RINSE (BREWER) RINSE (MIXER [n])	-	See "Rinse the circuit components separately", page 19
AUTO RINSING AT TIME	00:00-23:59	Set time for the automatic rinsing of the hydraulic circuit. See "Automatic rinsing", page 19
TAB DISSOLVE PAUSE	0-999	Time it takes the tablet to dissolve.

3.5.2  RINSE THE HYDRAULIC CIRCUIT

 Programming menu > CLEANING/RINSING

Rinse the whole circuit

This procedure allows rinsing all the components of the machine hydraulic system, such as the coffee brewer and all the mixing bowls.

1. Prepare more cups as water is dispensed multiple times.

2. Tap **START RINSING**, then tap **YES**: the rinsing cycle starts. When finished, the **CLEANING/RINSING** page is displayed.

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Rinse the circuit components separately

This procedure allows choosing which component of the circuit to rinse.

1. Prepare more cups as water is dispensed multiple times.
2. Do what follows:

To rinse...	Then tap...
the coffee brewer	RINSE (BREWER)
the first mixing bowl	RINSE (MIXER 1)
the second mixing bowl	RINSE (MIXER 2)
the third mixing bowl	RINSE (MIXER 3)

3. Tap **YES**: the rinsing cycle starts. When finished, the **CLEANING/RINSING** page is displayed.

Automatic rinsing

The automatic rinsing time can be set in the **AUTO RINSING AT TIME** field.

A 10-second countdown warns that the rinsing is about to start.

 **CAUTION** Hot water drains through all nozzles.

Note: The automatic rinsing graphics can be customized in the RheaMedia2 software.

3.5.3 CLEAN THE MILKER



Programming menu > **CLEANING/RINSING**



IMPORTANT To perform this procedure, the milker must be connected and enabled. To enable it, See "Milker page", page 45.

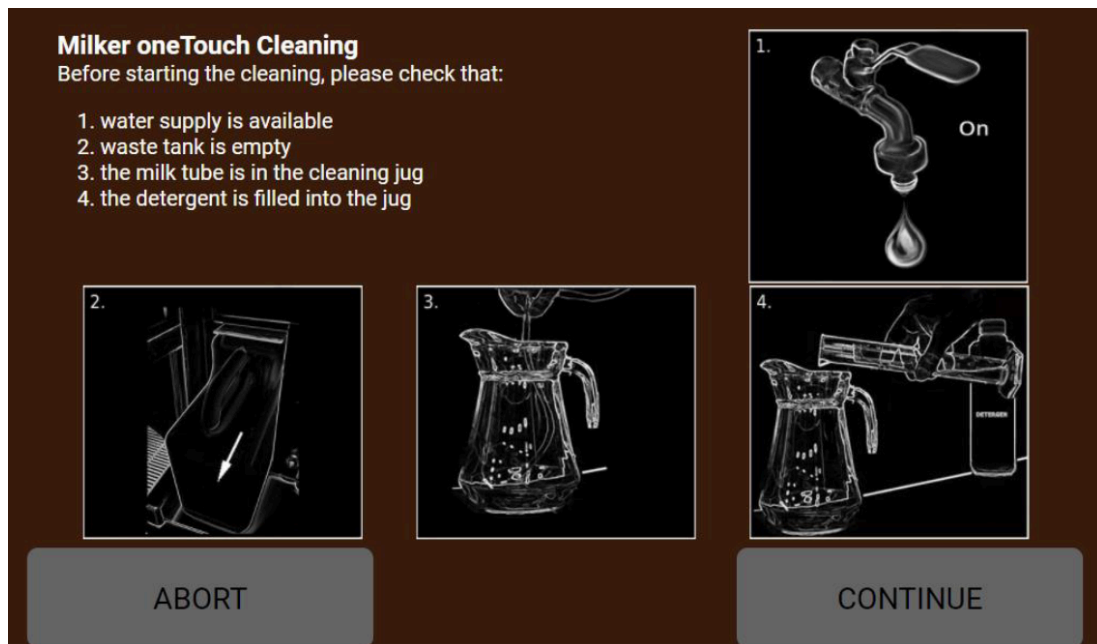
Note: The milker cleaning procedure varies depending on the model installed. To configure the parameters of the specific model, See "Milker page", page 45.

Procedure for the Venturi model

1. To start the procedure, tap **START CLEANING MILK MODULE**, then **YES**.
2. Add the detergent into the milker tray, then tap **START**, then **CONTINUE**: the cleaning cycle starts and repeats 12 times.
3. When finished, fill the milker tray with cold water, then tap **CONTINUE** and **CONFIRM**: the rinsing cycle starts and repeats 12 times. When finished, the **CLEANING/RINSING** page is displayed.

Procedure for the Indux model

1. To start the procedure, tap **START CLEANING MILK MODULE**.
2. Perform the checks displayed on the screen.



3. Place a cup under the nozzles, then tap **CONTINUE**: the rinsing cycle starts and repeats a set number of times, then the jug (clean-mix cointaner) is filled with hot water.
4. Wait for the detergent to dissolve.

Note: The dissolving time is defined in the **MILKER** page, in **TABLET DISSOLVE TIME** (See "INDUX parameters", page 47).

5. When the detergent is dissolved, the milk tube starts sucking up the sanitizing liquid in the jug. Then the jug fills with hot water. This cycle repeats a set number of times.

Note: A message is displayed on the screen if the conductivity sensor detects too much or too little detergent. In that case, the procedure continues but another cleaning cycle is necessary.

6. When the cleaning cycle is finished, empty the waste tank and put the milk pipe in position.
7. (Optional) Refill the milker.
8. If you have refilled the milker, tap **CLOSE**: all selections involving fresh milk are enabled. Otherwise, tap **CLOSE NO SEL MILK**: all selections involving fresh milk are disabled.

Milker automatic rinsing

The automatic rinsing of the milker can be performed after a fresh milk beverage delivery or periodically, after a specified time. To set the milker automatic rinsing, see "Milker page", page 45.

A 10-second countdown warns that the rinsing is about to start.

CAUTION Hot steam drains through the fresh milk nozzle.

Note: The automatic rinsing graphics can be customized in the RheaMedia2 software.

3.5.4 CLEAN THE COFFEE BREWER



Programming menu > **CLEANING/RINSING**

Procedure

1. Prepare more cups as water is dispensed multiple times.
2. To start the procedure, tap **START CLEANING BREWER**, then **YES**.
3. Tap **MANUAL** or **AUTOMATIC**, depending on how the procedure has to be performed: some water is dispensed through the brewer nozzle. Then the brewer opens.

Note: If **AUTOMATIC** is selected, some steps are automatically confirmed.

4. Insert a cleaning tablet into the brewer, then tap **CONTINUE**: the brewer closes and the tablet starts to dissolve.

Note: It takes two 19-minute cycles for the tablet to be dissolved. The espresso pump opens about every twenty seconds.

5. When the tablet has dissolved, the first rinsing cycle of the brewer starts: the water flows through the brewer every ten seconds for three times.
6. Wait for the rinsing cycle to finish. Then tap **YES** to repeat the cycle or **NO** to continue: the brewer opens.
7. Clean the filter with a brush.
8. To start the second rinsing cycle of the brewer, tap **CONTINUE**: the water flows through the brewer every ten seconds for six times.
9. Wait for the rinsing cycle to finish. Then tap **YES** to repeat the cycle or **NO** to continue.
10. To make a coffee, tap **HAVE A COFFEE**: a coffee starts to be delivered. Alternatively, to end the procedure, tap **SKIP COFFEE**: some water is dispensed through each nozzle.
11. When finished, tap **CLOSE**: the **CLEANING/RINSING** page is displayed.

3.6 Data audit page



Programming menu > **DATA AUDIT**

Introduction

This page allows monitoring all dispensed beverages data.

Page overview

DATA AUDIT

2023/08/25 15:37

OVERVIEW	PARTIALS	TOTALS	PRESELECTIONS	REFRESH DATA
----------	----------	--------	---------------	--------------

	NUM PAID (VA1)		NUM FREEVEND (VA3)		NUM TESTVEND (VA2)	
	TOT	PAR	TOT	PAR	TOT	PAR
TOTALS	13 173	13 172	0	0	28	28

	NUM PAID (PA2)		NUM FREEVEND (PA4)		NUM TESTVEND (PA3)	
SEL NUM	TOT	PAR	TOT	PAR	TOT	PAR
#01	5 058	5 058	0	0	23	23
#02	476	476	0	0	0	0
#03	482	482	0	0	0	0
#04	200	200	0	0	0	0
#05	195	195	0	0	0	0
#06	1 062	1 062	0	0	0	0
#07	39	39	0	0	0	0

BACK

CPU msg example 1

OVERVIEW tab

Element	Description
NUM PAID (VA1)	Total number of dispensed paid beverages
NUM FREEVEND (VA3)	Total number of dispensed free beverages
NUM TESTVEND (VA2)	Total number of dispensed test beverages
SEL NUM	Selection number
NUM PAID (PA2)	Number of dispensed paid beverages referred to selection number [#NN]
NUM FREEVEND (PA4)	Number of dispensed free beverages referred to selection number [#NN]
NUMTEST VEND (PA3)	Number of dispensed test beverages referred to selection number [#NN]
TOT	Non-resettable data
PAR	Resettable data

PARTIALS and TOTALS tabs

These tabs display data on the dispensed beverages divided by selection. Data in PARTIALS are resettable, whereas data in TOTALS are not resettable.

Element	Description
SEL NUM	Number of the selection
NUM PAID PRICE1	Number of paid beverages dispensed for each selection with PRICE 1 . See "Selection configuration page", page 25.
NUM PAID HAPPY	Number of paid beverages dispensed for each selection with PRICE 2 . See "Selection configuration page", page 25.
NUM FREEVEND	Number of free beverages dispensed for each selection
NUM TESTVEND	Number of test beverages dispensed for each selection
NUM TOTAL	Total number of dispensed beverages
MONEY PRICE1	Cost of beverage with PRICE 1 . See "Selection configuration page", page 25.
MONEY PRICE2	Cost of beverage with PRICE 2 . See "Selection configuration page", page 25.
MONEY TOTAL	Total gain on the beverage

PRESELECTIONS tab

Preselections are not configurable.

REFRESH DATA tab

Button	Function
REFRESH DATA AGAIN	Refreshes all data.
 RESET PARTIAL DATA	Re-initializes all resettable data.

3.7 Selections

3.7.1 SELECTIONS PAGE

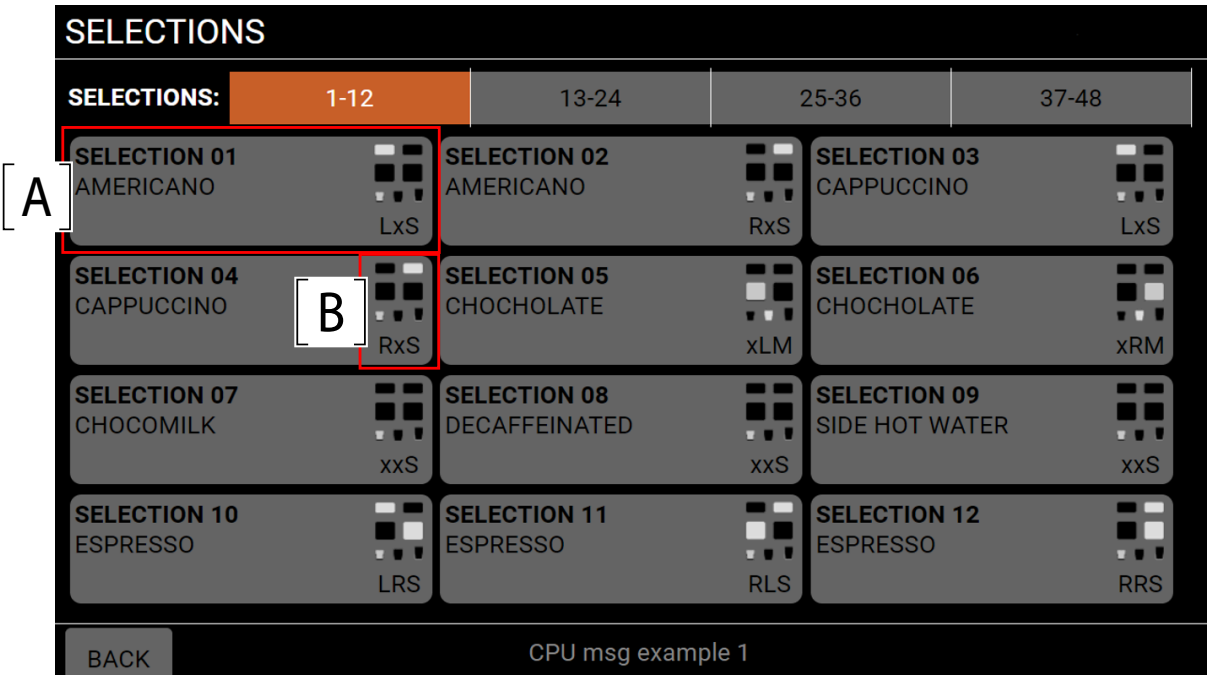


Programming menu > SELECTIONS

Introduction

This page shows all configured selections, that is all beverages the machine can dispense. It also allows configuring all relevant parameters.

Page overview



A Beverage selection. It opens the selection configuration page. See "Selection configuration page", page 25.

B Beverage customizations overview

Beverage customization overview

Note: Beverage customizations (ex. premium coffee/standard coffee, single shot/double shot, small/medium/big cup size, etc.) are displayed in the beverage screen when selecting the specific beverage (see "Beverage menu", page 54). To set beverage customizations, refer to RheaMedia2 manual.

The following image shows an example of beverage customizations in the **SELECTIONS** page.

A



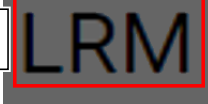
B



C



D



A

Beverage customization A

B

Beverage customization B

C

Cup size customization

D

Summary of the customizations:

- **L**: Left option has been selected for customization A
- **R**: Right option has been selected for customization B
- **M**: Medium option has been selected for cup size customization

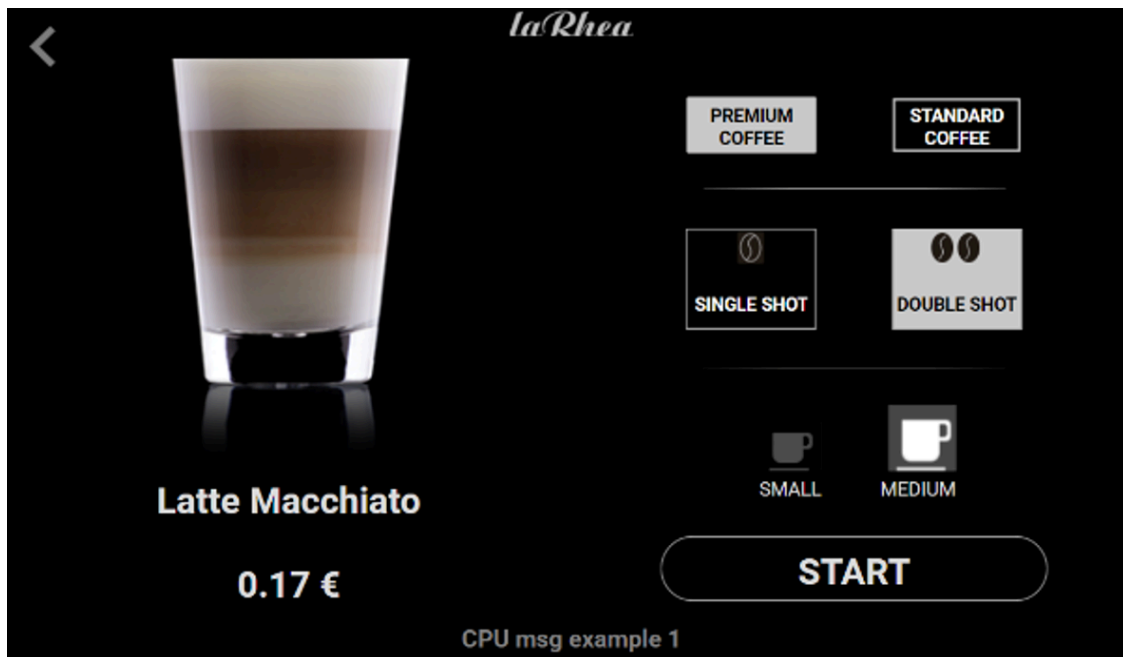
Other options:

- **S**: Small, for cup size customization
- **B**: Big, for cup size customization
- **x**: Not configured, for all customizations

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The following image shows the result of the customization in the relevant beverage menu.



3.7.2 MANAGE SELECTIONS



Programming menu > SELECTIONS

Configure a selection

1. Tap a selection: the configuration page opens. See "Selection configuration page", page 25
2. Make the desired configurations, then tap **SAVE**.

Reset a selection parameters

1. Tap a selection: the configuration page opens. See "Selection configuration page", page 25
2. In the **OVERVIEW TAB**, in **RESET SELECTION**, tap **CONFIRM**: a confirmation window opens.
3. Tap **YES**: all data are reset.

3.7.3 SELECTION CONFIGURATION PAGE



"Programming menu" > SELECTIONS > [selection button]

Introduction

This page allows configuring a selection, that is a beverage the machine can dispense.

Page overview

SELECTION 01 - XXX

2024/03/07 17:40

OVERVIEW

ESPRESSO

MILKER

PRODUCTS

WATERS

MIXERS

STATUS

SELECTION

...

PRICE 1

0

0

0

0

0

PRICE 2

happy price

0

0

0

0

0

PROGRAMMING

PARTIAL

TOTAL

BACK

SAVE

CPU msg example 2

TEST SELECTION

Actions in the page

Button	Function
TEST SELECTION	Performs a test on the current selection.
TEST IT	Performs a time test on the set value.

OVERVIEW tab

Element	Values	Description
STATUS	SELECTION INHIBITED PRESELECTION	Current selection dispensing modes • SELECTION: Dispensing is enabled. • INHIBITED: Dispensing is disabled. All tabs are disabled. • PRESELECTION: Not configurable.
PRICE 1	0-65000	Product full price See "Payment systems page "
PRICE 2	0-65000	Product discounted price (for happy hour time slots, cashless 1 or cashless 2). See "Payment systems page "
PROGRAMMING	PARTIAL TOTAL	• PARTIAL: Shows all set parameters (other than zero) in the ESPRESSO, PRODUCTS, WATERS and MIXERS tabs. • TOTAL: Shows all parameters in the ESPRESSO, PRODUCTS, WATERS and MIXERS tabs.
JUG	0-10	Number of times the beverage dispensing is repeated to fill a jug Note: These repetitions affect the selection data in the "Data audit page".
SELECTION REPEAT	2-9	Number of times the beverage dispensing is repeated Note: These repetitions do not affect the selection data in the "Data audit page".
INSTANT SCALING FACTOR	80%-120%	Allows increasing/decreasing all the selection components (instant product quantity, water, mixer) by a certain percentage. Percentage can be set from 80 to 120. If set to 100, the selection remains unchanged.
CUP SIZE (rhtt1 model only)	DON'T CARE ONLY SMALL CUP (down) ONLY SMALL CUP (up) SMALL CUP (up or down) ONLY BIG CUP ANY CUP	Cup that can be used for each selection when Wenglor sensor is enabled (See "Devices page", page 39). • DON'T CARE: Cup detection is disabled. • ANY CUP: Any cup in any position is accepted.
RESET SELECTION	CONFIRM	Resets all the selection parameters.

ESPRESSO tab

Element	Values	Description
COFFEE SEQUENCE	AFTER BEFORE	Coffee and instant products dispensing order • AFTER: Coffee is dispensed after instant products. • BEFORE: Coffee is dispensed before instant products.
COFFEE WATER	0-50.0 cc	Quantity of water in the cup If set to 0, espresso is not dispensed. Only instant beverages are dispensed.
COFFEE GRINDER	0.0-20.0 sec or g	Ground coffee quantity for the espresso
PREINFUSION	0-15 sec	Enables/disables the preinfusion function and sets its duration. If enabled (seconds value set from 1 to 15), after the coffee ground dose is compressed, water is dispensed for one second, then the machine pauses for the set number of seconds. The dispensing cycle is then resumed. If disabled (seconds value set to 0), the preinfusion function is not performed.
BREWER PRESSURE	0-10	Dispensing chamber pressure customization
TEMPERATURE ESPRESSO	95-110 °C	Espresso water temperature
GRANULOMETRY	DISABLED FINE REFERRING COARSE	Grinder position • DISABLED: The grinder position is not taken into account for the beverage dispensing. • FINE: Before the beverage dispensing, the grinder is adjusted so as to obtain a "fine granulometry" (10 degrees to close grinders referring to the standard value). • REFERRING: The grinder is adjusted to its reference position before the beverage dispensing. • COARSE: Before the beverage dispensing, the grinder is adjusted so as to obtain a "roughly granulometry" (10 degrees to opening grinders referring to the standard value).
LATTE MACCHIATO START BREWER	0.0-50.0 sec	For Latte macchiato selection, delay between milk and espresso dispensing cycle
GRINDER	1-2	If two grinders are available, grinder to be used.
COFFEE REPEAT	0-2	Number of espresso dispensing repetitions Note: These repetitions affect the selection data in the "Data audit page".

MILKER tab

Element	Values	Description
FRESH MILK FOAM TYPE	Hot no Foam Hot Classic Hot Fluffy Hot Barista Cold No Foam Cold Classic Cold Fluffy Cold Barista	Milk foam type of the current selection
FRESH MILK VALVE QTY	0.0-50.0 sec	Amount of fresh milk into the dispensed beverage If set to 0.0, milk is not dispensed.
FRESH MILK VALVE DELAY	0-50.0 sec	Milk dispensing delay
FRESH MILK AIR DURATION	0-50.0 sec	Air solenoid valve opening time
FRESH MILK AIR DELAY	0-50.0 sec	Delay between the milk dispensing and the air solenoid valve opening

PRODUCTS tab

Element	Values	Description
PRODUCT #	-	Number or name of the product
DOSAGE	0.0-50.0 sec or grams	Engine rotation time to adjust the product dose dispensed. If set to 0, the product is not dispensed.
START DELAY	0.0-50.0 sec	Delay time of the engine
NUM BREAKS	0-2	Number of temporary interruptions of the engine rotation during a dispensing cycle

WATERS tab

Element	Values	Description
WATER #	-	Number of the component where the water is dispensed
TIME	0.0-50.0 sec	Opening time of the instant solenoid valve to adjust the quantity of dispensed water
START DELAY	0.0-50.0 sec	Water delay
EV TEMPERATURE	75-98 °C	Water temperature

MIXERS tab

Element	Values	Description
MIXER #	-	Number of the mixer
TIME	0.0-50.0 sec	Mixer rotation time
START DELAY	0.0-50.0 sec	Delay of the mixer fan rotation
SPEED	LOW MEDIUM HIGH	Mixer rotation speed

3.8 Calibration**3.8.1 ESPRESSO CALIBRATION PAGE**

Programming menu > ESPRESSO CALIBRATION

Introduction

This page allows calibrating the grinder(s). See "Calibrate the grinder", page 31

Page overview

ESPRESSO CALIBRATION

2023/08/23 10:55

SELECTION

0

1

RUN SELECTION

EDIT SELECTION

LAST FLUX

0.00 cc/sec

Flux information are updated everytime you "run selection"

GRINDER

current calibration factor

0

START CALIBRATION

RESET CALIBRATION

VARIGRIND

auto regulation is DISABLED

current position

144

desired position

1

4

4

SET

IMPULSES

current

0

GRINDER

1

2

BACK

CPU msg example 2

Element	Values	Description
SELECTION	0-48	Allows acquiring the LAST FLUX value, that is the cc per second of the dispensing cycle. • RUN SELECTION: Starts dispensing the selected beverage. During the dispensing cycle, the software acquires reference data. • EDIT SELECTION: Opens the Selection configuration page for editing the selected beverage.
GRINDER	0.00-99.99 cc/sec	Current calibration factor, that is the ratio between grinding time and ground coffee acquired during the last calibration phase. • START CALIBRATION: Starts a new calibration phase. • RESET CALIBRATION: Deletes calibration factors. The machine shows values in seconds instead of grams.
VARIGRIND	0-520	Varigrind current position Note: If auto regulation is DISABLED is displayed, the Varigrind function of keeping the granulometry constant is disabled. SET : Sets the Varigrind position as indicated in desired position .
IMPULSES	0.00-99.99 imp/gr	Current Variflex impulses/grams factor At each grinding phase, the machine software checks the coffee ground cake height. If the measure height doesn't match with the expected one, then a "missing coffee" error is generated. This measuring can be used even to compensate grinding time if parameter VARIFLEX - AUTOMATIC ADJUSTMENT is activated.
GRINDER	1-2	Grinder to which previous parameters apply

3.8.2 CALIBRATE THE GRINDER

Calibration procedure



Programming menu > ESPRESSO CALIBRATION

1. At the bottom of the "Espresso calibration page", in **GRINDER**, select the grinder to be calibrated.
2. Set the grinder opening position manually. Alternatively, if the Varigrind is present, in **VARIGRIND**, set the desired position value, then tap **SET**: the blades start to adjust their position. When finished, the set value is shown in **current position**.
3. In **GRINDER**, tap **START CALIBRATION**.
4. Remove the brewer.

5. Tare a cup on a scale, then place it under the nozzle. Tap **CONTINUE**: ground coffee is dispensed for a predefined grinding time. When finished, the following window is displayed:



6. Collect the coffee, then do what follows:

If the coffee granulometry...	Then...
is appropriate	1. Weight the cup. 2. In the relevant field of the window, enter the weight value, then tap CONTINUE.
is not appropriate	1. In desired value, set a new value for the grinder position, then tap SET: the blades start to adjust their position. When finished, the set value is shown in current position. 2. Empty the cup, then put it under the nozzle. Tap GRIND AGAIN: ground coffee is dispensed. 3. If the coffee granulometry is appropriate, weight the cup and, in the relevant field of the window, enter the weight value. Then tap CONTINUE. 4. If the coffee granulometry is not appropriate, repeat this procedure from step 1.

7. Reinstall the brewer, then tap **CONTINUE**: a pre-defined amount of coffee is ground to calculate impulses/grams value. When finished, the "Espresso calibration page" populates with the calibration factor value and the Variflex impulses/grams factor value.
8. To measure the beverage flux, in **SELECTION**, set the reference selection number, then tap **RUN SELECTION**: the machine starts dispensing the reference beverage. When finished, the **LAST FLUX** value populates. If the value is not as expected, repeat the entire procedure.
9. If the Varigrind option is available, "Set the Varigrind automatic adjustment".

Set the Varigrind automatic adjustment



"Programming menu" > DEVICES

1. In the relevant **VARIGRIND** tab, tap **SAVE VALUES**: the **REFERRING SELECTION** value now matches with the **LAST FLUX** value in the "Espresso calibration page".
2. Tap **SAVE**.

3.8.3 RECALIBRATE THE GRINDER

Procedure overview

To recalibrate the grinder, perform the following tasks:

1. "Disable the Varigrind auto regulation".
2. "Calibrate the grinder".
3. "Re-enable the Varigrind auto regulation".

Disable the Varigrind auto regulation



"Programming menu" > DEVICES

1. In the relevant **VARIGRIND** tab, in **ENABLE AUTO REGULATION**, select **NO**.
2. Tap **SAVE**.

Calibrate the grinder



"Programming menu" > ESPRESSO CALIBRATION

Follow the calibration procedure, from step 1 to 8. See "Calibrate the grinder", page 31

Re-enable the Varigrind auto regulation



"Programming menu" > DEVICES

1. In the relevant **VARIGRIND** tab, in **ENABLE AUTO REGULATION**, select **YES**.
2. Tap **SAVE**.

3.8.4 INSTANT CALIBRATION PAGE



Programming menu > INSTANT CALIBRATION

Introduction

This page allows calibrating the amount of instant product dispensed per second.

Page overview

INSTANT CALIBRATION

2023/09/18 16 17

MOTOR 1	7.5 gr/sec	RESET	CALIBRATE
MOTOR 2	0 gr/sec	RESET	CALIBRATE
MOTOR 3	0 gr/sec	RESET	CALIBRATE
MOTOR 4	0 gr/sec	RESET	CALIBRATE
MOTOR 5	0 gr/sec	RESET	CALIBRATE

BACK

CPU msg example 2

Element	Values	Description
MOTOR [N]	0.0-25.0	Product canister on which to act.

Actions in the page

Button	Function
RESET	Resets all parameters.
CALIBRATE	Starts the calibration.

3.8.5 CALIBRATE INSTANT PRODUCTS

 Programming menu > INSTANT CALIBRATION

Procedure

1. Tare a cup on a scale, then place it under the nozzle.
2. Next to the relevant **MOTOR**, tap **CALIBRATE**: a window opens, while the product is dispensed for 10 seconds.
3. Weigh the product.
4. In the relevant field of the window, enter the value and tap **CONTINUE**: the gr/sec value populates.

3.9 Temperature page



Programming menu > TEMPERATURE

Introduction

This page allows setting the temperature parameters.

Page overview

TEMPERATURE

2023/11/16 17:03

Current temperature: heater=[30°] milker=[32°]

HEATER

30

°C

BACK

SAVE

CPU msg example 2

TEMPERATURE tab

Element	Values	Description
HEATER	0-40°C	Heating temperature of the coffee brewer

3.10 Payment systems page



Programming menu > PAYMENT SYSTEMS

Introduction

This page allows managing the payment methods of the machine.

Page overview

PAYMENT SYSTEMS

2023/09/04 12:14

GENERAL OPTIONS

MDB

MACHINE ID

RFID CARD

PARALLEL

COIN MECH TYPE

PARALLEL SINGLE VEND

...

CURRENCY (PRICES) NUM OF DECIMALS

0

1

2

3

PRICE LIST FOR CASH

1

2

PRICE LIST FOR CASHLESS

1

2

BACK

SAVE

CPU msg example 2

GENERAL OPTIONS tab

Element	Values	Description
COIN MECH TYPE	PARALLEL SINGLE VEND PARALLEL MULTI VEND EXECUTIVE PRICE HOLDING MDB	Payment system communication options
CURRENCY (PRICES) NUM OF DECIMALS	0-3	Number of decimals for price selection and inserted credit
PRICE LIST FOR CASH	1-2	Price for payment in cash 1: Refers to the PRICE 1 value set in the selection configuration page. 2: Refers to the PRICE 2 value set in the selection configuration page. See "Selection configuration page", page 25.
PRICE LIST FOR CASHLESS	1-2	Price for cashless payments 1: Refers to the PRICE 1 value set in the selection configuration page. 2: Refers to the PRICE 2 value set in the selection configuration page. See "Selection configuration page", page 25.

MDB tab

Element	Values	Description
ESCROW	ANYTIME ONLY AFTER SELECTION	Allows deciding when to activate the change giver.
CREDIT MAX	0-60000	Maximum amount of credit accepted
REST MAX	0-60000	Maximum amount of change accepted
SELL TYPE	SINGLE MULTI	• SINGLE: after a dispensing cycle, the amount of residual credit is not hold. • MULTI: after a dispensing cycle, the amount of residual credit is hold.
TOKEN VALUE	0-10000	Value of token
BILL VALIDATOR	0-2	• 0: The validator is always enabled. • 1: The validator is enabled only if the change giver has at least 5 euro inside. • 2: The validator is enabled only if cashless key is inserted.
COIN REST [N]	NO ACCEPTED	Coin accepted or not as change, if available
COIN NO REST [N]	NO ACCEPTED	Coin accepted or not when the machine is unable to give change

MACHINE ID tab

Element	Values	Description
PROTOCOL	TM-ON DDCMP 2400+ + DEX DEX reset DDCMP 9600 DDCMP 1200 TEST FUN IRDA	Protocol to be used for transferring data from the machine to an external device.
CODE ID 101	0-99999999	Machine number
CODE ID 104	0-99999999	Location number
CODE ID 106	0-99999999	Machine configuration number
ADDRESS VIDTS	0-999	Connection address by DDCMP protocol

RFID CARD tab

Element	Values	Description
MAX CREDIT CARD	0-60000	Maximum credit that can be loaded to the RFID card
DISCOUNT	0% : -80%	When the RFID card is inserted, percentage discount to be applied in happy hour time slots.
COIN [X] CARD	NO ACCEPTED	When the RFID card is inserted NO: Coin [X] is not accepted. ACCEPTED: Coin [X] is accepted.
COIN [X] NO CARD	NO ACCEPTED	When the RFID card is not inserted NO: Coin [X] is not accepted. ACCEPTED: Coin [X] is accepted.

PARALLEL tab

Element	Values	Description
COIN [X]	0-65000	Value of coin [X] accepted by the coin box

3.11 Product quantity pageProgramming menu > **PRODUCT QUANTITY****Introduction**

This page allows managing the amount of product each container can hold and the corresponding decouplers.

Page overview

PRODUCT QUANTITY

2023/09/04 12 04

SELECT A DECOUNTER

1

2

3

4

5

6

DECOUNTER #1
current value

00000

RESET

CANISTER
CAPACITY

0

0

0

0

0

sec

WARNING AT

0

0

0

0

0

sec

ENABLE PRODUCT STOP

YES

NO

BACK

SAVE

CPU msg example 2

Element	Values	Description
SELECT A DECOUNTER	-	Allows selecting the decounter to be set. Note: Decounter No. 1 is currently not configurable for this model.
DECOUNTER #[N]	0.0-6000.0	Decounter #[N] current value Any time a selection uses the selected product, this value decreases of the used quantity (or duration) in the recipe. RESET: Sets the decounter value to the CANISTER CAPACITY value.
CANISTER CAPACITY	0.0-6000.0	Maximum capacity of the canister for the specific product If the product engine calibration has been performed, the value will be set in grams, otherwise in seconds.
WARNING AT	0.0-6000.0	Time after which a warning message is displayed.
ENABLE PRODUCT STOP	YES NO	YES: The dispensing of beverages related to the specific product is inhibited when out of capacity. The message "Selection not available" is displayed on the screen.

3.12 Devices page



Programming menu > DEVICES

Introduction

This page allows configuring the machine equipment.

Page overview

DEVICES

2023/11/13 15 54

VARIFLEX	VARIGRIND	OTHER	NETWORK
BREWER DIAMETER	36mm	45mm	
STANDBY POSITION	CLOSE	OPEN	
AUTOMATIC ADJUSTMENT	NO	YES	
DELIVERY PHASE	NORMAL	FAST	

BACK

SAVE

CPU msg example 1

VARIFLEX tab

Element	Values	Description
BREWER DIAMETER	36mm 45mm	Coffee brewer diameter • 36mm: It contains about 9 gr of coffee. • 45mm: It contains about 14 gr of coffee.
STANDBY POSITION	CLOSE OPEN	Standby position of the coffee brewer percolation chamber inserted in the upper piston
AUTOMATIC ADJUSTMENT	NO YES	Automatic adjustment of the grinder YES : the grinding time is adjusted to keep the volume of ground coffee constant.
DELIVERY PHASE	FAST NORMAL	Time it takes for the message "Remove your cup" to appear on the screen after the beverage dispensing. • FAST: The message is displayed before Variflex switches back to idle position. • NORMAL: The message is displayed after Variflex switches back to idle position.
RESET GROUP IN ERROR	NO YES	Brewer reset when in OFF error condition • NO: Three reset attempts are performed at next start-up. • YES: The machine tries to reset the brewer three times after one hour in error condition.
RINSE AFTER DOWN TIME	6 HOURS 12 HOURS 24 HOURS	Enables/disables a rinse cycle after a specified time of inactivity of the Variflex

VARIGRIND tab

Element	Values	Description
POSITION	0-520 degrees	Current position of the Varigrind blades. When first installed, the value is set to 280 degrees.
ENABLE AUTO REGULATION	NO YES	Grinder auto-regulation to keep the granulometry of ground coffee constant. If YES is selected, the following fields appear: • NUMBER OF SAMPLES: Number of referring selection deliveries used for the average calculation of the flux. • REFERRING SELECTION: Beverage selection used as reference. • RUN SELECTION: Dispenses the beverage to acquire the related flux. • REFERRING FLUX: Desired referring flux. • REFERRING POSITION: Stored opening position (degrees) acquired during the latest calibration procedure. It is updated each time the average flux value is updated. • Last flux/position: Stored flux value (cc/sec) acquired during the latest calibration procedure. If the message "please click on RUN SELECTION" is displayed, no calibration has been performed. See "Set the Varigrind automatic adjustment".

OTHER tab

Element	Values	Description
FLOW METER MODEL	-	Flowmeter model
DRIPTRAY DETECTION	NO YES	If YES is selected, when the jug option is selected ("Beverage menu"), the machine waits for the drip tray to be removed before starting the dispensing cycle.
COFFEE SENSOR	ENABLED DISABLED	Sensor for the coffee beans canister
WENGLOR CUP SENSOR (rhTT1 model only)	NO YES	Sensor for the cup size detection
DETECTED CUP SIZE (rhTT1 model only)	-	Cup size detected by the double sensor
CUP SENSOR THRESHOLD	0-180	Threshold value for detecting the presence or absence of a cup. The value is calculated by taking the average between the cup presence reading value and the cup absence reading value. Not available if the Wenglor sensor is present. Not available for the rhTT1 model.
MODEM TEST	-	Performs a test on the modem.
GROUP TEST	-	START: Performs a test for verifying which brewer component is responsible for excessive current consumption during the up and down movements At the end of the test, six pairs of values will be displayed. Each pair will be displayed on screen for 5 seconds: • Pair 1: average consumption (over 3 cycles) • Pair 2: maximum consumption • Pair 3: time of consumption • Pair 4: cycle 1, average consumption • Pair 5: cycle 2, average consumption • Pair 6: cycle 3, average consumption Pair values are not saved.
MOTOR TEST	-	START: Performs a power consumption test on the motor. Variflex must be removed before performing the test. At the end of the test, the soaking up value and the soaking down value of the gearmotor are displayed. These values are not saved.

NETWORK tab

This tab is only available for the rhTT1 model.

Element	Values	Description
MODEL LTE	ENABLED DISABLED	Enables/disables LTE modem.
WIFI	HOTSPOT CONNECT TO...	• HOT SPOT: Provides hotspot service. • CONNECT TO...: Allows connecting to one of the available networks. See "Connect to the Wi-Fi network", page 51

3.13 Clock page



Programming menu > CLOCK

Introduction

This page allows configuring date, time and all related functions.

Page overview

CLOCK

2023/08/25 15:14

CLOCK

HAPPY HOUR

ENERGY SAVING

TIME

1

5

:

1

4

SET

DATE

2

5

day

0

8

month

2

0

2

3

year

SET

SUMMER TIME

YES

NO

BACK

SAVE

CPU msg example 1

CLOCK tab

Element	Values	Description
TIME	00:00-23:59	Current time
DATE	DD-MM-YYYY	Current date
SUMMERTIME	YES NO	Daylight saving time option

HAPPY HOUR tab

This tab allows setting different time slots when beverage prices are cheaper.

ENERGY SAVING tab

This tab allows setting a time slot for each weekday when the machine stops dispensing beverages. The energy saving function activates at the set **SWITCH ON** time and deactivates at the set **SWITCH OFF** time.

Actions in the page

Button	Function
SET	Updates date or time.

3.14 Milker page

 Programming menu > MILKER

Introduction

This page allows enabling/disabling the milker and setting its parameters.

Page overview

MILKER

2023/08/30 14:48

VERSION

xyz

STATUS

CONNECTED

ENABLED

YES

NO

MODEL

VENTURI

...

STEAM TEMPERATURE

max 128

1

2

5

CLEANING TIME

0

0

:

0

0

BACK

SAVE

CPU msg example 2

Element	Values	Description
VERSION	-	Software version of the milker
STATUS	-	Milker status
ENABLED	YES NO	Enables/disables the milker. It must be previously connected to the machine.
MODEL	NONE VENTURI INDUX	Milker model - NONE: No milker enabled. - VENTURI: Enables the Venturi model. All "VENTURI parameters" are displayed. - INDUX: enables the Indux model. All "INDUX parameters" are displayed.

VENTURI parameters

Element	Values	Description
STEAM TEMPERATURE	0-128 °C	Water temperature
CLEANING TIME	00:00-23:59	Time when the machine will display a message for performing the cleaning procedure. See "Clean the milker", page 19. When cleaning is necessary, milk beverages cannot be delivered.
AUTO UPDATE CLEANING TIME	YES NO	YES: the milker cleaning is automatically performed each day, at the same time of the latest cleaning cycle. NO: the milker cleaning is performed at the time set in CLEANING TIME.
SHOW RINSE-MILKER BUTTON AT STARTUP	YES NO	If enabled, the START CLEANING MILK MODULE button is displayed as soon as the machine is turned on.
RINSING PERIOD	0-900 minutes	Waiting time for the milker automatic rinsing after a fresh milk beverage delivery.
ENABLE RINSING	YES NO	Enables/disables the milker rinsing.
RINSING DELAY	0.0-10.0 seconds	Rinse start delay after dispensing
CHECK MILK PRESENCE WITH SENSORS	NO 1: OPTICAL AND CAPACITIVE SENSORS 2: ONLY OPTICAL SENSOR 3: ONLY CAPACITIVE SENSOR	Allows disabling all sensors or selecting the one/s to be used.

INDUX parameters

Element	Values	Description
STEAM TEMPERATURE	0-128 °C	Water temperature
SHOW RINSE-MILKER BUTTON AT STARTUP	YES NO	Enables/disables the cleaning button in the startup screen.
HYDRODYNAMIC EMPTYING PERIOD	0-900	Waiting time for the milker automatic rinsing after a fresh milk beverage delivery. Note: If the elapsed time after the last selection is longer than the emptying period set time, the machine will still start an internal rinse cycle (rinsing liquid moves to waste tank at the end of this procedure). Note: The ENABLE WASTE TANK SENSOR option must be enabled.
MANDATORY MILKER CLEANING	EVERY 24 HOURS EVERY 48-72 HOURS	Milker cleaning frequency Note: If EVERY 48-72 HOURS is selected, the cleaning frequency is extended to 72 hours only if the milker has not been used in the first 24 hours since the last cleaning.
CHECK MILK PRESENCE WITH SENSORS	NO 1: ONLY CONDUCTIBILITY SENSORS 2: ONLY FRIDGE SENSOR 3: CONDUCTIBILITY AND FRIDGE SENSOR	Allows disabling all sensors or selecting the one/s to be used.
ENABLE CONDUCTIBILITY SENSOR	YES NO	Enables/disables the conductivity sensor. Note: This type of sensor allows monitoring the quantity and/or quality of the cleaning liquid and the presence of milk without cooling unit.
ENABLE WASTE TANK SENSOR	YES NO	Enables/disables the waste tank sensor.
ENABLE COLD MILK TANK TEMPERATURE SENSOR	YES NO	Enables/disables the cold milk tank temperature sensor. Note: This type of sensor allows monitoring the milk temperature. If the temperature exceeds the safety tolerance, fresh milk-based beverages are disabled and the milk has to be replaced after a sanitary cleaning cycle.
TABLET DISSOLVE TIME	0-240 sec	Waiting time for the tablet dissolution during the milker cleaning
TUNING SPEED MILK PUMP	-30 +30	Allows calibrating or manually setting the working speed percentage of the milk pump. • RESET: Restores the default value. • CALIBRATE: Starts the calibration procedure. When finished, the percentage value populates.

Element	Values	Description
FOAM/AIR/PUMP SPEED	-	Allows specifying the characteristics (% of air and pump speed) of each foam type. See "Foam types values".

Foam types values

FOAM	Description	AIR (%)	PUMP SPEED (%)
HOT NO FOAM	Hot milk without foam	0	40-70
HOT CLASSIC FOAM	Hot milk with traditional foam, like at the café	20-60	30-100
HOT FLUFFY FOAM	Hot milk with a thick and consistent foam, due to the presence of smaller air bubbles. Similar to whipped cream	60-100	60-100
HOT BARISTA FOAM	Hot milk with extremely thick foam, configurable in the maximum range for Latte art	0-100	0-100
COLD NO FOAM	Cold milk without foam	0	30-55
COLD CLASSIC FOAM	Cold milk with traditional foam, like at the café	20-60	45-100
COLD FLUFFY FOAM	Cold milk with a thick and consistent foam, due to the presence of smaller air bubbles. Similar to whipped cream	60-100	45-100
COLD BARISTA FOAM	Cold milk with extremely thick foam, configurable in the maximum range for Latte art	0-100	0-100

3.15 Miscellaneous page



Programming menu > MISCELLANEOUS

Introduction

This page allows accessing the general configurations of the machine.

Page overview

MISCELLANEOUS

2023/09/01 12:34

GENERAL OPTIONS

MACHINE ID

MILK LM

FREEVEND

BLOCKING COUNTER

MESSAGE NUMBER

0

FAN TIME

001

min

BEEP TIME

03

sec

CPU LANGUAGE

MULTILANG

GB - ENGLISH

BACK

SAVE

CPU msg example 2

GENERAL OPTIONS tab

Element	Values	Description
MESSAGE NUMBER	0-7	Message displayed in standby mode • 0: "Place your cup" • 1: "Take a moment to relax" • 2: "Fresh milk" • 3: Custom message configurable with Rheaction • 4: "Enjoy a break" • 5: "Always at your service" • 6: "Insert coins" • 7: "Hello + <date and time>"
FAN TIME	0-180 min	Duration of powder suction fan activation after a dispensing cycle
BEEP TIME	0.0-1.3 sec	Beep duration at the end of any procedure
CPU LANGUAGE	EN1 MULTILANG	Enabled interface languages
ENABLE BEVERAGE STOP	YES NO	• YES: Beverage dispensing can be interrupted. • NO: Beverage dispensing cannot be interrupted.
FMILK TOPPING SWITCH	YES NO	Enables/disables the automatic switch to powdered milk when fresh milk is finished. This option is only available if the milker is enabled.
ENABLE DATA-AUDIT BEFORE	YES NO	• YES: Sales statistics are updated as soon as the beverage dispensing starts. • NO: Sales statistics are updated after the beverage dispensing.
PROG MENU PIN CODE	00, 111-999	• SET PIN: Allows setting a pin code for accessing the "Programming menu". • RESET PIN: Resets the pin.
QUICK MENU PIN CODE	00, 111-999	• SET PIN: Allows setting a pin code for accessing the "Quick menu". • RESET PIN: Resets the pin.

MACHINE ID tab

Element	Values	Description
MACHINE CODE [x]	0-65535	Code assigned to the specific machine

MILK LM tab

Element	Values	Description
PRODUCT MILK LM	0-6	Number of the canister to be used for the second milk dispensing cycle
MILK LM WATER NUMBER	0-3	Water valve to be used for the second milk dispensing cycle

FREEVEND tab

Element	Values	Description
FV HARDWARE KEY MODE	DISABLED ENABLED 1 ENABLED++	Free beverages dispensing mode • DISABLED: No free beverages are dispensed. • ENABLED 1: Only one free beverage is dispensed. • ENABLED ++: All beverages are dispensed for free, until this option is set on DISABLED again.
START FREEVEND NOW	0-255	Number of hours the free beverages dispensing mode is active. It activates when tapping START NOW .

BLOCKING COUNTER tab

Element	Values	Description
INSERT PIN CODE	-	Allows inserting the pin code for accessing the counter menu.
COUNTER	0-10000	Number of beverages that can be dispensed, after which the machine stops operating. If set to 0, the functionality is disabled.
WARN AFTER	0-50%	Warning threshold indicating the percentage of beverages the machine can still dispense before it stops operating. A warning message is displayed when the percentage is reached. If set to 0, the functionality is disabled.
PIN CODE	111-999	Allows setting a new pin code.

3.16 Machine connectivity



Programming menu > DEVICES > NETWORK

Connect to the Wi-Fi network

1. Tap **CONNECT TO...**: the machine scans the available networks.
2. When the list of networks is displayed, tap the desired one.
3. Insert the password, then tap **OK**.

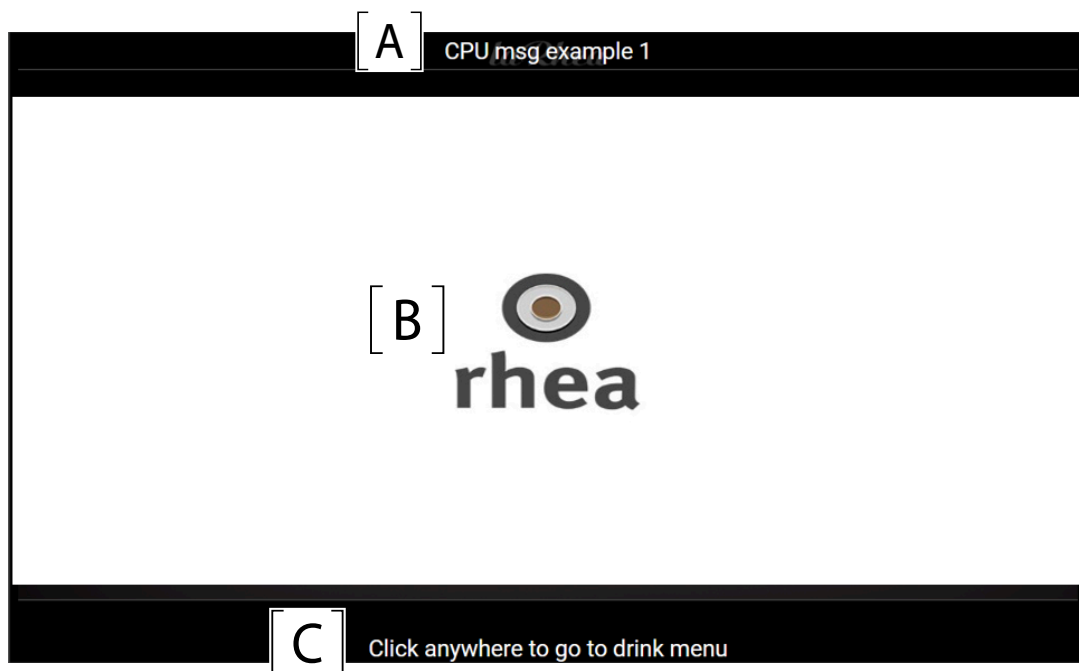
4 MACHINE DISPENSING MODE

4.1 Standby screen

Introduction

The standby screen activates when the machine is in standby mode.

Screen overview



- A** Message about the machine status (ex. warnings, low quantity of product, etc.)
- B** Standby images. It can display a slide show of up to four images.

C Custom message

Note: For more information on how to customize the standby images and message, refer to the RheaMedia2 manual.

Exit the standby mode

Tap anywhere the screen: the "Dispensing menu" appears.

4.2 Dispensing menu

Introduction

The dispensing menu shows all the beverages the machine can dispense.

It also gives access to a password protected quick menu. See "Quick menu", page 53.

Menu overview

The menu can be configured to show a 3x3 grid or a 3x4 grid (see the RheaMedia2 manual). A 3x3 grid is shown as an example.



A Beverage image and name. Opens the beverage menu. "Beverage menu".

The following icons may be displayed:

- : Jug option supported.
- : Out of milk. A milk refill is required.

Actions in the menu

Button	Description
	Scrolls available beverages.
	
LANGUAGE	Changes the interface language.
REFILL MILK	See "Refill the milker", page 56

4.3 Quick menu

Introduction

This menu provides quick access to specific pages and/or information. It also gives information on the latest and next cleaning cycle of the Indux milker.

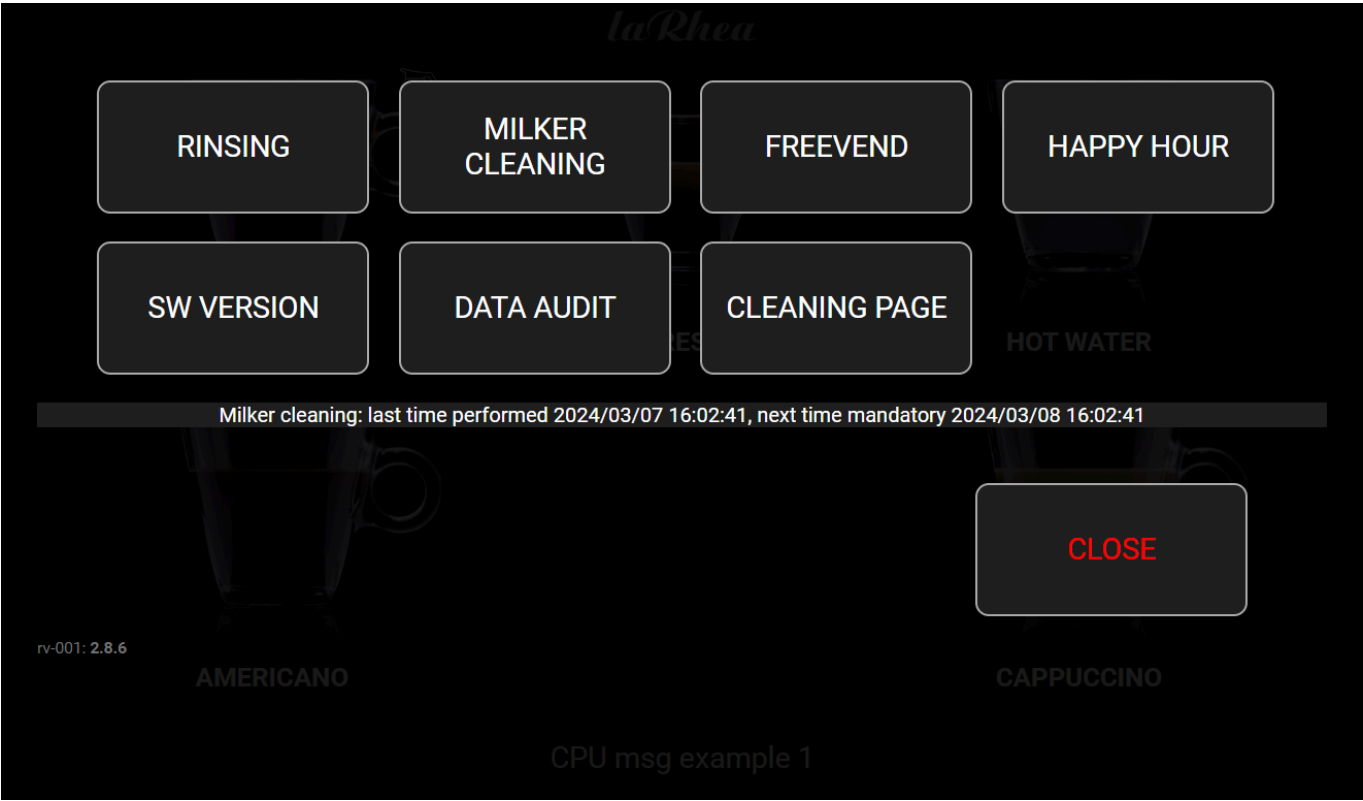
How to access it

Tap three times on the top left of the "Dispensing menu".

The menu could be protected by a password. See "Miscellaneous page", page 48.

Menu overview

Note: The elements in this page may vary depending on the RheaMedia2 configurations.



Element	Description
RINSING	Opens the " Cleaning/rinsing page " for the rinsing procedures.
MILKER CLEANING	Opens the " Cleaning/rinsing page " for the milker cleaning procedure.
FREEVEND	Gives access to the "FREEVEND tab".
HAPPY HOUR	Gives access to the "HAPPY HOUR tab".
SW VERSION	Displays the current version of the software installed.
DATA AUDIT	Opens the "Data audit page".
CLEANING PAGE	Gives access to the " Cleaning/rinsing page ".
CLOSE	Closes the menu and returns to the "Dispensing menu".

4.4 Beverage menu

 Dispensing menu > tap the desired beverage

Introduction

The beverage menu shows all information on the selected beverage and allows customizing it before dispensing. For more information on customizations, refer to the RheaMedia2 manual.

Menu overview

Note: Menu elements may vary depending on the selected beverage.



A Beverage information: image, name and price

B Beverage customizations

Actions in the menu

Button	Description
	Shows the description and the nutritional information of the beverage.
	Enables/disables the jug option.
START	Starts the beverage dispensing.

4.5 Beverage dispensing related procedures



Dispensing menu

Dispense a beverage

1. Place a cup under the nozzle.
2. If the machine is in stand-by mode, tap the screen: the dispensing menu is displayed.
3. Tap the desired beverage: the selected beverage screen opens. See "Beverage menu", page 54
4. Customize your beverage, then tap **START**: the beverage dispensing starts.

- 5. To enable the dispensing repetition, tap . To disable it, tap **STOP JUG repeating**.
- 6. When the dispensing is finished, the message “Your drink is ready!” is displayed. Then, the dispensing menu is displayed again.

Refill the milker

! IMPORTANT This procedure is only possible with a graphic interface made with RheaMedia2 v.2.7.18 or later versions. For more information, refer to the RheaMedia2 manual.

- 1. Tap **REFILL MILK**: the refilling information window appears.
- 2. Do what follows:

If you want to...	Then...
refill the milker immediately	1. Refill it with milk. 2. Tap Confirm: if you have refilled the milk: the refilling check procedure starts. An amount of milk is pumped and the conductivity sensor (if enabled) checks for its presence.
postpone the milker refilling	Tap Cancel: if you will do it later : the refilling check procedure is skipped.

5 TROUBLESHOOTING

Offcode	Context	Description	Solution
2	Connection error	• OFF 2E: Executive Connection error • OFF 2M: MDB Connection error • OFF 2P: Parallel Coin Connection error	Check the connection between the machine and the payment system. Otherwise, change the payment system configurations.
3	Waste water	The drip tray is full.	Empty the drip tray and lay it back properly.
5	EAROM	An error in the program memory has been detected. • OFF 5: EAROM write operation error • OFF 5A: EAROM bank 1 write operation error • OFF 5B: EAROM bank 2 write operation error	Replace the CPU card.
6	Water supply	• OFF 6C: Water refilling procedure did not end successfully. • OFF 6D: Too many continuous water refills without selections.	Check the connection between the machine and the water mains. Check for any water leaks.
7	Espresso circuit	An error in the Brewer/Espresso unit has been detected. • OFF 7C: Error in the brewer position during infusion • OFF 7D: Infusion too large. Possible failure of volumetric counter. • OFF 7R: Volumetric counter (initial check)	Check the volumetric counter status.
8	Coffee brewer	Brewer motor failure. It should move freely. Along dispensing cycle • OFF 8 A/B/C/G/H/I/L/P/Q/R: Incorrect movement of the brewer during delivery phase. • OFF 8 a/b/c/d/e/f/s: Incorrect movement of the brewer during initial check.	Check the components of the gear engine: engine, pulleys, belt. Check the encoder board, the CPU board and the wirings. Check coffee grounds and hydraulic seals. Clear brewer.
9	Coffee beans	The volumetric coffee doser is faulty. • OFF 9A: Shortage of coffee beans in left canister • OFF 9B: Shortage of coffee beans in right canister • OFF 9C: Shortage of coffee beans in left and right canister	Refill the canister(s) with coffee beans.
14	Water inlet	• OFF 14A: Too many continuous selections without water refill.	Check the water level detection system.
16	Programming keyboard	A malfunction has been detected in the selection panel / switch / mechanism.	Verify that the PROG button is functioning.

Offcode	Context	Description	Solution
17	Keyboard/ Sugar +/- keys	A malfunction has been detected in the selection panel / switch / mechanism. • OFF 17A: Keyboard	Verify that the selection is functioning.
24	Power supply	A problem in the power supply unit has been detected. • OFF 24A/24B: One or more of the power supplies are indicating an under or over voltage situation.	Replace the power supply board of the machine.
31	Espresso coffee water	Temperature sensor is defective, disconnected or reading is out of range. • OFF 31A/B/C: Water temperature. A (high) B (low) C (sensor) • OFF31H/V: Water temperature	Check the machine heating elements and connections.
32	Coffee brewer	Temperature sensor is defective, disconnected or reading is out of range. • OFF 32A/B/C: Brewer temperature. A (high) B (low) C (sensor)	Check the machine heating elements and connections.
36	Airbreak probe	OFF 36C: Airbreak probe in induction machines is disconnected or reports a temperature of 0 °C.	Check the airbreak probe.
41	Water Filter	Water filter is worn out.	Replace the water filter.
44	Products decounter	A canister is empty. No product can be dispensed.	Refill the canister(s).
54	Milker-CPU connection	Communication problem between the machine and the milker.	Check the connection between the machine and the milker.
57	Milker (Indux model)	OFF 57A: communication problem between the machine and the milker.	Check the connection between the machine and the milker.
71	Milker (Indux model)	Cleaning procedure error • OFF 71D: Not enough detergent. • OFF 71E: Too much detergent. • OFF 71G: Too aggressive detergent (additional rinsing are performed to preserve tubes). • OFF 71F: Waste tank is full.	OFF 71D/E/G: Repeat the milker cleaning procedure with a suitable detergent. OFF71F: Empty the waste tank.
121	Milker (Venturi model)	Water refilling procedure did not end successfully.	Check the water connection.
122	Milker (Venturi model)	Too many continuous selections without water refill.	Check the following elements: • pressure boiler water level probe • milker pump • water circuit of the machine • selections settings

Offcode	Context	Description	Solution
123	Milker (Venturi model)	Water temperature • OFF 123A: Too high • OFF 123B: Too low • OFF 124C: Not detected. The probe is faulty or disconnected.	Check the milk temperature sensing probe.

6 GLOSSARY

DA3	Data file format containing all machine operating parameters (recipes, prices, temperatures, device configuration, etc.).
VMC	Vending machine controllers



Rhea Vendors Group SpA

Via Trieste, 49 21042 Caronno Pertusella – Varese (VA) – Italy

Phone: +39 02 966551

E-mail: rheavendors@rheavendors.com

www.rheavendors.com