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Notification intensity levels

There are four different levels of notification intensity within this manual, as identified by the signal words DANGER, WARNING, IMPORTANT, and NOTE. The level of risk and importance of the notification is determined by the following definitions. Always observe the warnings to ensure safety and prevent potential injury and product damage.



Important:

Alerts against unsafe practices. Observe *Important* notifications to ensure food safety, prevent possible minor personal injury, or damage to the machine.



WARNING:

Indicates a potentially hazardous situation which, if the WARNING is ignored, could result in serious injury or even death.



DANGER:

INDICATES A IMMINENTLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, WILL LIKELY RESULT IN SERIOUS INJURY AND EVEN DEATH.



Note:

Gives additional information which may be helpful during the operation, routine maintenance, and cleaning of the machine.



Introduction

Thank you for choosing a CARAT espresso machine. We hope you enjoy it!

- Read this user manual carefully before starting to use the machine.
- This manual contains important instructions regarding safe intended use of the machine.
- Do not discard this manual, it will be useful for future reference. If damaged or lost, request a copy from the manufacturer.

General instructions

- Machine installation and certain maintenance operations should only be performed by qualified service personnel.
- All safety instructions and warnings contained in this manual should be observed at all times to ensure safe installation, use, and maintenance.
- Do not attempt to remove covers or safety shields to access the interior of this machine or make repairs. Repairs should be made by an authorised technician or service centre.
- Owners are liable for ensuring that users have been properly trained to operate the machine and understand the potential risks involved.
- The owner or installer will be liable for all nonauthorised modification of the machine.
- Non-authorised alteration or modification

- of the machine will immediately void the manufacturer's warranty.
- This manual references the machine at the time of sale. The commercial availability of subsequent versions including modifications, upgrades or adaptations does not oblige the manufacturer to apply any changes to this machine, nor is it obliged to update the documentation supplied.
- The manufacturer reserves the right to withdraw currently available manuals whenever deemed appropriate and reasonable.
- Periodically, some updates and changes may be required for this machine. In this event, a technician will be responsible for ensuring the change is made in accord with manufacturer's specifications.

Warnings

Note: The manufacturer is not liable for damage to persons or property resulting from failure to follow the instructions and warnings listed below when installing and using this machine.

- Install the machine in a horizontal position and away from heat sources and flammable objects.
- This machine should only be installed on a water-resistant work surface that is capable of adequately supporting the machine's weight.
- Place the machine in a location accessible only to personnel trained to operate it.
- Keep all hazardous packaging materials, such as plastic bags, styrofoam, and staples, out of reach of children.
- Plug the machine into a properly installed, earth grounded electrical outlet with line voltage that matches the specifications for the machine.
- Ensure that the power supply voltage does not fluctuate by more than 6%.
- Position the power cable so that users cannot

- trip over it. Keep the power cable away from sharp edges and heat sources.
- Children should never be allowed to play with the machine.
- This appliance is not suitable for installation in an area where a pressure washer may be used.
- Do not use the machine outdoors, where it would be exposed to severe weather or extreme temperatures..
- If the power cable is damaged, it may only be replaced by the manufacturer or its approved service technician.
- Do not remove or disable any of the mechanical, electrical, or thermal protection safety equipment.



- In case of emergency, (e.g., the machine catches fire or becomes unusually hot or noisy), disconnect the power immediately and turn off the water supply.
- If the machine is not going to be used for an extended period of time, disconnect the power. When disconnecting the power, pull the plug rather than the cable.
- When packed for storage, store the machine in a dry place with an ambient temperature above 5°C. Boxes may be stacked up to three

- units high of the same model. Do not place other heavy items on top of the box.
- If the machine is likely to be exposed to temperatures below 0 °C during handling and transport, make sure that service personnel empty the boiler and water system. (The machine's boiler and water system is empty when delivered from the factory.)
- To ensure fault-free machine operation, only use manufacturer-approved replacement parts and accessories.

Precautions

- Before performing maintenance and/or moving the machine, disconnect the machine from the power supply and wait for it to cool down.
- Do not place any liquids on the machine.
- This appliance must not be cleaned with a pressure washer.
- Never immerse the machine, plug or power cable in water, as there is a risk of electric shock.
- Do not touch the machine's hot surfaces or dispensing equipment.
- Do not touch the machine if your hands or feet are wet.
- Do not operate the machine if any part except the dispensing equipment is wet.
- Place the machine out of reach of children.
- This appliance can be used by children from age 8 and above and persons with reduced

- physical, sensory, or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Children shall not play with the appliance.
- Cleaning and user maintenance shall not be made by children without supervision.
- Do not use the machine if the power cable or plug is damaged, or the machine has been dropped. Contact a service technician for repairs or to ensure that it is safe for use.
- Do not block the vents with rags or other objects.
- Do not insert foreign objects into the vents.
- Check the drain regularly to make sure that waste water is emptying properly.

Intended use

- The coffee machine has been designed and manufactured to make espresso coffee and other hot drinks (e.g., steaming and frothing milk). Do not use it for any other purpose.
- The machine is intended to be used by trained personnel for preparing foodstuffs.
- This machine is not intended for use in industrial kitchens, domestic kitchens, or similar locations
- The manufacturer will not be held liable for damage to persons or property due to incorrect, improper or negligent use by nonprofessional personnel.

- To ensure optimal performance, install the machine in a location where these parameters will not be exceeded:
 - Maximum permissible inlet water pressure:
 600 KPa (6 Bar)
 - Minimum permissible inlet water pressure: 200 KPa (2 Bar)
 - Maximum inlet water temperature: 40°C
 - Ambient temperature is between +10 °C (min.) and +40 °C (max.).



Carat IGR

EA CTC	CARAT IGR		
FACTS	Standard	Turbo Steamer	
Steam wand	2pcs	lpc	
Hot water outlet	lpc	lpc	
Turbo steamer	None	lpc	
Electronic temperature control	Yes		
Temperature control by group	Yes		
Programmed via display	Yes		
Stand by mode	Yes		
Height, width, depth	620, 586, 563mm		
Boiler volume	6L		
Power supply	220-240V IN~ 2850W 50/60 Hz (EAED-C32B-12AM, EAED-C41B-12AM)	220-240V IN~ 2850W 50/60 Hz (EAED-C61B-12AM)	
Water connection	3/8" Internal thread		
Machine weight (kg)	45kg		
Steam boiler operating pressure	Between 0.8 and 1.2 bar		
Ambient noise	< 70 db		

Accessories

	2-spouts portafilter	l-spout portafilter	55-cm inlet hose	Blind gasket	Drainage tube (150 cm)
MODEL					
CARAT IGR	l unit	I unit	l unit	l unit	l unit



Carat 2GR

		CARAT 2GR		
FACTS	Standard	Turbo steamer	Turbo steamer + 3Boilers	
Steam wand	2pcs Ipc		ос	
Hot water outlet	Ірс Ірс		ос	
Turbo steamer	None Ipc		ос	
Electronic temperature control	Yes			
Temperature control by group	Yes			
Programmed via display	Yes			
Stand by mode	Yes			
Height, width, depth	620, 774, 563mm			
Boiler volume	II.5L		11.5+2×1.5 L	
_	220-240V IN~ 3200 W 50-60 Hz	220-240V IN~ 3250 W 50-60 Hz (EBEE-D61B-12AM)	380-415V 3N~ 4850W 50-60Hz	
Power supply	(EBEE-D32B-12AM, EBEE-D41B-12AM)	380-415V 3N~ 4850W 50-60Hz (EBGE-G61B-12AM)	(EFGE-G61B-12AM)	
Water connection		3/8" Internal thread		
Machine weight (kg)	63kg 68kg		68kg	
Steam boiler operating pressure	Between 0.8 and 1.2 bar		r	
Ambient noise	< 70 db			

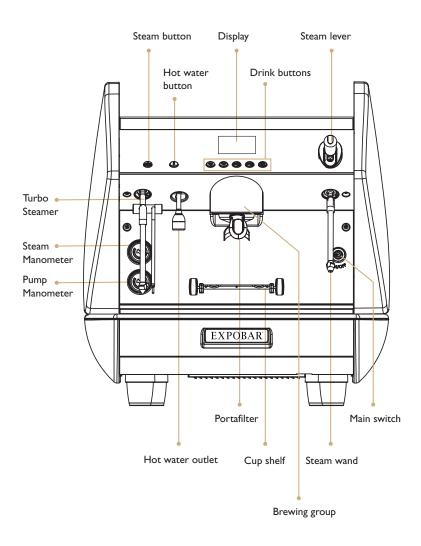
Accessories

	2-spouts portafilter	l-spout portafilter	55-cm inlet hose	Blind gasket	Drainage tube (150 cm)
MODEL					
2GR	2 unit	l unit	I unit	l unit	l unit



Front view of the machine

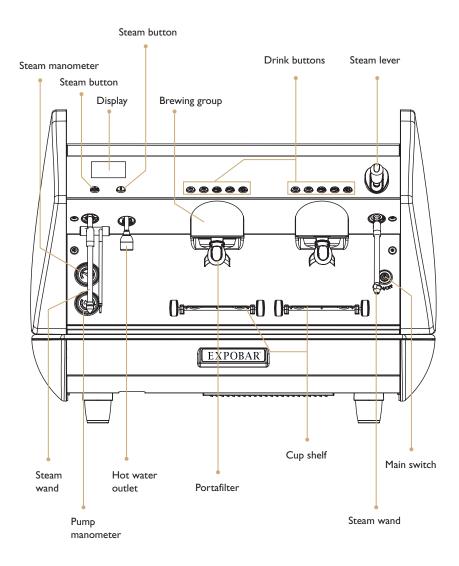
Carat IGR





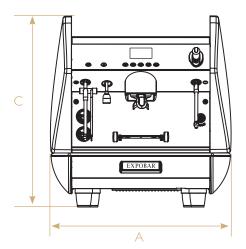
Front view of the machine

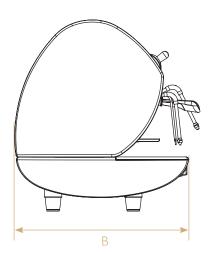
Carat 2GR





Carat IGR

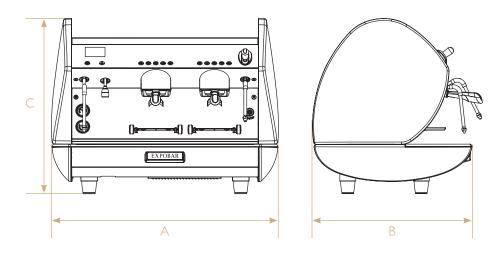




Model	А	В	С
Carat IGR standard	586mm	563mm	620mm
Carat IGR turbo steamer	586mm	563mm	620mm



Carat 2GR



Model	А	В	С
Carat 2GR standard	774mm	563mm	620mm
Carat 2GR turbo steamer	774mm	563mm	620mm



Packaging

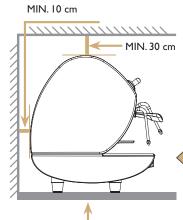
- The machine is shipped in a custom-designed carton which utilizes model-specific polystyrene cushions to protect it from damage.
- The machine's carton features standardized handling symbols to explain proper shipping and storage methods.
- The machine must remain in a horizontal position during the transport. Do not store or handle the machine except on its feet.
- During transport protect the carton and machine from impact drops, crushing, shocks, moisture and exposure to extreme temperature.

Delivery inspection

- Upon receipt and delivery ensure that the machine is in the exact condition described in the
 enclosed documentation, and that all accessories are included. Missing items should be reported to
 the manufacturer or dealer immediately.
- Damage caused during transport should be reported to the shipping agent and the machine's distributor immediately.
- Packaging materials are potentially dangerous and should be kept away from children.
- The carton and all packing materials are recyclable and should be returned to a recycling center for disposal.

INSTALLATION AND START UP

Positioning



Install within 0-3° horizontal.

- Install the machine on a level, sturdy, and water-resistant surface approximately 110cm above floor level for ease of access and usage.
- Adjust the feet to ensure that it dispenses coffee evenly to all cups.
- Ensure enough free space is available above (>30cm) and behind (>10cm) the machine to ensure easy cleaning and maintenance and adequate ventilation.
- Do not install the machine if it is wet or damp. Allow it to dry completely and ask a service technician to ensure that none of the electrical components have been affected.

Note:

Leave an air gap of at least 30cm above the machine and 10cm behind it to ensure adequate ventilation. The machine must be installed within 3° of horizontally level front-to-back and side-to-side to ensure proper hydraulic function and drainage. Confirm with a spirit level or digital angle gauge.



Electrical installation



The machine should only be connected to the power supply by qualified personnel. The following safety instructions should be obeyed at all times:

- Ensure that the electrical requirements stated on the TECHNICAL SPECIFICATIONS (pages 7 - 8) match the specifications of the power supply at the outlet.
- Ensure that the domestic electrical supply where the machine is being installed is rated for and able to provide the power required by the machine. Insufficient power supply, wiring, grounding, or insulation can result in overheating and possibility of fire.
- The coffee machine must be connected to an earth grounded electrical outlet that complies with the regulations in force in the country of installation.
- Ensure that a circuit breaker engineered for the power consumption of the machine is installed to protect the domestic electrical supply, as specified on the ratings plate located under the drip tray.
- Do not connect the machine to the domestic power supply via extension cords, plug adapters, or shared outlets.

The manufacturer will not be held liable for damage to persons, animals or property resulting from incorrect installation of the coffee machine.

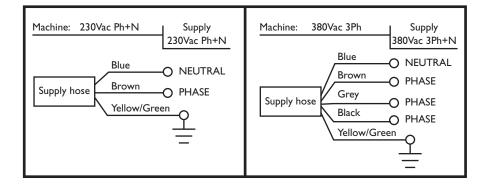


DANGER!

If the mains cable or plug is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid **SERIOUS INJURY OR DEATH!**

Connection types

Connect the machine according to the specification on the ratings plate located under the drip tray.





Water connection

- Connecting the machine to the domestic water supply must be performed by a qualified person.
- Purge at least 20 liters of water from the domestic water supply before connecting the machine to it to flush out any debris that may be in the plumbing system that would otherwise accumulate inside the boilers.
- The domestic plumbing system should be fitted with a brass 3/8" NPT male pipe fitting and an in-line shut-off valve. Connect the 180cm water inlet hose included with the machine to the domestic water supply and tighten the line fittings with a wrench to 15 ft. lbs. / 20N-m.
- Only use safe drinking water with a hardness rating between 5°fH and 8°fH (French hardness degrees) or 20 to 32 ppm (parts per million as calcium). If the hardness value is below this limit, corrosion of hydraulic components is likely. If the value is higher, lime-scaling inside the boiler will occur. In both cases, the proper function of the machine and quality and taste of the coffee will be negatively affected.
- If necessary, connect the machine to a water softener to reduce water hardness using the flexible 55cm hose included in the accessory box.
- Connect one end of the corrugated drain tube to the drain cup in the machine, connect the other end to the plumbing drainage system in the installation area.

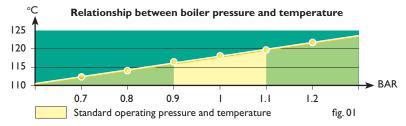


Imbortant:

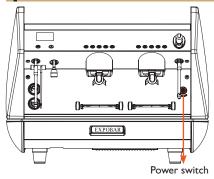
- Only use the hoses supplied with the machine. Never reuse damaged hoses.
- Ensure that the drainage tube is not twisted and that it is below the level of the drain cup.

Pressure and temperature

- Boiler pressure is directly controlled by water temperature (fig. 01).
- This machine is fitted with a pressure gauge that displays the boiler pressure, if the machine is equipped with a digital display it will also indicate water temperature.



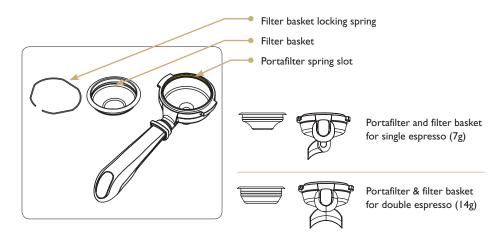
Starting the machine



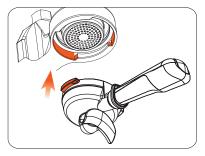
- Open the machine's water supply valve.
- Turn on the main power switch.
- Press a drink button at the control panel on each group, wait until water comes out continuously from each of them. This ensures that the heat exchangers in the machine are being correctly filled.
- Open the steam lever to release the air trapped in the boiler.
- The red lamp indicates that the boiler is heating. The lamp switches off automatically when the machine reaches operating temperature.
- The machine is now ready to use.



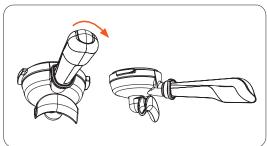
The portafilter set



Inserting the portafilter in the group



 Align the portafilter's two flanges with the two slots in the group housing.



Insert the portafilter and rotate it counterclockwise until the handle is approximately perpendicular to the face of the coffee machine.



 Portafilter not fully inserted.



Correct position.



X

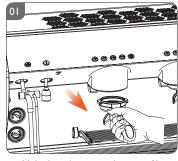


Espresso brewing



Important:

Always keep the portafilter inserted in the group to keep it warm. This is important to maintain an optimal temperature when the espresso is dispensing.



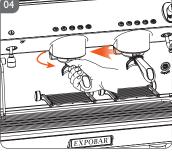
Unlock and remove the portafilter from the group head.



Fill the filter basket with espresso-grind coffee (amount will differ depending on filter basket size). For best results use only freshly ground espresso beans.



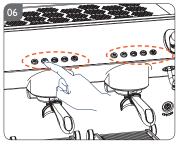
Press the coffee with the coffee tamper.



Insert the filled portafilter into the group head and lock it into the correct position.



Place the cup(s) under the portafilter outlet(s).



Select the desired option from the drink buttons.

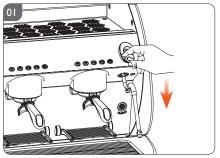


WARNING!

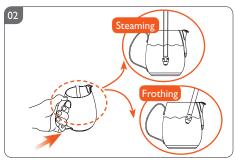
Never try to open the portafilter while the machine is in operation! The pressurised hot water could cause scalding or serious injury. After dispensing has finished, wait at least 3 seconds before removing the portafilter.



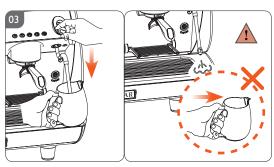
Steaming and frothing milk with the manual steam wand



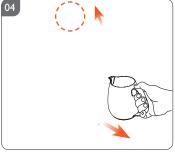
▲ Place the steam wand over the drip tray and open the steam lever for a few seconds to allow condensed water to be ejected. Close the steam lever when only steam comes out.



Immerse the steam wand into the milk, making sure the wand tip is submerged.



Open the steam lever again to begin steaming or frothing the milk. Do not remove the milk pitcher while steaming.



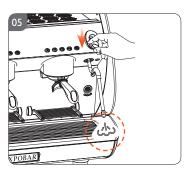
Once the milk reaches the desired temperature, close the lever and remove the pitcher.



WARNING!

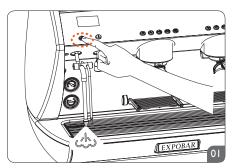
Do not allow the steam wand to extend out of the milk when the lever is open, it may cause serious burns and injuries.

After the process is finished, position the steam wand over the drip tray and open the steam lever for a few seconds to eject any milk remaining in the wand. Close the lever and then wipe down the outside of the steam wand with a damp cloth to prevent nozzle blockage and to keep it clean. Leaving milk in or on the wand will affect the taste of later drinks.

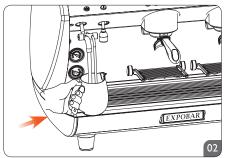




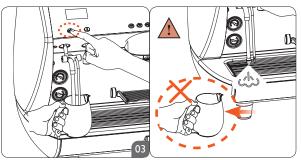
Steaming and frothing milk with turbo steamer



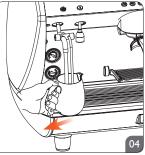
Place the steam wand over the drip tray and open the steam lever for a few seconds to allow condensed water to be ejected. Close the steam lever when only steam comes out.



Immerse the steam wand and temperature sensor into the milk pitcher, making sure the wand tip is submerged.



Press the button again to begin steaming or frothing the milk. Do not remove the milk pitcher while steaming.



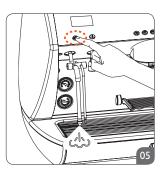
Once the milk reaches the programmed temperature, the steaming will stop automatically and the pitcher can be removed.



WARNING!

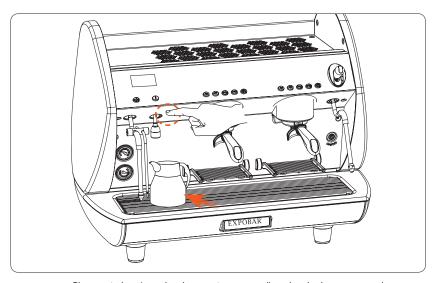
Do not allow the steam wand to extend out of the milk when the milk is being steamed or frothed, it may cause serious burns and injuries.

After the process is finished, position the steam wand over the drip tray and press the steam button once, allowing steam to flow for a few seconds to eject any milk remaining in the wand. Press the button again to stop the steam and then wipe down the outside of the steam wand with a damp cloth to prevent nozzle blockage and to keep it clean. Leaving milk in or on the wand will affect the taste of later drinks.





Dispensing hot water



- Place a pitcher (or other heat resistant vessel) under the hot water outlet.
- Press the hot water button (A) for 3 seconds to begin dispensing.
- Wait until the machine stops dispensing hot water automatically, or press the button again to stop hot water dispensing at any time.



WARNING!

Never expose hands and fingers directly under the hot water outlet during operation to avoid scalding or serious burns.



Coffee machine cleaning



Important:

- To keep the machine looking and working like new, you should always follow the cleaning and care instructions provided in this manual.
- Always turn off the main power switch when cleaning the exterior of the machine.
- All external surfaces should be cleaned with a damp, lint-free cloth that will not scratch the machine.
- Do not use aggressive cleaning detergents, solvents or degreasers. These can damage the surfaces, and plastic and rubber parts, and leave unwanted residue.



Important:

Each day, or 8 hours after dispensing the last coffee, the following cleaning tasks should be performed to maintain the quality and performance of the water system:

- Portafilter: Brew one espresso with the filter empty (around one minute) to flush it out (dispose of this water).
- Steam Wand: Position the wand over the drip tray and open the steam lever for one minute to flush the wand.
- Hot Water Outlet: Place a container under the water outlet and open the lever for 20 seconds (dispose of this water).

Daily cleaning

- Rinse each of the brewing groups, shower plates, and portafilters with hot water for 15 seconds.
- Clean the external surfaces of the machine with a damp cloth, paying special attention to the stainless steel parts.
- Clean the steam wand and the water tap. Be sure that the nozzles are not clogged or partially blocked with milk or other residue. If it's necessary to remove them for cleaning, be careful not to deform or damage any of the components during removal.
- Clean the dip tray and the stainless steel insert grid under running water with a brush.
- Clean the drain cup by slowly pouring one liter of warm water into it to dissolve and remove the coffee residue that accumulates inside the drain cup and hose.

Weekly cleaning

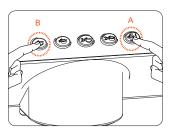
Clean the brewing group and portafilter with professional cleaning powder (page 22).



Cleaning the brewing group and portafilter

- Unlock and remove the portafilter from the group head.
- Place the cleaning membrane in the filter basket.
- Fill the filter basket with professional cleaning powder for espresso coffee machines.
- Lock the portafilter into the group head.
- Activate the auto-cleaning program:

When the machine is in idle mode, simultaneously press the Continuous and I Short Espresso buttons. After cleaning starts, release the buttons and the machine will automatically repeat the cleaning cycle 5 times until cleaning is completed.





WARNING!

Never try to open the portafilter while the machine is in operation! The pressurised hot water could cause scalding or serious injury. After cleaning has finished, wait about 3 seconds before removing the portafilter.



Important:

When the cleaning process is finished, remove the portafilter and run water through the group again to rinse out any residue. Repeat the cleaning process this time without cleaning powder to remove any remaining residue. Store the blind gasket in a convenient location for future use.



Note:

Rinse the group and portafilter with hot water (using only the blind gasket and hot water, no cleaning powder) each day.

Clean the group and portafilter with cleaning powder once a week.





Note:

Only use professional cleaning powder designed specifically for espresso machines. It's available from the distributor.





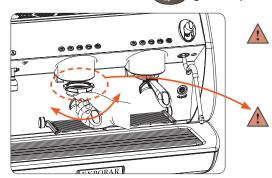
Cleaning the gasket and shower plate

Cleaning the gasket

While making espresso, coffee grounds will naturally accumulate on the group's sealing surface. Allowing an excessive amount of grounds to build up can prevent the portafilter from properly sealing to the group head. In extreme cases, such as leaving a used portafilter in the group head for several days, water can even become blocked from passing through the shower plate.

To prevent these problems, perform the following cleaning procedures each day:

- Install the blind basket into the portafilter without cleaning powder.
- Place the portafilter loosely in the group head do not close it fully.
- Press the Continuous button ().
- Perform an opening-closing motion with the portafilter in place without closing it fully. Water will flow over and around the portafilter, passing through the closing surface and washing out any coffee residue. Be very careful to avoid splashes, as this water is very hot and can cause burns.
- Press the Continuous button again to stop the water flow.



WARNING!

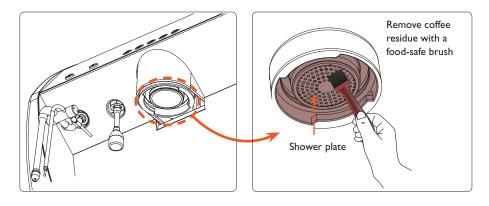
Take special care to avoid scalding when performing this cleaning operation, as the hot water used to clean the gasket will spill over the sides of the portafilter.

WARNING

Do not fully tighten the portafilter. If fully tightened, high-pressure water may spray out and cause scalding or serious injury.

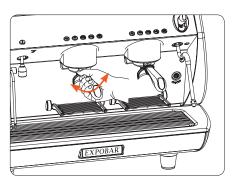
Cleaning the shower plate

- Remove the portafilter from the group head.
- Clean the shower plate and group gasket with a soft brush to remove any coffee residue.





Additional handling of the machine

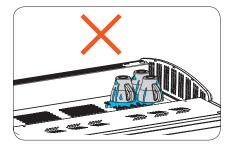


Always remove and insert the portafilters gently. Never use excessive force to try to close the portafilter. If the portafilter does not turn and lock into place without excessive force this usually indicates that there is too much coffee in the filter basket.



(Important:

Do not place wet cups directly on the cup shelf. Allowing water to drip into the machine can cause mechanical and electrical damage.



STORAGE AND DISPOSAL OF MACHINE

How to store the machine

Before storage be sure to:

- Perform all weekly and periodic cleaning procedures described in this manual (see pages 16-20).
- Disconnect and roll up the power cord (this should be performed by a qualified person).
- Disconnect the machine's water inlet hose from the domestic water supply and drain the boilers (this should be performed by a qualified person).
- Clean the drip tray and exterior of the machine to remove any coffee or other residue.
- Cover / re-pack the machine in its original carton and store it in a dry place where it will not be exposed to extreme temperatures or humidity.
- When returning the machine to service after long-term storage, perform all weekly and periodic cleaning procedures before use.

Disposal of machine

- Disconnect and roll up the power cord (this should be performed by a qualified person).
- Disconnect the machine's water inlet hose from the domestic water supply and drain the boilers (this should be performed by a qualified person).
- Pack up and ship/deliver the machine to a certified recycling center.





Electronic control panel

Button functions

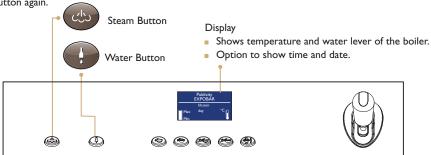
The following functions can be programmed and controlled from the digital display:

- Volume control of four different espresso drinks per brewing group.
- Timed hot water dispensing.
- Automatic boiler filling and level control.
- Automatic heating element shut-down in event of a low water condition.
- System supervision through messages, warning, and alarms.
- Automatic cleaning of the brewing groups.

The digital controller is programmed with four standard drink functions (these can be reprogrammed as desired by the user) and one continuous function from the manufacturer.

The upper four buttons (I Short Espresso, I Long Espresso, 2 Short Espressos, 2 Long Espressos) will brew the programmed beverage volume and then stop automatically.

The fifth/bottom button (Continuous) brews continuously until the user stops it by pressing the button again.





I Short Espresso



2 Short Espresso



I Long Espresso



2 Long Espresso



Continuous

Depending on how long this button is pressed it has 3 functions:

- Less than I second, activates the hot water for infusions dosing.
- Between I and 8 seconds, activates continuous espresso dispensing, in order to stop the dispensing, press the button again.
- Over 8 seconds, activates the programming menu. This is explained later in programming part.



Espresso machine status



fig.A



fig.B

The machine has 3 different statuses:

ON

The machine is active and ready for use. Generally when switching on the main switch, the machine will enter this status quickly. (See "ON" fig.A)

STANDBY

The main switch is turned on, but the machine's display reads OFF (See "STANDBY" fig.B). This is a power saving mode. To get to this status, begin with the machine in ON status. Press and hold the Continuous button the press the 2 Short Espressos button. The display will read "OFF" and go to STANDBY status. To exit STANDBY status press the button 2 Short Espressos button again, the machine will return to ON status.

OFF

The machine is totally powered down or electricity is disconnected.

Programming capabilities with buttons

A Turning the Boiler ON or OFF-

With the machine in ON status, press the Continuous and I Long Espresso button simultaneously to turn the boiler ON or OFF (multi-boiler machines only).

B Standby Mode-

On the left keypad, press and hold the Continuous button then press the 2 Short Espressos button, this will put the machine in STANDBY mode.

C Automatic Cleaning-

With the machine in ON status, press the Continuous and I Short Espresso buttons simultaneously to activate the automatic cleaning function.

Activating the Programming Menus-

There are two programming menus that can be adjusted while the machine is in ON status. The first programming menu is reached by pressing the the Continuous button for 8 seconds, until the "Doses Program" is shown on the display. From this program it is possible to access the second menu by pressing Continuous button again for 8 seconds. Learn more about these programming menus and their functions in the following pages.

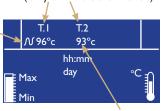


Display explanations

Boiler water level

Customizable lines Actual temperature of the main boiler This wave symbol **Publicity** is shown when the **EXPOBAR** boiler is heating. hh:mm °C day E Max Min

Actual temperature of group boilers (Only on multi-boiler models)



During espresso brewing this will show the dispensing time or the volume of the drink depending on what setting you have.

The digital display provides information, warnings, and controls for:

Time & day

- Boiler's water volume and temperature.
- Coffee brewing and beverage dosing time adjustment.
- Low water, temperature sensor, and filter service alarms and warnings.

Adjusting the display date and time



fig.A



fig.B

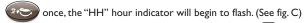


fig.C

- Accessing the Date and Time Program:
- 1. Press the Continuous button for 8 seconds. All buttons on the keypad will light up and Continuous button will flash. The machine is now in the "Doses" Program (See fig. A).
- 2. Press the Continuous button again for 8 seconds and the "Clock Adjust" Program will appear (See fig. B).

Setting the Date and Time:

3. From within the "Clock Adjust" Program press the 2 Short Espresso button



4. Adjust the Hour up or down using the I Short Espresso and I Long until the desired hour is showing. Then press the Espresso buttons 2 Short Espresso button to move on and adjust the Minute (MM) and date (Day) in the same manner.



Programming the coffee dosage

Use the following steps to program the espresso brew dosages for each Brewing Group and Drink Button (each button can be programmed for a different dosing time if desired):

- 1. Place a Portafilter filled with fresh espresso grounds in the Brewing Group.
- 2. Press the Continuous button for 8 seconds, all the lights in the keypad will light up and Continuous button will flash, the display will read "Doses Programming Select 30s".
- 3. Within 30 seconds press the Drink Button to be reprogrammed. All of the button lights will turn off except for the Continuous button and the one being programmed. Water will begin to flow and espresso will begin dispensing.
- 4. Allow the beverage to dispense until the desired drink volume is reached, then press the Drink Button that is being programmed to stop the water flow. This dosage time will now be stored as the default for that Drink Button.
- 5. Repeat Steps 1-4 for all Drink Buttons to be reprogrammed.



Important:

Use a portafilter filled with fresh espresso grounds for every new brewing dosage that is programmed.



Note:

Programming any of the options on the left-side bank of Drink Buttons (when viewing the machine from the front) automatically programs the dosages on all of the other corresponding Drink Buttons for the other Brewing Group(s). Always program the left-side buttons first, then program the other Drink Buttons to the right afterward to store their specific dosages.



Note:

For safety and water conservation, all brewing settings have a maximum dispensing time of 5 minutes.

Programming temperature for the turbo steamer

- Press the Continuous button for 8 seconds, all the lights in the keypad will light up and Continuous button will flash, the display will read "Doses Programming Select 30s".
- Immerse the steam wand in the milk to be steamed or frothed.
- Press the Steam button .The programmed temperature will appear on the digital display.
- When the liquid reaches the desired temperature, press the Steam button steaming. The new temperature is now stored.



Note:

The electronic temperature probe is designed to automatically stop the steam when the programmed temperature is reached. Steaming times with the Turbo Steamer will vary depending on the volume and temperature of the liquid being steamed or frothed, but final temperature will be the same.



Auto On/Off

- "Auto On/Off" Program controls when the machine will automatically turn on and off via preset times when the main power switch remains on. This is a power saving feature.
- "Closed on Day" Program is a power saving feature that allows users to specify one day per week that the machine will not be used, and therefore should not turn on, heat the boiler, and go into On status. This feature is optional and should only be used if needed.



fig. A

Setting the "Auto On/Off" Program:

- I. From within the "Clock Adjust" Program (see page 24) press the 2 Short Espresso button to enter the "Auto ON/OFF" Program (See fig.A). The "ON" function will begin to flash.
- Auto On/Off
 Off: Hh:mm

 I short espresso ↑ +
 I long espresso 0 +
 2 short espresso OK
 Continuous to confirm
- 2. Adjust the "ON" status by pressing the I Short Espresso or I Long Espresso buttons to move the hour value up and down that the machine is expected to automatically start on. When the desired hour is input (See fig.B), press the 2 Short Espressos button to accept and move to the minute input. Then adjust the minute value using the I Short Espresso or I Long Espresso buttons.

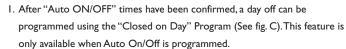


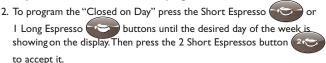
3. When the hour and minute that the machine will automatically turn ON has been correctly input, press the Continuous button to accept the program and move to the "Auto Off" Program. Programming the "OFF" time is done in the same manner as the "Auto On" time by repeating steps I through 3 from above.



fig.C

Setting the "Closed on Day" Program:







To exit from a program at any time press the Continuous button to scroll back to the home display screen. The number of button presses will vary depending on the program in use.



By default, the first value of each program will be --:-- to indicate that the function is disabled. When a value is added the function will be enabled. To leave any function disabled, simply press the 2 Short Espressos button while the display reads --:-- to move on to the next function.



Counters

This machine has 4 self-operating counters that keep track of the following information:

- Total litres of water that have cycled through the machine: Helpful in determining when cleaning and decalcifying is required.
- Service: Indicates when the machine needs technical service.
- Total coffee and hot water servings brewed.
- Coffees brewed for each button: Helpful in calculating approximate cost of various coffee and beverage capsules used.

Counters access



fig. A

Accessing the Counters:

- 1. From within the "Clock Adjust" Program (see page 24) press the Continuous button to access the "Counters" (See fig.A).
- 2. Press the Continuous button again to scroll through the "Counters".



Continuous to confirm fig. B

3. To exit the "Counters" press the Continuous button display returns to the date, time, and boiler information.

Resetting the Counters:

1. From within the "Counters" function press the 1 Short Espresso and 2 Short Espressos buttons simultaneously. This will reset all counters to zero.



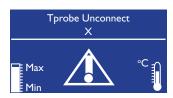
Display messages, alarms, and warnings overview



Flowmeter X Alarm: Indicates no water flow is being detected by flowmeter X.



No Water Warning: Indicates that the machine is not receiving water.



Temperature Sensor Warning:
 Indicates that the temperature sensor is not functioning.



Service Alarm:
 Indicates that technical service is needed.



Filter Alarm:
 Indicates that the water softener filter needs to be replaced.



The following troubleshooting steps should only be done when the machine has been turned off and disconnected from the main power supply. For all other nonspecific machine faults, disconnect the machine from the power supply and immediately contact the authorised and qualified service technician.

Problem	Possible cause	Solution
	The plug is not correctly inserted into the power socket	
The machine does not start up	The circuit breaker and/or differential are disconnected.	Check that they are connected.
	The cable and/or plug are damaged.	Call service personnel to replace them.
The steam wand does not dispense steam	The steam wand is clogged by milk	Clean the wand and, if necessary, remove the nozzle and unclog it using a pin or needle.
Water is found underneath the machine	The drainage tube is blocked.	Clean the drainage tube.

Faults produced by limescale		
Coffee not dispensed at right temperature:	Heat-exchanger outlet pipes clogged by limescale.	
Brewing groups do not dispense water:	Water system is clogged by limescale.	
90% of faults are due to limescaling inside the	coffee machine (due to not softening the water). To avoid	

these faults, maintain the water softener regularly.

Coffee-grinding problems		
Coffee dispensing is very fast:	The coffee grinding is too coarse, adjust the coffeegrinding setting.	
Coffee dispensing is very slow:	The coffee grinding is too fine, adjust the coffee-grinding setting.	

SERVICE INFORMATION



Notes:

For the warranty to be valid the conditions for maintenance must have been followed according to our instructions, proper precaution has been made and warranty claim been issued without delay.

The affected equipment may not be used during awaiting service if there is any risk that the damage or defect would worsen.

The warranty will not cover consumption supplies such as glassware, normal maintenance such as cleaning of filters, contaminations in water, lime, incorrect voltages, pressure or adjustment of water amounts.

The warranty will not cover damages of defects caused by incorrect handling and operation of the appliance.

FOR SERVICE Please contact your dealer

Your Dealer



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