



**Technical Manual** 



ENGLISH



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## **Document history**

Date	Author	Version	Changes	
28.04.2010	Veith	Version 1.00	First official release	
30.07.2010	Veith	V 1.01	French updated – Chap 4. Service updated and new sub chapters added – Menu updated – Legend added – Electric diagram updated	
	Veith	V2.00 draft	French updated – diagrams updated – Error and warnings updated – Menu extended to SW version 2.00 – Pictures added	
04.07.2012	Veith	V 3.00	Powder module added – New software 3.00 – new diagrams – Chap. 4 and 5 extended	
15.04.2014	Veith	V 3.01	New milk system, chapt. 2.4, 4.5 added – new diagrams & legend – Software tree updated to V4.00 Old milk system moved to chapter 4.6 Chapter 4.4 - 4.7 changed to 4.7 – 4.9	
15.09.2014	Veith	V 4.00	Ch. 4 updated and extended – KS9 added – Software updated – chapters with reference to user manual removed – parameters corrected	
07.03.2016	Veith	V 5.00	Milk level with pressure sensor added – Typelabel exchanged – Chap Touch extended – SW V7.00 Egro ONE Multi Drink added	
01.05.2017	Veith	V 6.00	SAG, CMF, AS and BYO added SW V 8.10 Single language manual – German – French – English Service chapter reorganized Take out Menutree, Diagrams and Platines	



## 1. Introduction

This manual is intended to give you additional information to the machines Egro ONE, Egro TWO and Egro BYO which are not in the installation manual delivered with the machine or in the user manual. This manual will be updated on a regularly base. The updates are available in our Download area without further notification. In this manual only information, which are not given in the above mentioned manuals. Please check yourself on <u>www.ranciliogroup.com/Support</u>

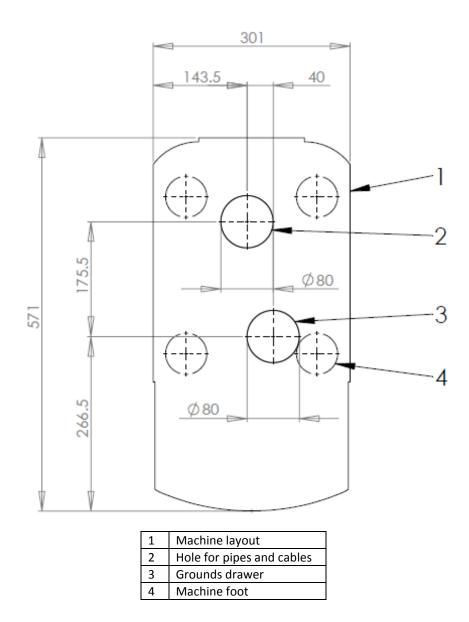
The user manuals of the machines are available for download on our homepage www.ranciliogroup.com

## 2. Technical data

## 2.1. Dimensions

The dimensions are given in the manuals of the machines. Detailed drawings will be distributed via the homepage.

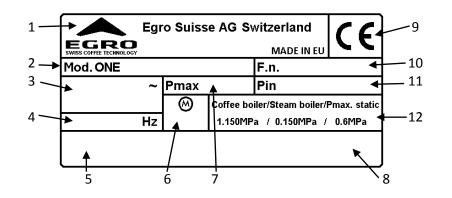
## 2.2. Drilling plan





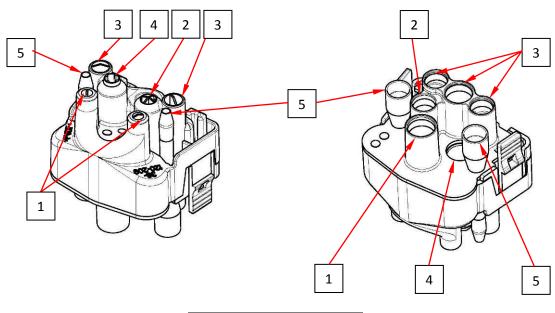
## 2.3. Type label

The type label is in the machine. Take out the ground drawer and it is on the left sidewall.



1	Manufacturer	5	Conformity marks	9	EC Conformity mark
2	Model and version	6	Total absorption	10	Serial number
3	Voltage	7	Motor power	11	Pin
4	Frequency	8	Date of manufacture	12	Max. boiler/static pressure

## 2.4. Outlet



1	Coffee
2	Hot Water
3	Milk/Milk foam
4	Powder product
5	Cold Milk Foam (CMF)



## 3. Installation

The installation of the coffee machine is described in the installation manual.

## 3.1. Electrical connections

The machines are delivered according to the information on the type label, but they offer different electrical connections.

Power supply	Power rating	Identification	"Reduced Power"
220-240V 3~, 50/60Hz	6.0kw	2P	OFF
380-415V 2N~, 50/60Hz	6.0kw	2P	OFF
220-240V 1N~ 50/60Hz	6.0kW	1P	OFF
220-240V 1N~ 50/60Hz	3.6kW	LP	ON
208/240 V2ph~, 60Hz	5/6kW	-	OFF

#### **3.1.1.** *Change power settings*

The power settings can be changed depending on the available power supply. The electrical diagram in the appendix shows the different ways to connect the machine.

When connecting the machine to 220-240V 1N~ 50/60Hz with 16A fuse the parameter "Reduced Power" has to be changed to "ON".

## 3.2. Stop using the machine

Warning! Only a qualified person is allowed to disconnect the machine from the main power supply!

- Clean the machine, on machines with milk a milk cleaning has to be done!
- Switch off the circuit breaker
- Disconnet from water and electric power, if necessary.
- Cover the machine and place it in a dry room, not exposed to environmental elements

Final Stop: Cut of the power supply cable. Consign the machine to authorized companies for its disposal.



## 4. Service

## 4.1. Service Booklet

The service booklet is in each machine for information of maintenance done. It has space for breakdowns, which should be noted down by the service technician.

#### 4.1.1. Open machine

Open machine front: Open front cover, remove ground drawer and loosen screw Remove side panels: Loose screws in the top cover plate. Then pull side panels upwards and remove.

#### 4.2. Preventive Maintenance

Preventive maintenance ensures a continuous quality of products and reduces unscheduled breakdowns. During preventive maintenance service will be done and necessary spare parts will be exchanged.

The bases for preventing maintenance are kits with all necessary parts. They are available as "Service kit" and "Extension kit".

The preventive maintenance is driven by the number of brewing cycles and/or the predefined time. Reaching the number of cycles or the time, the coffee machine indicates the message "Perform the preventive maintenance".

We recommend adjusting the maximum brewing cycles to 40'000 cycles and the time to 1 year.

The brewing cycles depend on various criteria as regularity of brewing and cleanings, composition of water, cleaning product, climatic conditions, etc.

In case of unfavorable conditions adjust the number of brewing cycles.

#### 4.2.1. Service interval

Cycles	40'000	80'000	120'000	160'000	200'000
Time	1 Year	2 Years	3 Years	4 Years	5 Years
	Service kit	Service kit & Service kit iSteam	Service kit & Extension kit	Service kit & Service kit iSteam	Service kit

#### 4.2.2. Maintenance

Tables with maintenance tasks for each type of machine are available in our download area. They list the tasks and the parts and are given with the necessary drawings.

#### 4.2.3. Lubricants

The lubricant table informs which lubricant has to be used according the application. The use of not specified lubricants can shorten the lifetime extremely.

No	Description	Туре	ID	Thermal Range	Area of Application
1	High performance lubricant	Berulub FG-H 2 SL	059246	-45 - +160°C	All connections: Boiler fittings, tea- and steam wand, piston motors Used for connections and mechanical moving parts
2	High performance lubricant	Berulub SIHAF 2	059247	-45 -+160°C	For all rubber seals like: NBR, EPDM, Viton Not applicable for Silicon O-Ring!
3	Synth. Assembly Grease	Klübersynth UH1 64-2403	054567	-30 - +140°C	Piston O-Rings Do not use with EPDM rubbers!



#### 4.2.4. Service kits

The service kits are listed below with their ID-number. As the content can change based on technical improvements, we do not list the content. The part, being part of the sets can be seen in our WEB-shop.

Description	ID-Number	Valves	
Service kit ONE Pure Coffee Sirai	10701238	Sirai	
Service kit ONE Pure Coffee NMS	10701087		
Service kit ONE Milk	10701102		
Service kit ONE Milk NMS ACL	10701086	ACL	
Service kit ONE Milk NMS Sirai	10701237	Sirai	
Service kit special Milk ACL	10701322	ACL	
Service kit special Milk Sirai	10701323	Sirai	
Service kit iSteam ONE	00061105		
Extension-kit ONE NMS	10701088		

## 4.3. Grinder

### 4.3.1. Limit Grinder adjustment

The grinder adjustment from outside can be limited with the springs we deliver with the machine. Make first the basic adjustment and then mount the spring as shown in the pictures to limit the grinder adjustment.





#### 4.3.2. Block Grinder adjustment

To block the grinder adjustment, make first the grinder adjustment and then turn on the blocking screw on the left and on the right inside the machine for blocking the adjustment wheel.





### 4.3.3. Change Grinder burrs

A counter for the coffee is integrated in the software, which we recommend to set to 1000 kg. As soon as the amount is reached, a message will inform to replace the burrs. The burrs should be replaced as well, when the grinding time becomes noticeably longer or the grind becomes irregular.

- Close the bean hopper and grind the beans still in the grinder
- Switch off the machine
- Remove the bean hopper and the top plate
- Empty the grinder completely with a vacuum cleaner
- Remove the grinder adjustment from the grinder
- Turn the upper burr-holder counter-clockwise until the head emerges completely;
- Unscrew the screws and remove the burrs from the burr-holder:
- Carefully clean the burr supports, the burr-holder thread and its housing;
- Position the new burrs in their holders and block them firmly in place;
- Reassemble the machine, performing the previous steps in reverse.
- Switch on the machine
- Calibrate the new burrs.

#### 4.3.4. SAG – Self adjusting Grinder

The grind setting will be managed according the brewing time of the coffee and not by the manual adjustment. This is done with two motors with worm gear, which are mounted at the grinders. To work with SAG, the extension board is a precondition as the calculation and the adjustment of the motors is managed by the board. SAG is available as option for all machines of the Egro ONE Series.

When installing the machine, the grinder setting must be done as written in the installation manual. The parameter <Product Setup> <Grinder> <SAG> <Module Type> has to be set to "Manual". When the grinder setting is finished you can activate SAG

SAG is working with a reference product for each grinder. Most time it is Espresso for the left grinder and coffee for the right one. The parameters which have to be considered for the reference product are: grams, pulses, pre-infusion and pressure. If for the left grinder product, no 3 "espresso" is selected, not only this product will be taken in account, but all products, which have the same values for the above mentioned parameters, e.g. "Cappuccino".

Take care at a BYO-machine that the reference products on the machine and on the tablet are the same.

The change of grinder burrs will be done the same way as described in the chapter above.



### 4.4. Brewing unit

#### 4.4.1. *Remove the brewing unit*

Unlock the frame, remove left sheet metal, and disconnect the tubes from the pistons and the cables from the main board. Unscrew fastening screws and disassemble brewing unit.

#### **4.4.2.** *Remove the spindle motor*

To remove the spindle motors, the screws at the top or at the bottom must be removed. Subsequently, the motor with the piston are pulled out up or down and can be taken apart.

#### 4.4.3. Brewing units

The Egro ONE has two generations of brewing units, which can be seen below. The main differences of the new one (BC18) are the plastic parts for the funnel, the ejector and the ground slider. The brewing unit is fixed with screws on top and bottom (BC18) and not with bolts (L61). The brewing chamber is fixed with openings and screws in the metal part.





#### L 61

BC18

#### 4.4.4. Calibrating the brewing unit

When replacing the brewing unit (BC18) as well as the exchange of spindle motors, the brewing unit must be recalibrated. The auto calibration can be found in <Machine setup> under the <Factory settings>.



## 4.5. Outlet

All machines have an outlet, which is manually adjustable in the height. This outlet has a handle to move the outlet.

## 4.5.1. Adjust outlet

The outlet can be adjusted from the force you need to move.

## **4.5.2.** Automatic outlet AS

The Automatic Spout (AS) is driven by a motor and offer the possibility to define five different cup heights, which will be assigned to the products. This is also valid for hot water products, when the machine has a central outlet.

If the machine has the hot water outlet on the side, the cup height must be defined as "top" so that no movement takes place.

Machines with AS have no handle on the outlet. Anyhow it is possible, when needed, to move the outlet slowly by hand.

This should only be done, if the outlet does not move anymore with the motor.



## 4.6. New milk system

#### 4.6.1. Default values

The default values are considered as recommendations. As not all systems work the same, they might be adjusted. The values are set for a milk temperature of 5°C.

The temperature setting "Medium" is to be used for foam products.

The higher the value of the milk temperature (low/medium/high) the more milk will be delivered. As the steam delivery is constant the milk product will be cooler.

The higher the value of the foam structure (fine/medium/big) the more air will be pumped. By adding air, the temperature of the milk products will increase.

Top Milk	
Milk temperature	
High speed (Low milk temp.)	95
Medium speed (Medium milk temp.)	70
Low speed (High milk temp.)	57
Correction time	1s

#### Top Milk & Quick Milk

Foam structure	
Fine	33
Medium	38
Big	42

#### 4.6.2. *Milk temperature*

First, the milk temperature has to be adjusted. This is done in percentage of the power of the milk pump on the Top Milk XP machines and with restrictors for the Quick Milk.

Please take care, that foam products always have a higher temperature than milk products with the same settings.

#### 4.6.3. *Foam structure*

We recommend using only one temperature setting for foam products. This simplifies the setting of the foam structure (in %). When changing the temperature setting the foam structure has to be adjusted.

#### 4.6.4. *Correction time*

The correction time should be adjusted in a way that the milk reaches the frother head when the steam will be switched on. This can be seen by a seriously increase of steam or by the switching of the steam valves. If the correction time is too short, it could happen that after a rinsing no milk will be charged.

#### 4.6.5. Change to pressure sensor

All configurations of the new milk system can work with a level measurement based on a pressure sensor. Order the pressure sensor according to the single or double milk configuration of your system and follow the instruction given here for each sensor.

For the sensor(s), an auto calibration is available and the technician can adjust it for the milk container in use at the customer.

- Remove the milk pump unit from the fridge
- Remove the tube from the white plastic part and take out the milk tube
- Remove the circlip and move the plastic part through the opening
- Insert the new plastic part with the mounted pressure sensor. The sensor with the red point on it is the standard /left sensor, the blue point shows the right one, which is only used with two kind of milk.
   Attention: Take care not to damage the cables and the sensor
- Secure the plastic part with the circlip and install the pump unit in the right place
- Plug in the milk tubes
- Connect the wires of each sensor together with the other sensor.
- Connect them to the mainboard of the coffee machine (connector J3)
- Make the auto calibration for each sensor.



The cable for the pressure sensor is done with two numbers:

10110976	Wiring pressure sensor NMS ONE (to connect with the machine)
----------	--

10110835 Wiring pressure sensor NMS 1Milk (to connect with 1 pressure sensor)

10110839 Wiring pressure sensor NMS 2Milk (to connect with 2 pressure sensor)

When ordering the machine with KS9, the cable is in the fridge and has to be connected to J34 on the control board or to J4 on the extension board, if it is in the machine.

When ordering the machine for FUM or SMPU the cable in the coffee machine is already mounted.

#### 4.6.6. Milk level calibration

ATTENTION! Set <Product Setup/Milk/Module Type> first to "Fridge". The menu for the level measurement is in the software under Product Setup/Milk.

The machine has an automatic calibration, which allows the technician to adjust the milk container the customer is using.

The calibration should be done, when the machine is correctly positioned on a stable, leveled surface. The auto calibration for the milk level guides with a sequence of steps through the procedure. It takes some minutes depending on the capacity of the milk container. When the "Fill"-button appears, press it at least up to the point that the metallic restrictor holder is completely in the water.

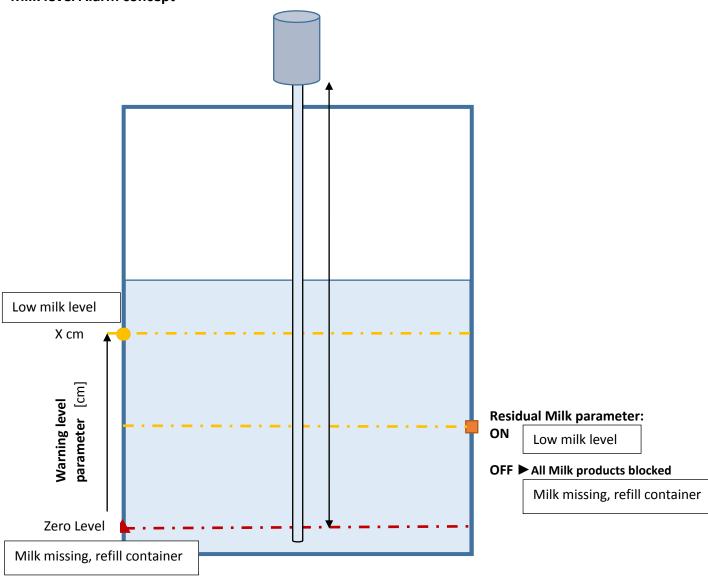
Attention, water is coming out of the outlet of the coffee machine!

As preparation take care that the milk tube is hanging free in the container and almost touch the bottom of it.

When having two machines, which take the milk out of the same container(s), take care to set the Zero level a little bit higher to avoid that the products cannot be finished as both machine can take out milk at the same time. Perform the auto calibration for both machines independently (not together).



### Milk level Alarm concept



Level= X cm (Warning level parameter)

At least one milk product is not possible. Milk qty. Product < Milk qty. in container Products with less milk quantity than in the container are disabled.

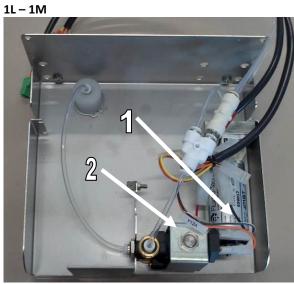


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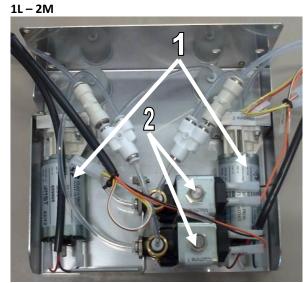
### 4.6.7. Configurations Milk system

The configurations shown are available for the fridges KS9, KS7 or as independent milk pump unit (SMPU).



1 milk – 1 machine

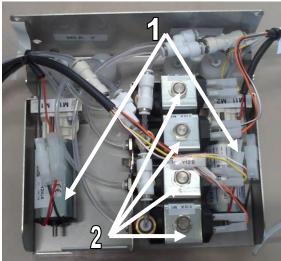
2 milk – 1 machine



1 milk – 2 machines



2L – 1M



2 milk – 2 machines

Milk pump unit:

- 1 Milk pumps
- 2 Milk valves



## 4.6.8. Cold Milk Foam CMF

The milk system received additional components, to produce Cold Milk Foam (CMF). This should be ordered with the machine, as a later retrofit is possible but very complex. CMF is **only** available for Top Milk with one milk and one machine! All other versions cannot be equipped with it.

At the rinsing and cleaning of the machine the way through the CMF-module will be considered, when a CMFproduct was produced before. Additional maintenance work is not necessary for the CMF-module.

Cold milk foam can have different stiffness. We integrated three levels with the following parameters:

	Liquid	Creamy	Stiff
Milk pump	46%	44%	42%
Air pump	50%	50%	50%
Mixer	100%	100%	100%

The stiffness will be done mainly with the milk pump. Mixer and air-pump should not be adjusted.

*If the retrofit with the CMF-module is planned, take care that the coffee machine must have the extension board.* 





### 4.7. Old milk system

#### **4.7.1.** Adjusting milk temperature

The milk temperature will be adjusted by the flow. If the requested temperature is not reached, restrictors can be used. Restrictors for cool box are available in  $\emptyset$  1.1 – 2 mm. Check steam pressure, if necessary.

#### **4.7.2.** Adjusting foam quality

The foam quality is adjusted by the quantity of air and done with restrictors. Attention! The foam quality can influence the milk temperature! Restrictors for air are available from  $\emptyset 0.3 - 1.1$ mm

#### a. Quick Milk/Top Milk

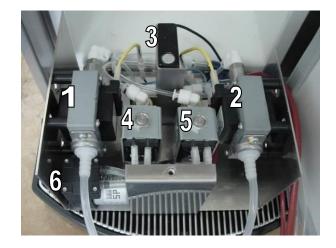
At the Egro ONE Quick Milk and Top Milk the restriction for the adjustment of the foam quality is placed at the white air block on the left opening. The opening on the side is closed.

#### b. Top Milk XP

At the Egro ONE Top Milk XP the restriction for the adjustment of the foam quality is placed at the white air block on the right side.

#### 4.7.3. Configuration

The configuration shown is only available for the fridges KS7.



Milk pump unit:

- 1–2 Milk pumps
- 3 Milk level sensor
- 4 5 Switch valves
- 6 Air pump



## 4.8. Under counter installation

When the refrigerator is placed under the counter a restrictor (0.4mm) has to be added to the air pipe between the fridge and the coffee machine. The restriction can be placed anywhere on the air pipe; however, we suggest to put it in the junction between the coffee machine and the fridge, which is easy to reach.

With this modification, the fridge works successful even with milk pipes of more than 1.5m.

Without this restriction, the milk pipes might not be emptied completely by the system after the automatic water rinsing and so the first milk product after the rinsing would show some water coming out of the spout before the milk arrives. *The settings have to be modified in < Product setup> <Milk>:* 

	NMS	Old milk system
Correction time	2 s	1 s
Rinsing time	0.5 s	0.5 s
Blowout time	1.5 s	1.5 s

## 4.9. Fridge KS 9

#### 4.9.1. Temperature adjustment

The temperature adjustment is on the left side inside the housing. After removing the left side panel, it can be adjusted.

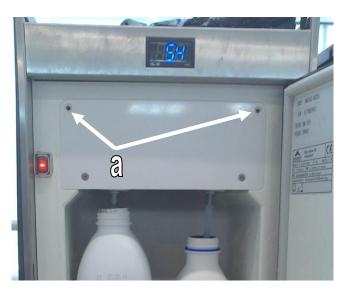
Press the SET button twice. Modify the temperature and confirm with the SET button. The temperature is set to the highest temperature in the fridge.



#### 4.9.2. *Remove milk pumps*

Switch off the fridge!

Remove the two screws (a) on the front of the plastic cover inside the fridge. Take out milk pump unit.





## 4.10. Fridge KS7 4.10.1. Temperature adjustment

The temperature adjustment is on the back inside the housing. After removing the back panel, the temperature can be adjusted. For cooler temperature turn clockwise.



#### 4.10.2. Remove milk pumps

Switch off the fridge! First remove both screws on the front inside the fridge and then loose the screws (a) from milk pump unit (do not remove). Then pull milk pump unit forward and afterwards take it out downwards

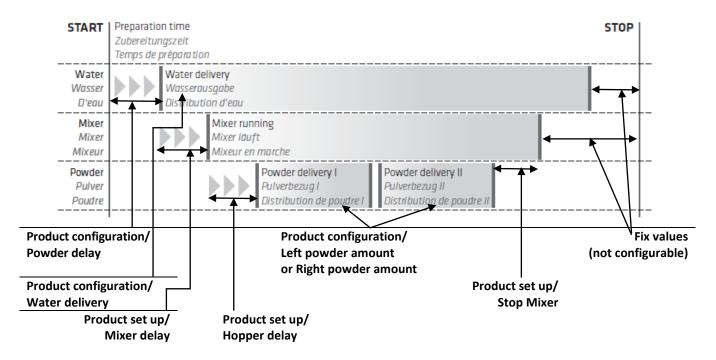
When mounting the milk pump unit, take care to the third fixing which is top, back in the middle. After mounting the unit, it can be that the Milk level sensor has to be adjusted, to work as expected.





#### 4.11. Powder Module

The preparation of a powder product is handled with a number of parameters described with the diagram below. The parameters are split in the one, which are necessary to adjust for each product and the ones which are handled as a machine parameter. Make sure to make the water calibration, in the product setup! The menu is only in English, for other languages please refer to the software description.



#### 4.11.1. Powder hopper

The powder hoppers are cleaned with the mechanics mounted. In special circumstances, it is necessary to take apart the mechanics to replace some parts. When reassembling, it is important to have the right order and placements of the parts to secure a proper function. Some parts are similar and can easily be mixed up.



Front nut Back nut



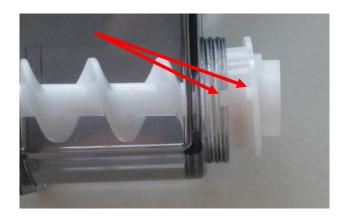
**Back assembly** 



Front components



Take care on the knobs! Available on the front and on the back of the powder hopper



## 4.12. Fuses and Print Boards

Inside on the left side panel of the coffee machine is a label with location and values of the fuses and the description of the LEDs.

For the detailed description of the print board we have a separate document available in our download area.



## 5. Software

## 5.1. Use of USB

The Egro ONE offers the possibility to use a USB-drive for updates and backups. Data to upload must be saved on the root directory of the USB-drive.

The functions available with a USB-drive are self-explaining and will not be described in detail. As soon as the USB-drive is connected to the machine, follow the instructions on the touch screen or on the display.

## 5.2. Software update

#### 5.2.1. Touch

Attention: Before you upgrade an Egro ONE, you have to check which version is installed, on the machine you want to upgrade

Machines with software version under V2.00 must first be updated to V2.00.

Machines with software version V2.xx or V3.xx must first be updated to V5.xx

Machines with software version V4.xx or V7.?? must be updated to V7.05. When updating the software to V7.05, take care to use the correct version. Check the installed version before!

Now you have to upload and install the second part of the SW 7.05 (part B):

Sw\_B\_C7-05\_M7-00.tar, Sw\_B\_C7-05\_M7-00.md5

If you get an error during update of second package, restart machine and start update Sw\_B\_C7-05\_M7-00 again.

ATTENTION: For machines with initial software versions 4.9x, 5.9x 6,9x it is required to perform a reset of the default parameters after the upgrade.

Afterwards you can upgrade the software to a higher software version

To update the software and messages file on an Egro ONE Touch follow these steps:

- Copy the "Sw\_xxxx.tar" and "Sw\_xxxx.md5" file of a software version to the root directory of a USB-drive e.g. "Sw C8-00 T8-00 M8-00.tar" and "Sw C8-00 T8-00 M8-00.md5"
- Insert the USB-drive in the machine and wait for the "Load&Show" screen to appear
- Select "Software upgrade", then select the file "Sw\_C8-00\_T8-00\_M8-00" and start the update
- When the update is over, exit the menu and remove the USB-drive. The machine will reboot. It will show "Update in progress, Do not shutdown the machine"
- After that it will display the software versions: TB: SW version V8.00 22/05/2016
   Vocabulary V8.00
   CB: SW Version V8.00 24/05/2016

The example is done for the software version V8.00 – it will work the same with every other version!

#### 5.2.2. Keypad

Attention: Before you upgrade an Egro ONE, you have to check which version is installed, on the machine you want to upgrade

Machines with software version under V2.00 must first be updated to V2.00.

Machines with software version V2.xx or V3.xx must first be updated to V5.xx

Machines with software version V5.xx and higher can be updated directly to the actual version.

To update the software on an Egro ONE Keypad follow these steps:

- Copy "Sw\_C8-00.mhx", "ALLM8-00.MSG" on the root directory of a USB-drive
- Insert the USB-drive in the machine, select "Machine Software" and select the file "Sw\_C3-00.mhx"
- At the end select "Messages" and select the file "ALLM8-00.MSG"
- When the upgrade procedure is over, exit the menu and remove the USB-drive. The machine will reboot.
- On the display you should see the new software version V8.00 24/05/2016.



## 5.2.3. Recovery

If the software update fails or the control board due to a memory error (BE x) does not start anymore, you have to upload the "RECOVERY.UPD" as following:

(RECOVERY.UPD is only available on Keypad SW)

- 1. Download Software V8.10 "RECOVERY.UPD" from our homepage and store it in the root of a USB drive
- 2. Switch off machine
- 3. Plug in USB drive;

Touch: connect USB-cable ID 34070075 to control board J6 and unplug the touch cable (J1) Keypad: connect USB drive in the front

- 4. Switch on machine
- Machine boots directly from USB and installs the software and message file.
   Keypad: When the message "Pull out USB Key. Thank you" appears, take out the USB-drive. The machine starts.

**Touch:** wait until on the control board display (see picture) the red point on bottom right hand corner is flashing (2 minutes). Unplug USB drive and wait till machine did start up and finished rinsing. Plug in Touch and restart machine.



#### 5.2.4. Exchange of Touchscreen

When changing the touchscreen, it can happen, that the touchscreen from spare part has a newer version then the control board of the machine, which will be recognized and displayed.

If this happen, the machine must be updated with a recovery file to the actual version.

#### 5.3. Egro ONE Touch

The Egro ONE Touch allows the upload of pictures and videos. To save memory, it is recommended to erase all none used files on the Egro ONE

#### 5.3.1. Pictures

Resolution: 480x640 pixels, ratio of 3:4; jpg, bmp or png files We recommend to use pictures with the right size and resolution. The picture for the Egro ONE can be in different formats and ratio. The presentation on the screen will be always adjusted to the resolution of the screen.

#### 5.3.2. Product icons

The Egro ONE Touch interface offer the possibility to upload customized icons for the products and to modify the products name.

Uploaded icons will be available for each product types according their name. During the product configuration, it is possible to select only the icons assigned by the file name to the product type. The icons must have the following naming:

Description	Example	Product type
<b>0_</b> xxxx.png	<b>0_</b> espresso.png	Coffee
<b>1_</b> xxxx.png	<b>1_</b> cappuccino.png	Coffee&Milk
<b>2</b> _xxxx.png	<b>2_</b> coldmilk.png	Milk
<b>3_</b> xxxx.png	<b>3_</b> hotwater.png	Water
<b>5_</b> xxxx.png	<b>5</b> _chocolate.png	Powder, Powder&Coffee, Powder&Milk,
		Powder&Coffee&Milk

The icons are only recognized with the following parameters:

File format	.png
Size	168x139 Pixel (Width x Height)



### 5.3.3. Upload the icons

To upload the icons, it is necessary to store them in the root of a USB drive (do not store the icons in a folder). Insert the USB drive in the USB-port of the machine.

Type in the manager or technical password to enter in the Load&Show menu and follow these instructions:

- Select "Upload/Download pictures/icons"
- Select "Upload/Delete icons"
- Select "Upload USB -> ONE"
- Select the icon and press "Copy" to upload the single icon or select "copy all" to upload all icons stored in root of the USB stick.
- At the end of the upload, select "Exit".



- Select the product icon in "product configuration".

Espresso / 0	1	*	-
Type Coffee	9	*	
Icon	-	*	
0 Grams [g]	<b>e</b>		
0 Grinder	Ũ		
0 Impulses	1		
Bypass [fm]			
Сору			P
<b>K</b> Back	Exit		



### 5.3.4. Product name customization

Egro ONE offer the possibility to adopt the product names. If the new name can be written with characters provided by the touchscreen; this can be done using the Touch interface.

In case of Asian characters or languages with special characters, it is necessary to modify the product name in the messages file with the "Qt Linguist" software. An existing name will be replaced with the new name. Egro must rework the modified message file before uploading it to the machine. After that, it is possible to exchange the product name in the "product configuration" menu.

- Enter in "Products configuration", select "Name" and then "Customize".



- Insert the new product name and confirm with "enter"

ustor	n1_			12	
0	1	2	3	4	5
6	7	8	9	(	)
а	b	С	d	е	f
g	h	i	j	k	I
m	n	0	р	q	r
S	t	u	v	w	X
У	z	,			1
aA	-	pace		enter	•



- The new product name will be displayed in the products-selection page.



#### 5.3.5. Copy customized machine

The customization can be copied from one machine to another using the Load&Show menu:

- Download with "ONE  $\rightarrow$  USB" the parameters file (backup file.bck) from the sample machine
- Upload the customized products icon on the new machine (see chapter 5.3.3). This step is only necessary in case of customized icons.
- Upload the customized messages file (modified by Egro) This step in only necessary if Egro modified the products names in the message file.
- Upload the parameter file (backup file.bck, downloaded from the sample machine) on the new machine.
- If some products are displayed without their icon it is necessary to verify that <u>all</u> icons have been uploaded correctly.

#### 5.3.6. Video

To produce a suitable video for the display of the Egro ONE TOUCH it is necessary to use professional video editing software (e.g. Adobe Premiere). With such software, several parameters can be adjusted. Do not include AUDIO in the video. A video that shows how to set up a new video with the right settings is available on the Egro home page. This video is not edited for the display of the ONE TOUCH!

Videos only run automatically, during the preparation of a beverage, if the ONE Touch is configured to be in the SELF-SERVICE MODE.

Videos can be played any time in the ONE TOUCH going into the video menu.

	Egro ONE	Egro ONE Multi Drink
Format:	AVC	MPEG-4/AVC
Format/Info:	Advanced Video Codec	Advanced Video Codec
Format profile:	Baseline@L3.0	Baseline@L3.0
Format settings: CABAC:	No	No
Format settings: ReFrames:	1 frame	1 frame
Codec ID:	avc1	avc1
Codec ID /Info:	Advanced Video Coding	Advanced Video Coding
Bit rate mode:	Variable	Variable
Bit rate:	986 Kbps	986 Kbps
Width:	480 pixels	640 pixels
Height:	640 pixels	480 pixels
Display aspect ratio:	4:3	4:3
Frame rate mode:	Constant	Constant
Frame rate:	25 fps	25 fps
Standard:	PAL	PAL
Resolution:	24 bits	24 bits
Colorimetry: 2	4:2:0	4:2:0
Scan type:	Progressive	Progressive
Bits / (Pixel*Frame):	0.128	0.128
File format:		MP4
Page orientation:		Portrait



## 5.3.7. Delete Pictures & Video

It is recommended to erase non-used pictures and videos from the machine. This works only, if "Load&Show" is activated by a USB-drive to be plugged in.

Upload/Download Bitmap	Upload/Download Images	Download	Select	tion of image to be deleted	
			Delete	Delete a single image after confirmation	
	Upload/Delete Icons	Delete	Delet	e a single icon after confirmation	
Upload/Delete Video	Delete	Delete a sir	Delete a single video after confirmation		



## 5.4. Touchpad

### 5.4.1. Clean the touchpad

### The manufacturer recommends:

"Lightly wipe to clean the dirty surface with absorbent cotton or other soft material like chamois, soaked in the recommended chemicals without scrubbing it hardly. Always wipe the surface horizontally or vertically. Never give a wipe in a circle. To prevent the display surface from damage and keep the appearance in good state, it is sufficient, in general, to wipe it with absorbent cotton."

### 5.4.2. Lifetime

The touchpad has a lifetime with finger knocking over 1 million times as confirmed by the manufacturer. The use of a pen or any other sharp item reduce lifetime.

## 5.5. Egro ONE Keypad

#### 5.5.1. Change Language

If an Egro ONE Keypad is in a language you cannot read, here is the way to select another language.

```
Stop – 5 sec

5

5

1 – Password, if requested

5

5

1

5

1

1

4

+ or - to change language
```

#### 5.6. Backup

Attention!

These parameters are stored in the backup-file of the Egro ONE but they will not be overwritten when loading a backup to another machine:

REDUCED POWER MILK MODULE TYPE MILK SENSOR POWDER MODULE TYPE ISTEAM MODULE TROLLEY UNIT P1 OUT P1 TURNS P2 TURNS BREWING GROUP QR-SETTINGS SERIAL NUMBER

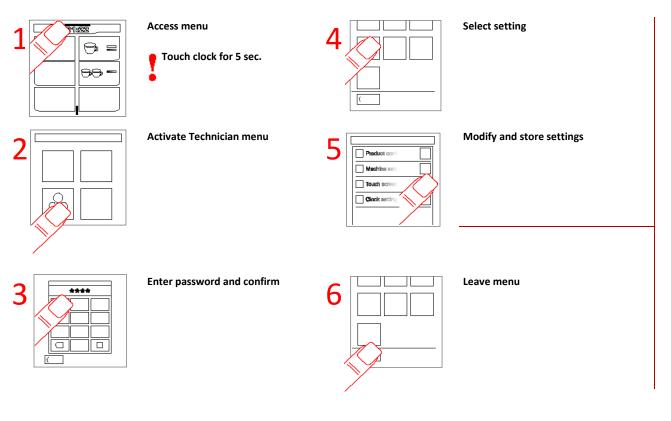


## 5.7. Menu

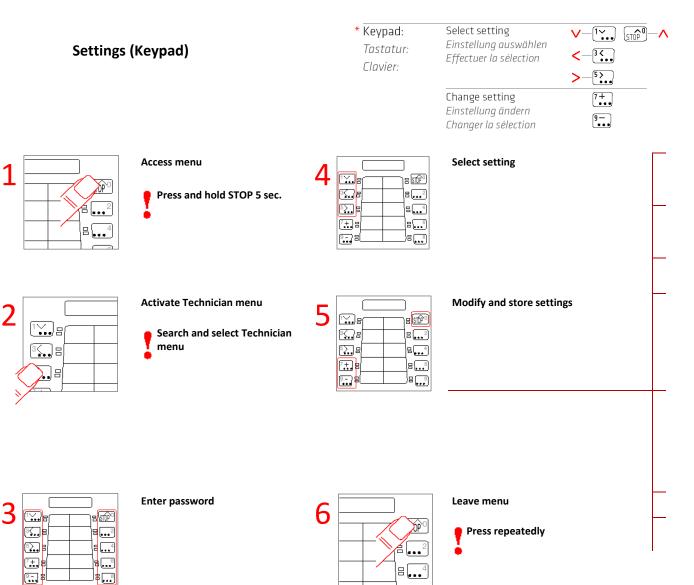
The menu is password protected (Password: 1849). Depending on the configuration different settings are available

The menu items may be different between a Keypad and a Touch machine. We tried to make the descriptions here as logic, that it might be understandable for both user interfaces.

## Settings (Touch)









## Product configuration

Name	Product name: selectable from a list of names or enter custom names
Туре	Beverage type: Filters the icons and product parameters
**lcon	Icon selectable by a set of icons filtered by the parameter «Type»
* Position	Position related to the keyboards button. «0» means drink not available
Grams	Ground coffee dose
Grinder	Selection of left, right or both grinders or manual for decaf chute
Impulses	No. of flowmeter pulses (1 imp. = 0.5 ml) - will be set with dosing function
Bypass	No. of flowmeter pulses (1 imp. = 0.5 ml). Delivered at end of coffee/milk (use only for single dose)
Bypass first	Sequence of coffee and water
Pre-Infusion	Pre-Infusion in four levels
Tamping pressure	Three levels of tamping pressures
Coffee delay	Delay in seconds after product start before coffee is delivered
Hot water quantity	Water quantity entered in seconds
** Hot water temperature	Temperature of the hot water
Milk quantity	Milk quantity entered in seconds for delivering time
Milk cycle 1	Select the different preparation of milk (hot, cold, hot foam, cold foam)
Milk cycle 1	Select the different preparation of milk (hot foam, cold foam)
Percentage milk 2	Defines the percentage of the second milk cycle
Milk frother	Frother source (left / right / both)
Milk foam	% of foaming milk. 0% = hot milk, 100% = milk foam
Cold milk	Cold milk delivering instead of steamed milk
Milk Container	Selection from which container the milk will be taken, if only one container -> select "Left"
Foam texture	Three levels of foam texture
Milk temperature	Three milk temperatures to select
Milk delay	Delay in seconds after product start before milk is delivered
Powder delay	Delay in seconds after product start before powder is delivered
Water amount	Water quantity in ml – Attention increase automatically, if the amount of powder is too much!
First powder	Selection if right or left powder is first delivered
Left Powder amount	Time of powder delivery from left powder in seconds
Right powder amount	Time of powder delivery from right powder in seconds
Product count	Number of counted products
Brewing cycles	Number of cycles done (for jugs)
Standard mode	Drink enabled during standard mode
Payment/self	Drink enabled during payment/self-mode
Register number	Needed for cash debit system
Cup height	5 size for the cup height and «Top» for no movement
Price	Product price
Сору	Copy the parameters FROM or TO a drink
Dose	Function to dose the coffee brewing. Start the brewing and press STOP, when cup is filled. Amount is stored automatically (only available for coffee products)
Test	Function to test the drink

\* Only for model Keypad

\*\* Only for model Touch



## Product setup

	0000					
Coffee	Boiler temperature	Temperature set po	oint of the coffee bo	iler		
	Group heater	Power managemen	t of the group heate	r		
	Auto-Rinse time	Time for the autom	atic rinse after the l	ast brewed coffee 0=OFF		
	First Coffee	Increases the amou	nt of coffee powder	for the first coffee after 3 min of no coffee		
	Delivery time	Shows the brewing	time after the prepa	aration		
Grinders	Grind left time/10g	Time to grind 10g o	f coffee with the lef	t grinder		
	Grind right time/10g	Time to grind 10g o	f coffee with the rig	ht grinder		
	Grind left test	Test function to grin	nd and adjust the co	rrect amount of ground coffee for the left grinder		
	Grind right test	Test function to grin	nd and adjust the co	rrect amount of ground coffee with the right grinder		
	Left time %	Time of the left grin	nder – 50% = both gr	inders ground the same amount		
	SAG	Module Type	Modes: Off – Man	ual – Self-regulating – End switch		
		Ref. Product left	Defines the refere	nce product for the left grinder, most time «Espresso»		
		Target time left	Requested target t	ime for the left reference product		
		Ref. Product right	Defines the refere	nce product for the right grinder, most time «Espresso»		
		Target time right	Requested target t	ime for the right reference product		
	Man. Setting	Left grinder	If the parameter «	SAG» «Module Type» is on manual, the grinder can be		
		Right grinder	adjusted with this	menu.		
Milk	Module type	Type of the milk mo	odule – not installed	/ Coolbox /Fridge		
	Auto-Rinse time	Time for the autom	atic rinse after the l	ast delivered milk		
	Pump purge	Purge the milk pump circuit with the fridge 0=OFF				
	Milk rinsing	Renew hourly the milk in the milk tubes when having a cool box				
	Correction time	Delay of steam for the milk delivery after a milk auto-rinse				
	Rinsing time	Increase of the rinsing time in case of longer tubes (under counter installation)				
	Blowout time	Increase of the blowout time in case of longer tubes (under counter installation)				
	Milk temperature	Configuring and testing three different milk temperature (Fast speed – low temperature, low speed – high temperature)				
	Foam texture	Configuring three d	ifferent levels of foa	im texture		
	Left sensor / Single	Sensor type	Sensor type Off=no sensor; Switch = capacitive sensor; Level = pressure sensor			
		Capacity (I)	Capacity of the mil	k container		
		Calibration	Autocalibration	Starts the automatic calibration and sets the values for the milk level measurement		
			Zero level (cm)	Value is from the sensor down to the minimum level; will be set in auto calibration – should not be changed		
			High factor	Factors for the control of the milk pump speed. These		
			Medium factor	values will be set by the auto calibration and should not be		
			Low factor	- changed		
		Residual Milk	"Off" blocks all mil	k product, when milk level is too low;		
			"ON" blocks only t	he milk products, which cannot be done anymore		
		Warning level (cm)	Level of milk in the the function is dea	container, to activate the Low level-information; with 0.0 ctivated		
	Right Sensor	The right sensor has	s the same subment	as the left sensor. It will not be repeated.		
iSteam	iSteam module	iSteam installation				
	Foamed milk	Shut-off temp.	Shut-off temperate	ure of the foamed milk		
		Emulsion level	Emulsion level of t	he foamed milk		
	Steamed milk	Shut-off temp.	Shut-off temperate	ure of the steamed milk		
		Emulsion level	Emulsion level of t	he steamed milk		
	Auto purge	Activates the indica	tion to purge the iS	team after use		
	Auto purge time	Time after the last i	Steam use before «	Purge iSteam» is displayed		
Powder	Module type	Installation of Powo	ler module			



## Product setup

Water test	Delivers water for 10 sec. to the powder module -> measure volume and insert value at "Water amount"
Water amount	Amount of water delivered in 10 sec.
Fan stop time	Follow-up time of the van after the powder delivery
Left screw speed	Speed of the left screw drive (is normally at 100 %!) *
Right screw speed	Speed of the right screw drive (is normally at 100 %!) *
Mixer speed	Speed of the mixer (is normally at 100 %!) *
Mixer delay	Delay of the mixer after the water starts running
Powder delay	Delay of the powder delivery after the mixer is working
Stop mixer	Follow-up time of the mixer after the powder delivery
Auto rinse time	Time for the automatic rinse after the last delivered powder product
	*for encire enclose the motor encod can be reduced

\*for special application the motor speed can be reduced



## Machine setup

Function mode	Stand-by mode	Sets coffee machine in stand-by
	Payment mode	Sets coffee machine in payment system/register mode
	Self-service mode	Sets coffee machine in self-service mode
General	Language	Select the display language
	Buzzer	Activate buzzer
	Change manager password	Set a new manager password using 4 digits
	Change technician password	Set a new technician password using 4 digits
	Illumination	Activates machine light
	*Keyboard	Sets the number of product on a keypad machine
	Coffee powder alert	Activates the coffee powder alert by software sensor
	Grounds value	Amount of grounded coffee before «DRAWER FULL» is displayed
	Trolley unit	Trolley installation
Unit converter	Temperature	Selects the temperature unit
	Pressure	Selects the pressure unit
Preselection	Standard mode	Number of preselected beverages in Standard mode
	Payment mode	No. of preselected beverages in payment mode
Boiler settings	Steam boiler	Steam boiler installed
	Boiler steam pressure	Pressure set point of the steam boiler
	Reduced power	Power for the boilers; OFF: 2 boilers can work together; ON: only one boiler
		can work at the specific moment
	Coffee boiler type	Defines the type of coffee boiler (3 or 2.5 kW)
Factory settings	Brewing chamber	Definition of the brewing unit with 15 or 18 grams
	Lower Offset	These parameters are set with the «Auto calibration» of the brewing unit. The
	Upper Offset	should not be changed.
		Using the brewing unit L61 (15 gr) they should be "0"
	P1 out	Position of the upper piston (in number of turns) to eject the coffee cake
	P1 turns	Position of the upper brewing piston to brew coffee
	P2 turns	Position of the lower brewing piston to eject the coffee cake
	Autocalibration	Activates the automatic calibration and sets the values for the pistons
	Hot Rinsing	Activates hot water valve for rinsing: 0 = no hot rinsing
		100 = pulsed hot rinsing.
		Old milk system: activates rinsing with cold water and parallel steam
	Sensor Offset AS	Distance between the end switch and the photo sensor at the upper end of the AS - Do not change!
	Password: 2408	All grey fields are protected with an additional password
Data interface	Payment system type	Select the type of payment system
	Decimal point	Number of decimal points
	Coin value	Coin value #16 Value of each channel of the coin-checker
	Smart card number	ID number of the smart card to uniquely associate a smart card to a coffee machine
Remote control	Remote Control	Activate the connection for a tablet
	Interface	Defines the connection of the tablet (BYO-fix or BYO-flex)
Telemetry	Telemetry	Activates the telemetry
	Serial number	Displays the serial number to be used in the telemetry
Maintenance function	Initialization	Function to enable the first startup
		Switch off the heating elements of both boilers
	Heaters	
	Cool down	Cool down of the boilers



## Machine setup

indonne setap		
	Serial number	Serial number of the machine
	Insert the serial number	Insert the serial number of the machine
AS setting	Module Type	Activation of the automatic spout (AS)
	Crash behavior	",Continue"- the spout tries if it can move on even there is a resistance "Stop"- the spout does not move on
	Upper sensor height	Height of the sensor from the cup grid – currently not in use
	Cup distance	Value will only be set when AS with sensor.
	Cup height 15	5 heights for different cup sizes
Software version	**Touch Bootloader	Shows the version of the touch boot loader
	**Touch operating system	Shows the version of the touch operating system
	**Touch SW	Shows the software version of the touch
	**Touch message	Shows software version of the touch messages
	**Touch parameters	Shows the software version of the touch parameters
	Control board boot	Shows the software version of the control board boot
	Control board SW	Shows the software version of the control board
	HW Control board	Shows the hardware version of the control board
	Control board USB SW	Shows the software version of the control board USB
	Protocol version	Shows the protocol version
	Control board messages	Shows the messages version of the control board
	Control board parameters	Shows the parameters version of the control board
	Powder Module	Shows the version of the Powder module control board
	Version HW	Shows the hardware version

- \* Only for model Keypad
- \*\* Only for model Touch



#### Touch screen

Pages	Customize		Name	Page n	ame from selection list or enter custom names
	Press < <settings>&gt; to ac</settings>	cess submenu	Background	Backgr	ound color scheme
			Order	Set the	e order of the pages
			Visible	Activat	te page
	Time to home	Time page remair	ns visible before it a	automat	tically returns to home page
Backup	Backup Start	Starts backup afte	er confirmation		
	Restore setting	User Backup		Restor	es user backup files
			Clear backup me	mory	Delete all user backups
		Auto Backup		Restor	es auto backup files
			Clear backup me	mory	Delete all auto backups
		Default settings		Load th	he default settings (factory settings)
Energy saving	Screen saver	Picture time		Time p	er picture
		Start time		Time to	o start screen saver
		Transition mode		Mode,	how the pictures will appear
		Sequence		Up to 1	10 pictures can be selected
	Backlight	Time to reduce ba	acklight of display		
	Sleep Mode	Time to switch of	f display		
Promotion	Promo image	Used in self-servi	ce during drink pre	paratior	n - only if no video activated
	Promo videos	Used in self-servi	ce during drink pre	paratior	n
Technical Video	)				
QR Settings	Email address 15	Up to 5 mail addr	esses can be config	gured	
	Change email address	Email address car	n be insert with the	help of	an on screen keyboard
	QR Code Resolution	Resolution in thre	e levels - recomme	ended to	o use the "High"
Calibrate Touch screen		The calibration of cannot be found		nas to be	e done only when the buttons are moved and



#### Date + Time

Clock	Date mode	Defines date mode
	Set date	Set date with year, month and day
	Time mode	Defines time mode 12h or 24h
	Set time	Time setting
Auto power ON	Enable Auto power	Activates the auto power function - Touch: display shows an < <a>&gt; in the header</a>
	Standby after cleaning	Standby after cleaning can be enabled, disabled or set to be asked every time
	Sunday ON	Set the switch on time for Sundays
	Sunday OFF	Set the switch off time for Sundays
	Copy to all?	Copy Sunday settings to all weekdays

Each weekday can be set individually with the following menu options. Closing day - put ON and OFF on the same time.

## Cleanings settings

Cleaning time	Daily cleaning schedule
Block Machine	Activates the blocking the coffee machine if a cleaning is not performed within 2h from the cleaning time warning
Self-service cleaning The message for the daily cleaning in self-service mode; ON=message displayed OFF=no message of	
Flashing Reminder Red / blue flashing when cleaning is prompted	
Early cleaning	Allow the cleaning up to two hours before the set time. If ON – no reminder will appear on the set cleaning time, if OFF the reminder will appear anyway



#### Counters

		Coffee Coffee & Milk Milk Hot water	Number of coffee b Number of coffee b	beverage prepared since last reset beverages prepared since last reset & milk beverages prepared since last reset		
		Milk Hot water	Number of coffee 8	& milk beverages prepared since last reset		
		Hot water				
				verages prepared since last reset		
		:Ctoover for over a d	Number of hot wat	er beverages prepared since last reset		
		iSteam foamed		milk made using the iSteam foamed button		
		iSteam steamed		d milk made using the iSteam Steam button		
		Powder		beverages prepared since last reset		
		Powder & Coffee		& coffee beverages prepared since last reset		
		Powder & Milk		• & milk beverages prepared since last reset		
		Powder Coffee Milk		; coffee & milk beverages prepared since last		
			reset			
	Products	Displays the number of brewing of each beverage since last reset				
	Reset counters	Reset all product counters. It also shows the last date and time when reset counters made				
	Last reset made	Date of the last reset of bre	the last reset of brewing cycles			
Maintenance	Brewing group	Brewing cycles	Number of brewing	g cycles since last maintenance		
		Max cycles number	Number of brewinរួ OFF	g cycles after machine needs maintenance. 0 =		
		Max cycles time	Time in months aft	er which machine needs maintenance. 0 = OFF		
		No of cleanings since last reset	Shows the number	of cleanings since the last reset		
		Reset cycles	Reset the number of brewing cycles since last maintenance			
		Last reset made	Date of the last reset of brewing cycles			
	Water softener	Filter capacity		which the softener cartridge must be replaced. 0		
		Water used	Water used since la	ast maintenance		
		Reset filter	Reset number of lit	ers of water used since the last maintenance		
		Last reset made	Date of the last reset of the water softener			
	Cleanings counters	Coffee cleanings	Number of coffee cleanings since last reset			
		Milk cleanings	Number of milk cleanings since last reset			
		Reset cleanings	Reset the cleaning	counters		
	Lifetime counters	Туре	Total	Total amount of brewing's of all beverage		
			Coffee	Number of brewed coffee beverages		
			Coffee & Milk	Number of prepared coffee & milk beverages		
			Milk	Number of prepared milk beverages		
			Hot water	Number of prepared hot water beverages		
			iSteam foamed	Number of foamed milk made with iSteam foame		
			iSteam steamed	Number of hot milk made with iSteam steamed		
			Powder	Number of prepared powder beverages		
			Powder & Coffee	Number of prepared powder & coffee		
				beverages		
			Powder & Milk	Number of prepared powder & milk beverages		
			PowderCoffeeMilk	Number of prepared powder, coffee & milk beverages		
		Products	Displays the numbe	er of brewing of each beverage		
		Cycles		g cycles during coffee machine lifetime		
		Water				
		Cleanings	Coffee cleanings	Total amount of coffee cleanings		
		-	Milk cleanings	Total amount of milk cleanings		
		Water	Shows the liters of Coffee cleanings	water used during coffee machine lifetime Total amount of coffee cleanings		



#### Counters

Grinder	Left Grinder	Amount of coffee grind with the left grinder in kg
	Left max amount	Defines the amount of coffee before changing the blades
	Ref. Product left	Number of prepared reference products for the left grinder
	**Last reset made (left)	Shows date and time of the last reset for the left grinder
	Reset left	Resets the counter of the left grinder
	Right grinder	Amount of coffee grind with the right grinder in kg
	Right max amount	Defines the amount of coffee before changing the blades
	Ref. Product right	Number of prepared reference products for the right grinder
	**Last reset made (right)	Shows date and time of the last reset for the right grinder
	Reset right	Resets the counter of the right grinder
**Service Phone	Technician name	Possibility to insert contact data
	Company	Possibility to insert contact data
	Phone 1	Possibility to insert contact data
	Phone 2	Possibility to insert contact data
	Change contact info	Opens a window with onscreen keyboard to change the contact i

\*\* Only for model Touch



## Diagnostic

Errors	Last error list	Displays last 32 errors/warnings from most recent to oldest (resettable)			
	Reset last error list	Function to reset "Last e	Function to reset "Last errors list"		
	Total error list	Displays last 64 errors/warnings from most recent to oldest (not resettable)			
Tests	Valve Test	Brewing	Switch the brewing valve Y1		
		Bypass	Switch the bypass valve Y6		
		Steam boiler fill	Switch the steam boiler filling valve Y3		
		Steam right foamer	Switch steam valve for the right foamer Y5		
		Steam left foamer	Switch steam valve for the left foamer Y4		
		Pre steaming valve	Switch pre steaming valve Y18		
		Rinsing cold water	Switch the rinsing cold water valve Y10		
		Air valve	Switch the air valve Y13A		
		Milk rinse right	Switch the rinsing valve for right milk Y12B		
		Milk rinse left	Switch the rinsing valve for left milk Y12A		
		Tea cold water	Switch the cold water valve for Tea Y2A		
		Tea hot water	Switch the hot water valve for Tea Y2B		
		iSteam Air	Switch the air valve for iSteam Y14A		
		iSteam Steam	Switch the steam valve for iSteam Y14		
		Heating relay	Switch the heating element relay S2 Switch the valve Y21		
		Milk rinsing hot			
		PM: Hot water valve	Switch the hot water valve for powder module Y30		
		EX: Y20 CMF Milk	Switch the CMF milk valve Y20		
		EX: CMF Air	Switch the CMF air valve		
		EX: EV3 (AUX)			
		EX: DI1			
		EX: DI2			
		EX: Power BLE			
	Heater Test	Coffee boiler	Switch the heating element of the coffee boiler and displays the temperature in the coffee boiler E1		
		Steam boiler	Switch the heating element of the steam boiler and displays the pressure i the steam boiler E2		
		Flush steam boiler	Switch the filling valve of the steam boiler, the hot water valve and the pum		
		Brew chamber	Switch the heating element inside the group E3		
	Motor Test	Pump	Switch the pump M1		
		Right Grinder	Switch the right grinder M3		
		Left Grinder	Switch the left grinder M2		
		AUX output	Switch the auxiliary output		
		Right milk pump	Switch the right milk pump		
		Left milk pump	Switch the left milk pump M4		
		Upper piston	Moves the upper piston and displays the current position of the piston		
		Lower Piston	Moves the lower piston and displays the current position of the piston		
		Air Pump	Switch the air pump M6		
		AUX output	Switch the auxiliary output		
		PM: L screw drive			
			Switch the left screw drive of the powder module M30		
		PM: R screw drive	Switch the right screw drive of the powder module M31		
		PM: Mixer	Switch the mixer of the powder module M32		
		PM: Fan	Switch the fan of the powder module M33		
		EX: M14 AS	Switch the spout motor		
			Switch the mixer of the CMF module		



#### Diagnostic

	EX: M15 SAG left	The left SAG-motor can be moved		
	EX: M16 SAG right	The right SAG-motor can be moved		
Sensors	Steam boiler level	Shows level in the steam boiler B3		
	Steam boiler pressure	Shows the pressure (bit + value) in the steam boiler S13		
	Temp. Coffee boiler	Shows the temperature (bit + value) in the coffee boiler B1		
	Flowmeter	Function to brew a fixed number of impulses. Shows the counted impulses from the flowmeter P1		
	Milk level switch left	Shows the level switch of the single or in case of two kind of milks of the milk in the fridge B2		
	Milk level switch right	Shows the level switch of the right milk in the fridge B5		
	Milk level left/Single	Shows the level of the single or in case of two kind of milks of the left milk i the fridge B9		
	Milk level right	Shows the level of the right milk in the fridge B10		
	iSteam Temperature	Shows the temperature (bit + value) of the iSteam probe B4		
	Supply voltage	Shows the rectified voltage (bit + value) of the secondary winding of the transformer		
	Trolley tanks	Shows the status of the trolley tank sensor		
	Grounds drawer	Shows the status of the grounds drawer S12		
	Switch AUX 0			
	AUX2 Switch	Shows the status of the switch AUX2		
	PM: Door sensor	Shows the status of the door switch of the powder module S32		
	EX: AI (AUX)			
	EX: DI1			
	EX: DI2			
Button & LED	iSteam foamed button	Shows the status of the iSteam foamed button		
	iSteam steamed button	Shows the status of the iSteam steamed button		
	LED Milk foam	Switch the foamed iSteam LED		
	iSteam steamed LED	Switch the steamed iSteam LED		
	* Test	Test of the keypad – LED next to button lights up and the button number i shown in the display		
	Illumination	White Switch the white light		
		Red Switch the red light		
		Green Switch the green light		
		Blue Switch the blue light		

\* Only for model Keypad



## 6. Fault finding

## 6.1. List of errors

#### Error - Coffee machine is blocked

Code	Fault description	Solution
E01	RS422 broken link between control board and touch board	<ul> <li>Check connection between control board and touch board</li> <li>Check if control board is running -&gt; LED on board</li> <li>When leaving <diagnostic> it may happen that the error appears shortly – there is no problem</diagnostic></li> </ul>
E02	Short circuit +24V AUX trolley	<ul> <li>Check 24V AUX and trolley</li> <li>Check connection between trolley and coffee machine</li> <li>Check Fuse F1 on the power board</li> </ul>
E03	Short circuit +24V valves, brewing group heating element, milk sensor, air pump, relay milk pump	<ul><li>Check listed elements</li><li>Check cables and wiring</li></ul>
E04	Short circuit +5V card reader	Check listed elements Check cables and wiring
E06	Short circuit cash system	Check listed elements <ul> <li>Check cables and wiring</li> </ul>
E08	Short circuit +12V power board	Check power board
E09	Short circuit heating element relay	Check heating element relay – replace if necessary
E10	Heating element relay interrupted	Check heating element relay and cable – replace if necessary
E11	Overheating coffee boiler	<ul> <li>Check temperature sensor of coffee boiler with diagnostic</li> <li>Check power supply (triac)</li> <li>Check fuse F10 A + B</li> </ul>
E12	Overheating steam boiler	<ul> <li>Check heater of steam boiler with diagnostic</li> <li>Check level sensor</li> <li>Check Steam boiler filling valve</li> <li>Check pressure on the manometer</li> <li>Check power supply (triac)</li> </ul>
E13	Error during upper piston movement	<ul> <li>Check spindle motor with diagnostic – movement, switch function</li> <li>Brewing unit L61 and former version</li> <li>Check upper piston shaft</li> <li>Check also lower piston switch for proper movement</li> <li>Brewing unit BC18 (18 grams)</li> <li>Perform brewing group calibration</li> </ul>
E14	Error during lower piston movement	<ul> <li>Check spindle motor with diagnostic – movement, switch function</li> <li>Clean lower piston/sieve if dirty (blockage can cause error)</li> <li>Check thread of lower piston shaft</li> <li>Brewing unit L61 and former version</li> <li>Check lower piston shaft</li> <li>Brewing unit BC18 (18 grams)</li> <li>Perform brewing group calibration</li> </ul>
E15	CCI/CSI link between coffee machine and cash system interrupted	<ul><li>Check cables and interface</li><li>Check connection to control board</li></ul>



## 6.2. List of warnings

## Warning - Coffee machine works with limitations

Code Fault description	Solution
W01 Short circuit +12V light module	Check listed elements
	Check cables and wiring
W02 Short circuit +24V spindle motor	Check listed elements
	Check cables and wiring
W03 Short circuit +5V end switch or encoder spindle motor	Check listed elements
	Check cables and wiring
W04 Short circuit +12V pressure sensor	Check listed elements
	Check cables and wiring
W05 Short circuit +5V iSteam keyboard	Check listed elements
	Check cables and wiring
W06 Short circuit +5V flow meter	Check listed elements
	Check cables and wiring
W07 No signal from flow meter	Check flow meter with diagnostic
	Check water supply
	Check water pump and water pressure
	Check electric contacts
	Check the restrictor in the piston
	Check brewing valve
W08 Short circuit brewing valve [Y1]	Check valve with diagnostic
	Check cable from valve to control board
W09 Short circuit bypass valve [Y6]	Check valve with diagnostic
	Check cable from valve to control board
W10 Short circuit fill valve boiler [Y3]	Check valve with diagnostic
	Check cable from valve to control board
W11 Short circuit right steam valve or pinch valve [Y5]	Check valve with diagnostic
	<ul> <li>Check cable from valve to control board</li> </ul>
W12 Short circuit left steam valve [Y4]	Check valve with diagnostic
	Check cable from valve to control board
W13 Short circuit cold rinse valve [Y10]	Check valve with diagnostic
	Check cable from valve to control board
W14 Short circuit air valve [Y13A]	Check valve with diagnostic
VV 14	Check cable from valve to control board
W15 Short circuit fridge right milk valve [Y12B]	Check valve with diagnostic
	Check cable from valve to control board
W16 Short circuit fridge left milk valve [Y12A]	Check valve with diagnostic
	Check cable from valve to control board
W17 Short circuit air pump [M6]	Check pump with diagnostic
	<ul> <li>Check cable from pump to control board</li> </ul>
W18 Short circuit fridge right relay milk pump [K5]	Check relay with diagnostic
	Restart machine
	<ul> <li>Check cable from relay to control board</li> </ul>
W19 Short circuit fridge left relay milk pump [K4]	Check relay with diagnostic
W19 short en care mage lett relay mink pamp [k1]	Restart machine
	Check cable from relay to control board
W20 Short circuit 4TEA cold water valve [Y2A]	Check valve with diagnostic
	Check cable from valve to control board
W21 Short circuit 4EA hot water valve [Y2B]	Check valve with diagnostic
	Check cable from valve to control board
W22 Short circuit iSteam air valve [Y14A]	Check valve with diagnostic
	Check cable from valve to control board
W23 Short circuit iSteam steam valve [Y14]	Check valve with diagnostic
	Check cable from valve to control board



Code Fault description	Solution
W24 Short circuit AUX1 output	Check output with diagnostic
	Check cable from output to control board
W25 Short circuit brewing heater	Check heater with diagnostic
	Check cable from heater to control board
W26 Short circuit temperature sensor coffee boiler	Check temperature sensor with diagnostic
	Check cable from sensor to control board
W27 Temperature sensor coffee boiler interrupted	Check temperature sensor with diagnostic
	Check cable from sensor to control board
W28 Short circuit pressure sensor of steam boiler	Check pressure sensor with diagnostic and compare with manometer • Check cable from sensor to control board
W30 iSteam sensor interrupted	Check iSteam sensor with diagnostic
WS0 isteam sensor interrupted	Check cable from sensor to control board
W31 Short circuit iSteam sensor	Check iSteam sensor with diagnostic
WOT short chedit isteam sensor	Check cable from sensor to control board
W32 Timeout steam boiler filling (120 seconds)	Check filling valve boiler with diagnostic
	<ul> <li>Check if the water is connected and the tap is open</li> </ul>
	Check pump
	Check non return valve
	Check level sensor
W33 Timeout coffee boiler filling (80 seconds)	Check if the water is connected and the tap is open
	Install the machine according the installation manual!
	• Check pump pressure (< 10 bar in Diagnostic)
	Check pressure relief valve 11bar
	Check non return valve boiler inlet
	Brewing valve does not close
	Check Flowmeter
W34 Timeout steam boiler pressure (600 seconds)	Check heater steam boiler with diagnostic
	Check power supply
	Check temperature switch F11 A + B
	Check pressure sensor
W35 Timeout coffee boiler temperature (180 seconds)	Check heater coffee boiler with diagnostic
	Check power supply
	<ul> <li>Check temperature switch F10 A + B</li> </ul>
	Check temperature sensor
W36 Incompatibility between parameters and the SW- version	Switch off and on again – Repeat the SW update
	Use the latest version of the software from our download area
W37 Check the clock on the menu or on the control board	Check clock – adjust clock – check clock after some minutes
	When repeating the error message remove jumper J10 for 10
	min and place it again. Adjust clock.
W38 Incompatibility between the messages and the SW	Check SW and message version
W39 Interruption between control board and powder module	Check if powder module is switched on
	Check cable from powder module to control board of the coffee
	machine
W40 Short circuit +12V powder board	Check board of powder module
W41 Over temperature mixer motor	Check mixer motor with diagnostic
	Check cable from motor to control board
	Check if something blocks the mixer
W42 Short circuit mixer motor	Check mixer motor with diagnostic
	Check cable from motor to control board
W43 Overcurrent mixer motor	Check mixer motor with diagnostic
	Check cable from motor to control board
	Check if something blocks the mixer
W44 Over temperature left screw drive motor	Check left screw drive with diagnostic
	Check cable from motor to control board
	Check if something blocks the left screw drive
W45 Short circuit left screw drive motor	Check left screw drive with diagnostic
	Check cable from motor to control board



Code Fault description	Solution
W46 Overcurrent left screw drive motor	Check left screw drive with diagnostic
	Check cable from motor to control board
	Check if something blocks the left screw drive
W47 Over temperature right screw drive motor	Check right screw drive with diagnostic
	Check cable from motor to control board
	• Check if something blocks the right screw drive
W48 Short circuit right screw drive motor	Check right screw drive with diagnostic
	Check cable from motor to control board
W49 Overcurrent right screw drive motor	Check right screw drive with diagnostic
	<ul> <li>Check cable from motor to control board</li> </ul>
	Check if something blocks the right screw drive
W50 Hot water valve interrupted [J4]	Check hot water valve with diagnostic
	Check cable from valve to control board
W51 Fan interrupted [J6]	Check fan with diagnostic
	Check cable from sensor to control board
W52 Short circuit +24V hot water valve [J4]	Check hot water valve with diagnostic
	Check cable from valve to control board
W53 Short circuit +24V fan [J6]	Check fan with diagnostic
	Check cable from sensor to control board
W54 Flowrate too small	Check flowmeter of the coffee machine with diagnostic
	Check cables and wiring
	Check hot water valve powder module
W55 Check fridge	Check fridge
	Check cables and wiring
	Check correct working of milk valves and cold water valve
W56 SC +24V Milk pumps	
W57 SC Milk sensor or extension board	
W60 Communication error pressure sensor milk	Check pressure sensor for milk level measurement in diagnostic
W61 Communication error Extension board	
W62 AS crashed into an object (e.g. high cup)	Not shown on the display
W63 AS blocked for 10 min. due to errors	
W64 CMF milk valve Y20 interrupted	Check CMF milk valve with diagnostic
	<ul> <li>Check cable from the valve to the board</li> </ul>
W65 CMF air valve Y21 interrupted	Check CMF air valve with diagnostic
	<ul> <li>Check cable from the valve to the board</li> </ul>
W67 Short circuit CMF milk valve Y20	Check CMF milk valve with diagnostic
	Check cable from the valve to the board
W68 Short circuit CMF air valve Y21	Check CMF air valve with diagnostic
	Check cable from the valve to the board
W70 CMF mixer error	Check CMF mixer with diagnostic
	Check cable from the mixer to the board
W71 SAG error grinder left	Check left SAG motor with diagnostic
	Check cable from the motor to the board
W72 SAG error grinder right	Check right SAG motor with diagnostic
	Check cable from the ^motor to the board
1/72 AS arrar in unstrake or AS motor shorted	

W73 AS error in upstroke or AS motor shorted



## 7. Egro BYO

## 7.1. Tablet communication:

Activate the tablet in the menu «Machine setup», «Remote Control» «Remote Control».

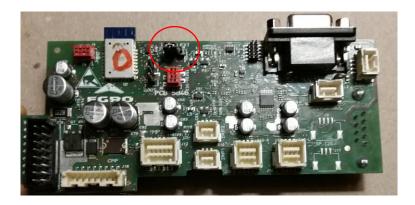
Interface:

- BYO fix is used for the build in tablet. -> the tablet has to be set to «USB-Mode»
  - → "Do not check if tablet is charging" has **not** to be selected in the App-> otherwise the tablet does not switch off, when the machine switch off.
- BYO flex (BLE) is used for an external tablet. -> the tablet has to be set on Bluetooth mode.
  - → "Do not check if tablet is charging" has to be selected in the App. -> General setting, when the tablet is in the Bluetooth mode and is not charged from the coffee machine.
- **CCI/CSI** is used by communication via the serial interface -> set the tablet to «USB-Mode»
  - → "Do not check if tablet is charging" has to be selected in the App.

#### Note:

When changing the communication from the serial communication to Bluetooth, this must be changed in the machine settings of the coffee machine and in the settings of the tablet. Furthermore, the jumper on the extension board must be adopted, as shown below:

Jumper positon on extension board left: Bluetooth Mode right: Serial connection (USB Mode)

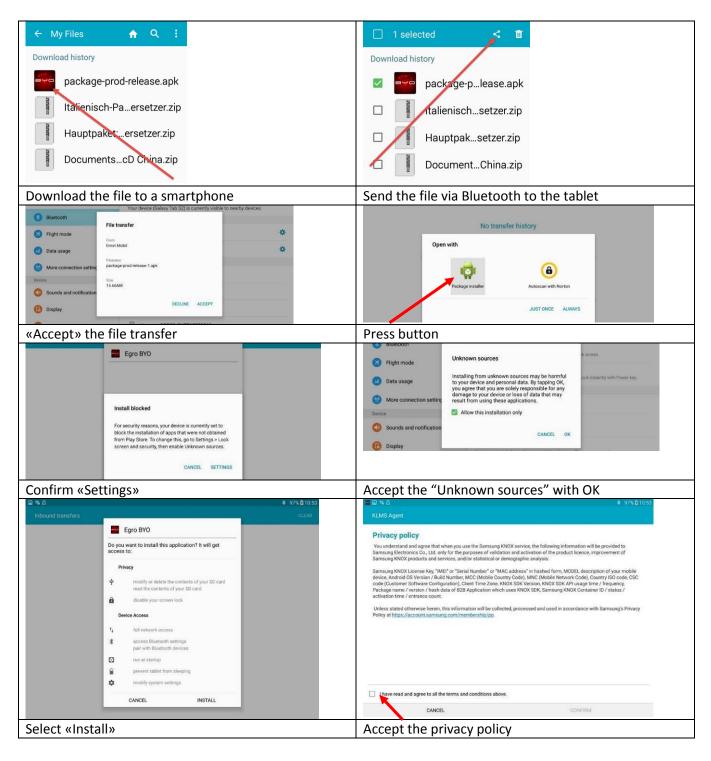




#### 7.2. Install new App on the tablet

If the BYO-App is running on a tablet it has to be stopped. Go to the App-menu "Settings" -> "Device Lock" and select "Exit device lock mode"

- Activate Bluetooth at the Smartphone and the tablet and connect the devices.
- Send the App via Bluetooth to a Smartphone.





## 7.3. Generate Backup and send to a smartphone

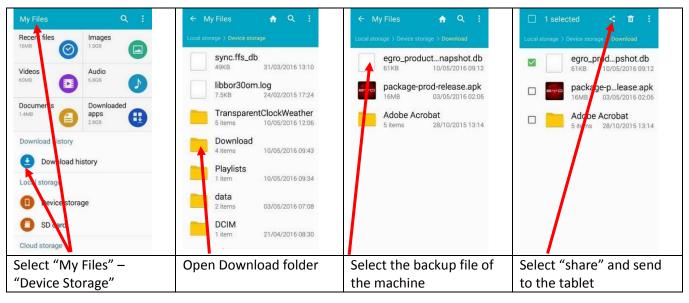
- Activate Bluetooth at the Smartphone and the tablet and connect the devices.
- Send the Backup-file via Bluetooth from the tablet to a Smartphone.

Clean Machine	CONNECTION SETTINGS			My Files			
-	Switch to USB mode			Local storage	Device storage +		
General Settings	Disconnect			~ 😑 Device storage	Device storage		
Interface Settings	DEVICE LOCK			Alarms	Name Android	Time V Type 23/03/20. Folder	Size 2 itoms
	Exit device lock mode			~ 🦳 Android	Podcasts	13/01/20 Folder	0 items
Products	DATABASE Backup Restore			cnlabSpeedTest	Pictures	13/01/20 Folder	0 items.
Machine Information				com.android.calendar.subs	Notifications	18/01/20 Folder	0 items
	COFFEE SOURCE NAMING Name for left coffee source			DCIM	Movies	13/01/20 Folder	0 items
Manuals		DEUTSCH (SCHWEIZ)		Documents	Alarms	13/01/20 Folder	0 items
		ENGLISH DEUTSCH (DEUTSCHL)	AND)	~ 🗾 Download	Music	13/01/20 Folder	1 item
		FRANCAIS		Adobe Acrobat	egro_product_db_snapshot.db	10/05/20 db	51.00KE
_	settings_enum_coffeesource_1	ITALIANO			egro_usb_log.txt	10/05/20 txt	367KB
lect «Backup»		SHARE D	DELETE MORE	Search backup	file and select	SEARCH VI	EW AS IN
Save and log		SHATE D	DELSTE MORE	My Files		SEARCH VI	EW AS M
elect «Backup»	Device storage + Device storage	Time Type	Size	My Files	file and select	Time <b>v</b> Type	Size
elect «Backup»  1 selected  Device storage	Device storage + Device storage	Time Type 23/03/20 Folder		My Files	file and select Device storage + Device storage		
elect «Backup» and I selected cool storage Device storage Alarms	Device storage + Device storage Name Android	Time         Type           23/03/20         Folder           13/01/20         Folder	Size 2. terns	My Files	file and select	Time <b>v</b> Type	Size 2 items
alected «Backup» alected alected alected bevice storage Alarms Android	Device storage       Device storage       Name       Android       Podcasts	Time         Type           23/03/20         Folder           13/01/20         Folder	Size 2 items 0 items	My Files	file and select	Time <b>v Type</b> 23/03/20Folder Folder	Size 2 items 0 items
Cocal storage  Device storage  Alarms  Alarms  Android  cnlabSpeedTest	Perior storage + Device storage Name Android Podcasts Pictures	Time         Type           23/03/20         Folder           13/01/20         Folder           13/01/20         Folder           13/01/20         Folder	See 2 Norma 0 Roma 0 Roma	My Files	file and select	Time V Type 23/03/20 Potter Folder	Size 2 items 0 items 0 items
elect «Backup»  se 1 selected  costi storage  Device storage  Aarms  Aarms  Android  cniabSpeedTest  com.android.calendar.sube	Perice storage +  Perice storage Name Android Podcasts Pictures Votifications	Time         Type           23.03/20         Folder           13/01/20         Folder           13/01/20         Folder           13/01/20         Folder           13/01/20         Folder	Sze 2.kms 0.tems 0.tems	My Files	file and select	Time + Type 23/03/20 Folder Folder DS file	Size 2 items 0 items 0 items 0 items
Alarms Android Contactional SpeedTest Contactional Contactions Co		Time         Type:           23/03/20         Folder           13/01/20         Folder           13/01/20         Folder           13/01/20         Folder           13/01/20         Folder           13/01/20         Folder           13/01/20         Folder	Size 2 forms 0 forms 0 forms 0 forms	My Files	file and select	Time   Tipe 23/03/22 Folder  Folder	Size 2 items 0 items 0 items 0 items
elect «Backups  lectad  lectad  belocted  bel	Device storage + Device storage Android Android Podcasts Pictures Notifications Alarms Alarms Ausic	Time         Type:           23/03/20         Folder           13/01/20         Folder           13/01/20         Folder           13/01/20         Folder           13/01/20         Folder           13/01/20         Folder           13/01/20         Folder	See 2 items 0 items 0 items 0 items 0 items	My Files	file and select	Time	Size 2 items 0 items 0 items 0 items 0 items 0 items



### 7.4. Send Backup-file from a smartphone to a tablet

- Activate Bluetooth at the Smartphone and the tablet and connect the devices.
- Send the backup-file via Bluetooth from the Smartphone to a tablet.
- Install the backup on the tablet



			NAS MORE		Clean Machine	CONNECTION SETTINGS	
	Device storage +			0-0	Grean MidChillie	Switch to USB mode	
<ul> <li>Device storage</li> </ul>	Device storage			<b>†</b> & <b>?</b>	General Settings	Disconnect	
Alarms	Name	Time v Type	Size	851A		DEVICE LOCK	
- Android	Android	23/03/20 Folder	2 itoma	( <b>三</b> 8)	Interface Settings	Exit device lock mode	
	Podcasts	13/01/20 Folder	0 items		Products	DATABASE	
cnlabSpeedTest	Pictures	13/01/20. Folder	0 items			Backup Restore	
com.android.calendar.subs	Notifications	13/01/20 Folder	0 items	Ø	Machine Information	COFFEE SOUPLE NAMING	
CIM	Movies	13/01/20 Folder	0 items		Manuals	Name for eff coffee source	
Documents	Alarms	13/01/20 Folder	0 itema	1 Contra		Live Mühle	
Composed Download	Music	13/01/20. Folder	1 item			settings_enum_coffeesource_1	DEUTSCH (DEUTSCHLAND)
Adobe Acrobat	egro_product_db_snapshot.db	10/05/20 db	51.00KB			settings_enum_coffeescurce_1	FRANCAIS
STORAGE USAGE	egro_usb_log.txt	10/05/20 txt	367KB		Save and Loout	settings_enum_coffeesource_1	ITALIANO
he App recogniz	ze only one backu	-	th a clear		BYO App.	.kup me, use m	e button «Restore» i
efined name.		-	th a clear			.kup me, use th	
he App recogniz efined name.	ze only one backu	password	th a clear			.kup me, use m	
he App recogniz efined name.	Ze only one backu	password ION	th a clear			.kup me, use m	
he App recogniz	Ze only one backu	password ION				.kup me, use m	
he App recogniz efined name.	Allow cleaning without Allow cleaning without MACHINE CONFIGURATI Separate water output CONNECTION SETTINGS Switching the connection m	password ION ode will automatica				.kup me, use m	
he App recogniz efined name.	Allow cleaning without Allow cleaning without Allow cleaning without MACHINE CONFIGURATI Separate water output CONNECTION SETTINGS Switching the connection m tablet from the machine. Bluetooth mode USB	password ION ode will automatic: mode				.kup me, use m	
he App recognize efined name.	Allow cleaning without Allow cleaning without Allow cleaning without MACHINE CONFIGURATI CONNECTION SETTINGS Switching the connection m tablet from the machine. Bluetooth mode USB Disconnect	password ION ode will automatica				.kup me, use m	
he App recognize efined name.	Allow cleaning without Allow cleaning without MACHINE CONFIGURATI Separate water output CONNECTION SETTINGS Switching the connection Bwitching the connection Switching the connection Build continue output Build connect Disconnect SCREEN BRIGHTNESS	password ION ode will automatic: mode 51%				.kup me, use m	
he App recogniz efined name.	Allow cleaning without Allow cleaning without Allow cleaning without CONNECTION SETTINGS Switching the connection m tablet from the machine. Bluetooth mode USB Disconnect SCREEN BRIGHTNESS	password ION ode will automatic: mode 51%				.kup me, use m	



Note: For BYO-fix both options are **not** selected For BYO-flex both options are selected



## 8. Egro ONE Multi Drink

#### 8.1. Prepare machine

We recommend to order the machine as Egro ONE Multi Drink. However, every **Egro ONE Touch** can be converted to an Egro ONE Multi Drink.

Egro ONE Multi Drink does not support the options AS, CMF und SAG, and not the necessary extension board. If these options are built in the machine, we disadvise a modification towards an Multi drink machine.

Preconditions for the conversion are:

- Central hot water outlet (retrofit able)
- NO hot water outlet on the side
- Bypass single cup (option to order or retrofit)
- Multi Drink SD-card

This description shows the mechanical/hydraulic change.

The central hot water connects to the outlet with the connector no. 10-701-019, which can be ordered in our spare parts portal. Together with the bypass option, make the conversion, to have the following situation in the machine. We recommend to completely remove the hot water outlet on the side, as it will not be used anymore.



Outlet with central hot water



Bypass in the machine



#### 8.2. Concept Multi Drink

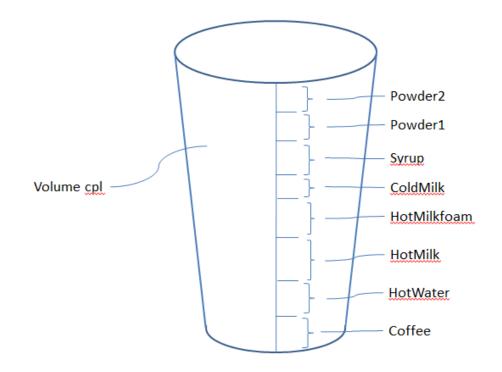
The concept of Multi Drink is based on a volume, which is the cup size (S, M, L and XL).

For this, four different **coffee** recipes are available, which are defined in the <Basic Recipes> with the amount of ground coffee and the water volume.

The product is composed out of ingredients, e.g. Cappuccino is made out of coffee and milk. Therefore, we assign coffee and milk to it.

A cup with size L uses automatically the coffee recipe for size L with its fix volume of water. The preparation of all other ingredients like milk, milk foam, hot water, etc. are calculated from the Multi Drink software based on the percentage of the recipe.

For this calculation, it is essential to have the product set up done for all ingredients. The product set up/dosing must be done with the product used in daily condition.





#### 8.3. Software

The software of the Egro ONE Multi Drink is based on the software of Egro ONE and only some menus are different. We publish here only the menus being different; for all other menus, we refer to the menus in Chapter 5.

#### Product configuration

The parameters in the "Basic" section are valid for all recipes. The adaptation of a value has an influence on all beverages using this parameter/value.

Basic	Coffee recipes	Extra shot	Туре	Define the type of Extra shot - "Xtra" will create a second shot with defined values; "Double" makes the selected coffee product a second time.		
		Left grinder	1. Select cup size S, M,	L, XL, Xtra (if configured)		
		Right grinder	2.Make settings			
		Both grinders	Grams	Ground coffee dose		
			Impulses	Number of flow meter impulses (1 imp. = 0.5 cl)		
			Pre-Infusion	Pre-Infusion in four levels		
			Pressure	Three levels of tamping pressures		
			Bypass	Number of flow meter impulses (1 imp. = 0.5 cl)		
	Volumes	Size	Defines the size for the	e four available cups. The cups will be filled up to this value		
			based on the individua	•		
		Topping	Volume reduction	Defines the volume reduction in % from the basic		
		Coffee volume	S, M, L, XL, Xtra	volumes to add toppings by hand Defines the coffee volume for the available cups and the		
		conee volume	5, W, L, AL, Alla	Xtrashot.		
		Milk values	The basic values define	e the delivery in a certain time. The delivered product must		
			be measured and the	value adjusted.		
			Hot milk	Volume of milk or milk foam delivered		
			Warm milk			
			Tempered milk			
			Cold milk			
			Fine milk foam			
			Medium milk foam			
			Coarse milk foam			
			Test milk	Button to start the milk test		
			Milk correction right	Factor for correcting the amount in the cup, if the used types of milk have different foaming behavior. The left milk will be used as reference.		
			Milk correction both	Factor for correcting the amount in the cup. Should only be adjusted if the correction of the right milk was adjusted.		
		Water values	The basic values define be measured and the v	e the delivery in a certain time. The delivered product must		
			Cold water	Volume of water delivered and button to start each water		
			Test cold water	test individually		
			Warm water	—		
			Test warm water	—		
			Hot water			
			Test hot water			
		Powder values	The basic values define the delivery in a certain time. The delivered product must			
			be measured and the	value adjusted.		
			Water	Volume of water delivered for powder preparation		
			Test water	Button to start the water test		
			Powder left	Volume of powder left with water delivered		
			Test powder left	Button to start the powder test left		
			Powder right	Volume of powder right with water delivered		



#### Product configuration

		Test powder right	Button to start the powder test right
Prices	Xtra	Price S XL	Price for the Extra-shot
	Topping	Price S XL	Price for additional option, like toppings, cream etc.

Here the availability of the product groups will be defined. For example, an Espresso: XL makes no sense and no powder will be used. So the size XL and all powder options will not be activated.

Product group	Product 1 28	Туре	Beverage type: Filters	s the icons and product parameters			
		lcon	Icon selectable by a set of icons filtered by the parameter $\ll$ Type $\gg$				
		Name	Select from a list of names or enter custom names				
		Promotion	Promo image	Used in self-service during drink preparation — only if no video activated			
			Promo videos	Used in self-service during drink preparation			
		Categories	Size S	Defines the available size for the product group			
			Size M				
			Size L				
			Size XL				
			Standard size	Defines the standard size for the product group - must be activated before			
			Left grinder	Defines the available grinders for the product group			
			Right grinder				
			Both grinders				
			Standard grinder	Defines the standard grinder for the product group - must be activated before			
			Left milk	Defines the available milk for the product group			
			Right milk				
			Both milks				
			Standard milk	Defines the standard milk for the product group — must be activated before			
			Left powder	Defines the available powder selections for the product			
			Right powder	group			
			Both powders				
			Standard powder	Defines the standard powder for the product group - must be activated before			
			Xtra	Defines if the xtra-shot is available for this product group			
			Topping	Defines if the volume reduction is available			
		Recipe	Sequence Coffee	Selection in which sequence the product components will			
			Sequence milk	be delivered, defined by numbers. Missing numbers create a pause in the preparation. The time bases will be adjusted in the basic values.			
			Milk part	Percentage of the beverage, together with ≪Powder part≫ it cannot be more then 100. When both values together are below 100%, the cup can be filled up with water			
			Milk temperature	Three milk temperatures to select			
			Cold milk	Cold milk delivering instead of steamed milk			
			Milk foam	% of foaming milk. 0% = hot milk, 50% first hot milk then milk foam, 100% = milk foam			
			Foam texture	Three level of foam texture quality			
			Sequence powder	Selection in which sequence the product components will be delivered, defined by numbers.			



#### Product configuration

	Dowdor port	Dereenters of the houseness together with «Mill nort» it
	Powder part	Percentage of the beverage, together with $\ll$ Milk part $\gg$ it
		cannot be more then 100. When both values together are
		below 100%, the cup can be filled up with water
	First Powder	Selection if right or left powder is first delivered
	Powder mix	50% both powder in use; 100% only right powder; 0%
		only left powder
	Sequence water	Selection in which sequence the product components will
		be delivered, defined by numbers.
	Water temperature	Temperature of the hot water
	Volume reduction	Volume correction to adjust the volume of the specific
		recipe (should only be used in exceptional cases)
Price	S, M, L, XL	Product price for each size

#### Sequence of the product

The sequence for the different ingredient for the product is defined with numbers. Each missing numbers create a pause of 3 seconds in the preparation.

#### Cappuccino

Product settings:	Sequence of preparation:
Sequence Coffee: 1	Coffee (Espresso)
Sequence Milk: 2	Milk and Milk Foam

#### Latte Macchiato

Product settings:	Sequence of preparation:
Sequence Coffee: 4	Milk and milk foam
Sequence Milk: 1	Pause of 9 seconds
	Coffee

#### Espresso

Product settings: Sequence Coffee: 1 Sequence of preparation: Coffee (espresso)

#### White coffee

Product settings:SetSequence Coffee: 1CoSequence Milk: 1Co

Sequence of preparation: Coffee (espresso) and milk at the same time



#### Touch screen

Page view	Time to home	Time page remains	s visible before it automatically returns to home page				
	Family page	It is possible to generate up to 6 family pages. Pages without products will not be displayed. The layout is given, cannot be changed. New pages will be set automatically but the sequence can be modified.					
		Visible	Visible Activate page				
		Name	The name of the page as it will be show on the start page				
		lcon	Icon, which will be shown on the start screen				
		Color	Background color for the icon on start page / product f				
		Position	Position of the icon for the family page on the start page				
		group and the pos the latest position To remove a produ	an be added to each page. New products can be added wi ition. New product groups can be assigned to every positio will be used. uct, you have to select it, press the <remove> button and e page and the product is gone.</remove>	on, automatically			
Backup	Backup Start	Starts backup after	r confirmation				
	Restore setting	User Backup	Restores user backup files				
			Clear backup memory Delete all user backups				
		Auto Backup	Restores auto backup files				
			Clear backup memory Delete all auto backups				
		Default settings	Load the default settings (factory settings)				
Energy saving	Screen saver	Picture time	Time per picture				
		Start time	Time to start screen saver				
		Transition mode	Mode, how the pictures will appear				
		Sequence	Up to 10 pictures can be selected				
	Backlight	Time to reduce backlight of display					
	Sleep Mode	Time to switch off display					
Technical Vide	0						
QR Settings	Email address 15	Up to 5 mail addre	Up to 5 mail addresses can be configured				
	Change email address	Email address can	be insert with the help of an on screen keyboard				
	QR Code Resolution	Resolution in three	e levels - recommended to use the "High"				
Calibrate Touc	h screen	The calibration of the touch screen has to be done only when the buttons are moved and cannot be found for the use of it.					



#### 8.4. Egro ONE Touch -> Egro ONE Multi Drink

For the conversion of an Egro ONE to a Multi Drink machine, the requirements as written in the beginning of chapter 7 must be fulfilled.

- Check software version it has to be THIS release: SW\_C5-01\_T5-00\_M5-00
- If the SW-version is different, bring the machine to the version (Version available in the technical download area)
- Migrate the machine from Egro ONE Touch to Egro ONE Multi Drink (Upgrade via USB-pen and the Load&Show menu)
- At the end, do not restart the machine (just remove the USB-pen) and wait until the rinsing is finished.
- Switch off the machine
- Open front door, loosen the four screws of the touch screen and take it out
- Change the SD-card (see below)
- Place the touch screen in its frame, tighten the screws, close the front door
- Switch on the machine
- Now you have an Egro ONE Multi Drink
- Perform an initialization via Machine Setup/Maintenance function/Initialization
- Load the <Factory settings>
- Configure the machine at customer request

#### 8.5. Egro ONE Multi Drink -> Egro ONE Touch

The conversion from a Multi Drink machine to an Egro ONE Touch with the standard interface need no special requirement. Follow the sequence below with care!

- Switch off the machine
- Open front door, loosen the four screws of the touch screen and take it out
- Change the SD-card (see below)
- Open the left side of the housing
- Plug in USB adapter and keypad to control board.
- Switch on the machine
- Load SW and message file to control board
- Set jumper W4 to "Reset"
- Load SW and message file to the touch screen Attention use package without control board software!
- Switch off the machine and remove the jumper
- Close the housing
- Switch on the machine
- Upgrade to the current SW-version



## 8.6. How to replace SD card

# Before replacing the SD-card check the SW-version! From Touch Screen SW version 3.00 with OS #388 or higher, the SD card works without limitation.

All previous versions cannot be supported.

- Switch off the machine and disconnect the main power supply.
- Unmount the touch screen from the front panel.
- Remove the old SD card from card holder (J7 connector)
- Put the new SD card in the card holder
- Take care that SD card is properly mounted and fixed
- Mount the touch screen back in the front panel
- Connect the machine to the power supply
- Switch the machine on
- When the machine is ready to use, update the software
- Check the latest SW version on www.ranciliogroup.com/Support
- Consider the update information

SD-cards can be ordered as spare parts





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