

# Tru-VEND® VENDING MACHINES

## Mini-Black®

INSTRUCTIONS FOR USE &  
MAINTENANCE MANUAL

Version: 15.12

"SHE SELLS, YOU EARN!... ®"



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## INTRODUCTION

Dear User,

Thank you for purchasing the Mini-Black® vending machine, a product manufactured by ELEKTRAL. As a company developing integrated production, our quality certified production has continued since 1978 based on high technology. This integration can be broadly described as R&D, Electronics, Electromechanics, Production Lines, Mechanics Workshop, Moulding Workshop, Plastic Injection and Vacuum Forming Group. With T.R. State Planning Organization's various incentives, the factory has reached an approximately 20,000 m2 production area with the capability of making many electronic machines and components for professional use. Most of our machines have been produced for the first time in our country. Starting with Germany, our company is technologically cooperating in terms of production, representation and OEM production with the sector's leading companies from UAE, Bulgaria, India, Great Britain, Iran, Israel etc. We have direct or indirect exports to countries in Europe, Asia, America, Africa. Furthermore, to expand our direct sale markets in foreign countries our intensive works and exhibition activities continue uninterruptedly. As a result of our rapidly growing export potential, our company has been awarded with a first place prize in 2004, during "Rising stars of e-commerce in Turkey" competition. The same year we were awarded with the "25'th Anniversary Award of EBSO (Aegean Area Chamber of Industry), "The Chamber of Industry, Innovation, Employment" with continuous R&D projects being supported by TUBITAK (Turkish Scientific Research Council). In 2011 Istanbul Chamber of Industry has chosen our company as "INNOVATION FINALISTS". In the year 2012, with it's innovative Vending Machine project, Elektral has been awarded as an "TET (Turkish Electro Technology) R&D Project Market Finalist" by the Ministry of Economy, Turkish Export Assembly and IMMIB (Istanbul Mining and Metal Exporters Union). Another award won by Elektral is "The year 2013 First Rank in Innovation" organised by IAOSB (Izmir Ataturk Industrial Zone)-Ege University. Believing that real growth target is to be achieved with a global industrial understanding and a global move, Elektral is motivating all it's employees with this understanding and continues rapidly with an intensive R&D work to reach determined goals.

Tru-VEND® vending machines have been designed and produced to provide more spare time to its owners. They ease your life in various situations with multipurpose and practical use. Our products provide you profit and comfort for 24 hours continuously, loyal to the owner, with no employee costs. Please note that as for all industrial machines, its necessary to periodically check and maintain your machine. Please use the machine as recommended in this manual.

**Elektral Products are produced in environmental friendly facilities, causing no harm to the nature and living creatures.**



- Made in Turkey
- Alteration rights reserved
- No claims can be accepted by our firm regarding the applications of this instrument from the second or third parties.
- All rights Reserved

**Usage and Safety Warnings**



**Procedures & Safety Warnings before using the *Mini-Black*®**



**Technical specifications of *Mini-Black*®**



**Installation of the *Mini-Black*®**



**Programming and related procedures *Mini-Black*®**



The arrow-end lightning symbol inside the equilateral triangle informs that there is high amount of 'un-insulated' dangerous voltage to cause an electric shock inside the product.



The exclamation mark inside the equilateral triangle informs the user that there are important instructions of usage and information inside the booklets given with the equipment.

*Mini-Black*<sup>®</sup> Pre use, to do list and safety warnings



Do not wet the *Mini-Black*<sup>®</sup> machine. Always unplug from the electricity plug before proceeding and use only a damp cloth (not wet) to clean the vending Machine.



This is an electrical machine and there is a risk of electricity shock. Only authorized, qualified and well informed personnel may operate and service the machine.



Use the vending machine on Earthed Electrical Supply only.



Please carefully read the articles where you see this Warning Sign in the User's Manual.



*Mini-Black*<sup>®</sup> is designed to operate between given electrical voltage limitations only. 220 ( $\pm 10\%$ ) VAC / 50 Hz



**WARNING:** Please follow the instructions given in the User's Manual. Incorrect usage can cause damage to the Vending Machine and/or humans and the environment.

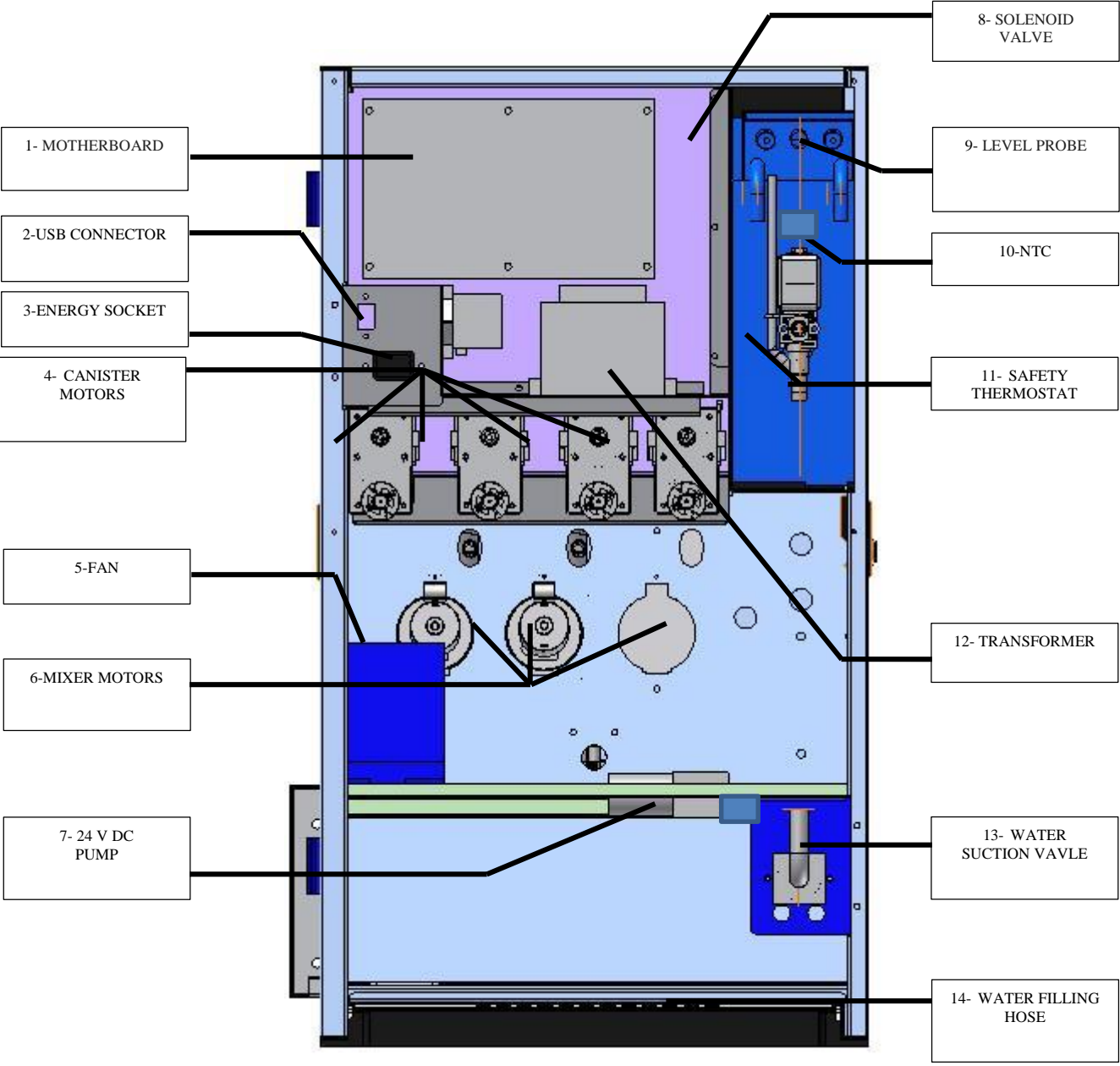
## 1. GENERAL DESCRIPTION

The Vending Machine that you have chosen has been produced by our factory using high technology systems in parallel with other developing technologies and modern aesthetic design providing versatile usage. Tru-VEND® Vending Machines can be used in all public areas such as hotels, factories, hospitals, restaurants, clinics, cinemas, bus terminals, gas stations, doctor & lawyer offices, malls, etc. Backwards traceability is also possible on the performed machine modifications by the serial number on each machine.

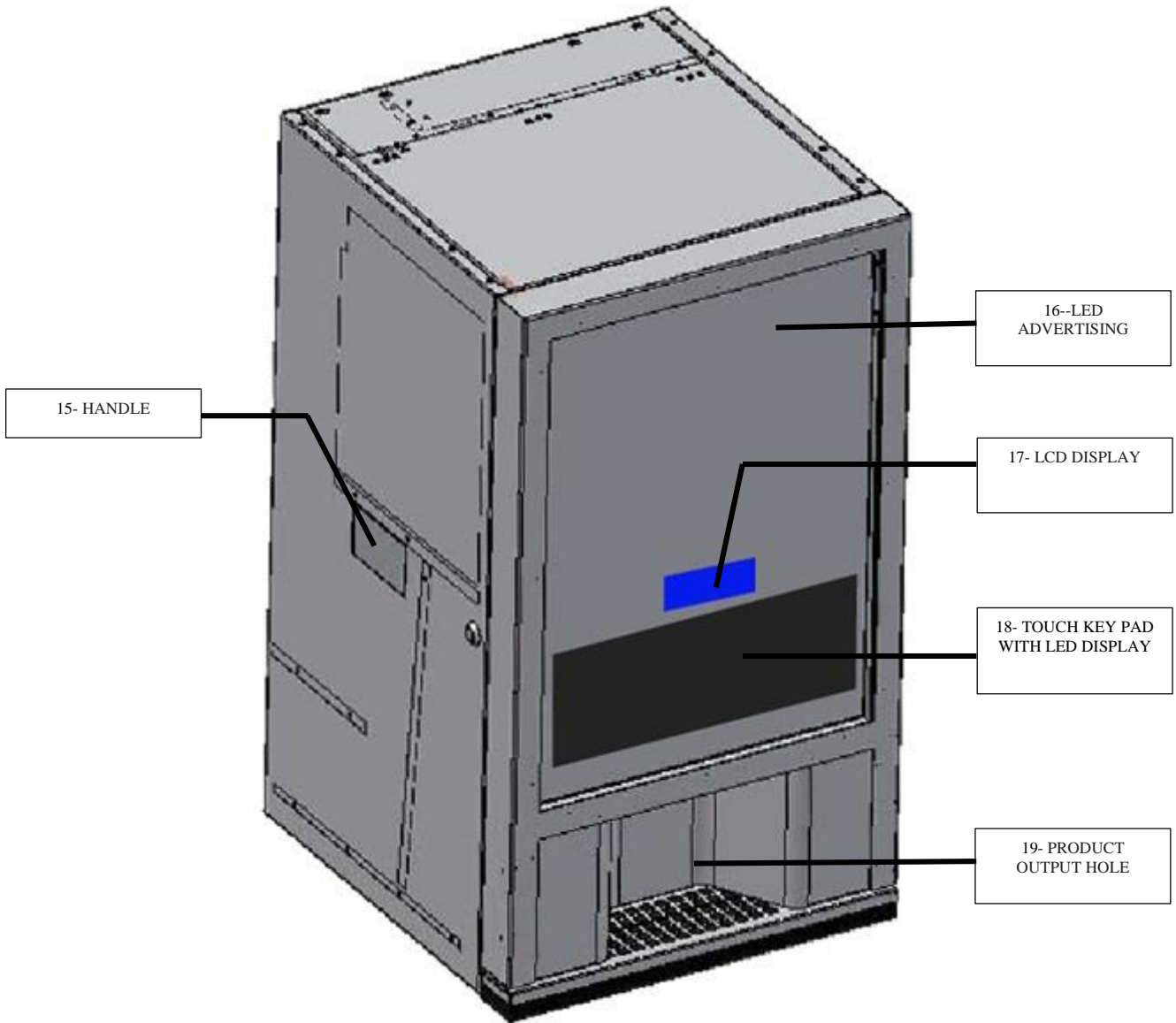
- International norms, in conformity with CE Norms and produced under ISO 9001: 2008 QMS.
- All components are made of ROHS compliant Human Health Friendly production materials.
- 4 product containers, easy product filling.
- LED backlit touch-sensitive keypad.
- With 3 mixers and facilitating 8 different hot drinks programming option, also 23 different products to be able to program on each button. (Factory default settings are : Coffee, Espresso, Coffee with Milk, Double Espresso, Cappuccino, Mochaccino, Hot Chocolate, Hot Water ) [may vary according to the Keypad].
- Separate mixer settings for each product.
- Possibility to change the canister location
- Sophisticated calculation algorithm for faster and better product output.
- Sophisticated calculation algorithm for a cleaner mixer assembly. Requires less frequent cleaning.
- Despite the comprehensive adjustment feature it is simple to use and gives flawless product presentation.
- Thanks to the advanced software, alerts and redirecting to make the correct selection are available.
- Product settings availability to minimize the errors that occur through advanced software.
- Encrypted menu entry.
- LCD screen for programming, setting, and viewing statistics.
- Easy changeable, LED-backlit advertising space.
- Long-lasting Components designed specifically to prevent calcification.
- Screw-less, spiked motors and mixers that can be installed easily.
- Special radial fan with high flow rate against dust blockage.
- NSF Certified PP plastic parts and silicone hoses (Human Health Friendly).
- Waste water collection container.
- Boiler drain hose (without opening the lid )
- 4.5 litre insulated stainless steel boiler, can be installed easily
- Anti-lime scale, high power, long lasting resistance component.
- Safety thermostat on the top of the boiler.
- Lime scale resistant, advanced water level measurement gauge
- Wide range of temperature detection by temperature probe.
- Illuminated cup hole (cup height adjustment console) and output.
- Easily removable rear cover.
- Grounded 1.5m power plug protected with double entry fuses.
- Economic energy consumption (heating: ~ 1800 W, standby: ~ 25W).
- Easy program installation with USB cloning, download option & log receiving.



**2. MAIN UNITS**

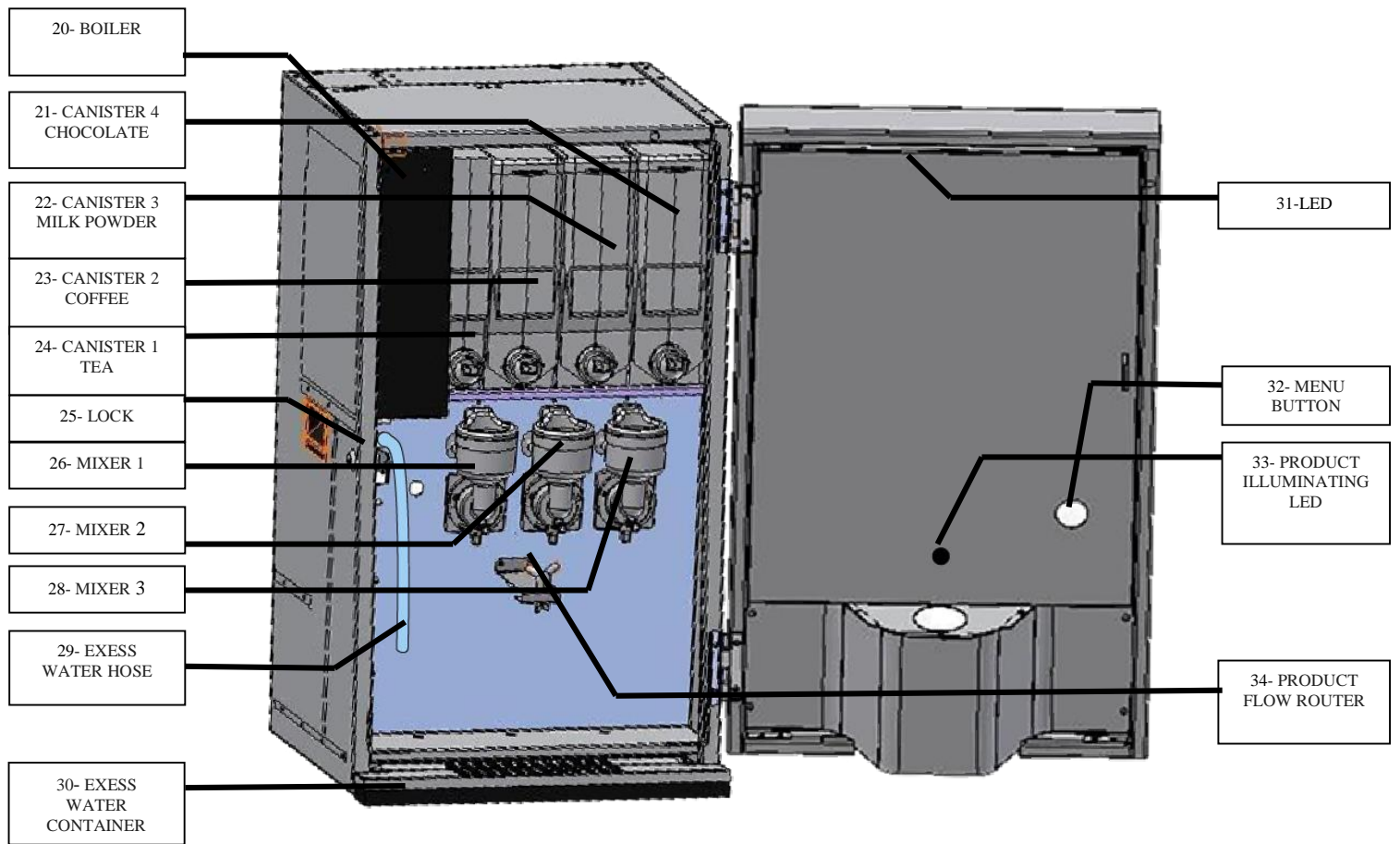


**Figure 1: Rear View**



**Figure 2: Front View**





**Figure 3: Product Canisters**

NOTE: 2 mixers standard, 3<sup>rd</sup> optional mixer can be added

## 2.1 Trunk

Main parts inside the trunk are explained here under.

### 2.1.1 Boiler Tank

The boiler tank capacity is 4,5 L and is equipped with a 1800 W Immersion Heater. The safety of the Boiler Tank is controlled by a Temperature Sensor and Water Level Probe. The Tank is well fitted to the VM trunk and it is well insulated. This is where the water is heated (Figure 3 - 20). The water temperature is electronically measured. The tank has been insulated to minimise heat loss, energy usage has been minimised therefore operating cost has been reduced.



**Do not touch when the *Mini-Black*<sup>®</sup> boiler tank is hot.**



**When draining out the water in the boiler tank, the red cork inside the end of the water hose needs to be removed. Proceed with CAUTION as the hose contains VERY HOT water.**

### 2.1.2 Product Canisters and Motors

Product canisters are the components containing the ingredients used for preparing the end product to be poured into the mixers with the help of the connected motion motors. There are 4 canisters (Figure 3 - 21, 22, 23 and 24) with connected motors (Figure 1 - 4) in the machine. With the condition of using a suitable ingredient, the operator can fill in the canisters with any desired product preparation ingredient.

Factory Settings:

Product preparation ingredients

5-Tea 6-Coffee 7- Milk Powder 8-Chocolate

Product canister motors

For Coffee 90 rpm / For tea 50 rpm / For milk powder 90 rpm/ For Chocolate 160 rpm

### 2.1.3 Mixers and Motors

These are the compartments where soluble powder ingredients are mixed and prepared to become the end user products ready to be served. A setup consisting of 3 mixers and their motors can be seen on Figure 3 – 26, 27, 28.



**There is a steam lid on the top of the mixers. It takes away the vapour forming on the mixer. This feature is important in terms of keeping the ingredients safe and dry correctly for a long time.**



**Replace mixer washers (O-ring) once a year.**

### 2.1.4 Water Pump

It performs the task of pumping the water to the boiler. A special pump and insulation has been used to provide silent operation.

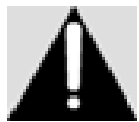


**Operating the machine without water for a long time causes damage to the pump and the pump needs to be replaced.**

### 2.1.5 Electronic Modules

The machine is fully micro-processor controlled; the electronic modules are listed below:

- a) Motherboard electronic module
- b) Touch keypad electronic module



**All models are being produced by Elektral. Spare parts and module replacements have to be done by authorized personnel only, otherwise irreversible damage can be caused to the machine and the guarantee becomes void.**

## 2.2 Control Panel

### 2.2.1 Screen

LCD (Liquid Crystal Displays-LCD) is the display where all operations can be followed (See Figure - 2, 17). It will be referred as "LCD" in the forthcoming sections.

### 2.2.2 Keypad

The keypad is used for programming and selecting a product. The use of the LED illuminated touch keypad module (See Figure - 2, 18) is described in details under programming menus section.

## 3. TECHNICAL SPECIFICATIONS



**Operation:** Electro-Mechanic Operating Principle

**Power Supply:** 220 VAC ( $\pm$  % 10) / 50 Hz.

**Stand by Power:** ~25W Resistance: ~ 1800W

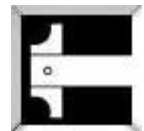
**Operating Temperature:** 5° C +50° C

**Humidity:** % 95 non-condensing

**Protection Class:** IP20

**Dimensions:** 395 (W) x 700 (H) x 420 (D) mm

**Weight:** ~ 31 kg



## 4. INSTALLATION AND CLEANING



The vending machine has to be placed on a stable flat surface and operate in an upright position. It is recommended to use the machine with its specially designed base stand (See chapter 8.1). The machine has a mixer cleaning function (See chapter 6.6 Manual Cleaning). As the machine is used for serving beverages for direct consumption it definitely has to be cleaned on regular frequent basis. Any cleaning solutions causing human health hazard cannot be used during the cleaning process.

Ensuring safe and healthy usage of the machine can be achieved by strictly following below instructions. Apart from the periodic cleaning instructions below, visible marks on the machine must be wiped using a soft, hygienic and slightly damp cloth. Especially during frequent usage of the machine, the cleaning has to be done more often as described in below periodic cleaning instructions.



**The water temperature during mixers self-cleaning (automatic) process has to be as hot as when the machine is in operation.**



**Chemical solvents must not be used during cleaning the machine by hand. Only warm water should be used.**



**Disconnect the machine from the electricity supply when the machine is cleaned by hand**



**Do not connect and operate the machine if the power supply is not an earthed electricity supply.**

### 4.1. Daily Cleaning

Choose "AUTO CLEANING" from the menu to clean the mixers. To perform automatic mixer cleaning, the red button behind the front cover (used for entering programming mode) has to be pressed three times. Also check if the product canisters are full. Take away the water from the excess water tray.

### 4.2. Weekly Cleaning

Take the mixers off and wash with hot water. Wash the product flow routers. Clean the excess water tray with hot water. Clean the product powder fallen inside the machine.

### 4.3. Monthly Cleaning

Take off the product canisters and do functioning test. Wash and dry the canisters. Test and check if the extractor fans are functioning. Open the back cover and clean around the electronic board with the help of a small vacuum cleaner. Do not neglect monthly graph checks.

### 4.4. Annual Cleaning

Check the boiler, the solenoid, the water distributors etc... in the machine for lime scale. Clean if needed. Change the parts listed for periodic replacement in the user manual. Check the usage labels and the physical state of the machine.

## 5. PRODUCT LOADING AND INITIAL OPERATION



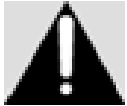
- Place the water hose from the pump behind the machine into the water tank before connecting to the main power supply.
- Connect the machine power supply cable to the mains (220V). The water suction process will start.
- The LCD displays When the pump is sucking water "PUMP IN PROGRESS" message. 

PUMP IN PROGRESS
------------------
- If the machine warns for lack of water, check if the pump is extracting water into the boiler and if the hose is crushed or damaged.
- Pour the powder based ingredients into the canisters while the water suction is in progress. For this purpose, open the front cover, slightly push the canisters upwards and pull out slowly. Then pour the predetermined suitable powder ingredients into each canister. It is recommended to keep at least 1/3 of the canister full. The product preparation ingredients defined in the machine are described below.

### PRODUCT PREPARATION INGREDIENTS

Coffee, Chocolate, Milk Powder, Tea, Sugar, Fruit Tea, Salep, Decaffeinated Coffee, Sup, Aroma

If you need to put a non-standard, different product (Turkish Coffee etc.) into one of the canisters, the canister motor needs to be changed. Before proceeding with this, carefully pull out the motor wires by pressing on the socket spikes (mind the location of each cable during this process). Then push downwards the motor wires to free them from the socket. Put the new motor in it's place and insert the wires in their locations on the socket.



**During the replacement of the canister motors, the machine has to be unplugged from the electricity supply and the canisters have to be removed.**



**There is a red coloured "+" sign on one of the canister motor wires. When re-inserting the detached wires during the canister motor replacement process, the single wires coming to the sockets are "+" and they need to be inserted into the sockets with red "+" signs on the motor. The double wires in the other hand are "-" and need to be inserted into the other socket.**

**Note: This connection can be made reversed only on 50 rpm motors. In that case the wire with the "-" sign is connected to the motor socket with red "+" sign. The wire with the red "+" sign is connected to the other motor socket. These connections determine the direction of the motor rotation. When done correctly the rotation of the motor is clockwise.**

- Put the full canisters back into their places and close the front cover.
- When there is sufficient amount of water in the boiler the heating process starts and the LCD displays "HEATING IN PROGRESS".
- When the heating process is completed the machine is ready to use the LCD displays "WELCOME! MAKE A SELECTION"
- Press the button of the desired beverage and take the cup with the beverage in it.

HEATING IN PROGRESS

ELEKTRAL-TR  
COFFEE DISPENSERS

WELCOME!  
MAKE A SELECTION

## 6. PROGRAMMING

Programming is done by entering the machine menu. There is a button behind the front cover of the machine for menu operations (See Figure - 3, 32). After entering the menu with this button, the touch keypad is used for menu operations.



Enter the four digit password. To navigate up or down in the menu when entering the password, use buttons PRODUCT5/ CAPPUCCINO UP, PRODUCT6/ MOCHACCINO DOWN. Factory settings password is "0000".

PASSWORD  
[0\*\*\*\*]

### On the touch keypad

**PRODUCT5/ CAPPUCCINO UP:** To move UP in the menu

**PRODUCT6/ MOCHACCINO DOWN:** To move DOWN in the menu

**PRODUCT7/ HOT CHOCOLATE:** Exit/No

**PRODUCT8/HOT WATER:** Select/Save/Yes

**Note: The keypad may vary according to the machine.**



### 6.1 Product Dosage

This option is for adjusting the dosages of water, coffee, chocolate etc... used in the machine. The operation time of the related mixers can also be adjusted here.

From hot water to aromatised cappuccino, 23 different hot beverage dosages can be adjusted here.

The settings have to be done correctly in order to obtain the taste and consistency required. The factory settings have been listed in Section 10 Menu Tree.

PRODUCT DOSES [1]

HOT WATER [1/1]

WATER DOSE [1/1/1]

WATER DOSE  
4,0 s

### 6.2 Temperature Setting

These settings are used to adjust the temperature of the water used in the machine.

The temperature value shown on the bottom left part of the LCD is the water temperature in the boiler at that time. The value shown on the bottom right part of the LCD is the adjusted (required) water temperature value in the boiler. The temperature can be adjusted between 65-90 °C.

Recommended maximum Temperature

During summer 80 °C During winter 85°C

TEMPERATURE [2]

THERMOSTAT  
79°C 80°C

### 6.3 Limit Settings

This menu is to adjust the Product Temperature Level Limitation. This value can be adjusted between 50-70 °C.

The machine does not serve beverages if the temperature of the water used is below the value adjusted.

LIMIT [3]

LIMIT  
79°C 60°C

### 6.4 Language Settings

This menu is for selecting the Menu Language. You may choose Turkish or English Menu Languages.

LANGUAGE [4]

ENGLISH

## 6.5 Counters

Each item sold is counted individually and in total. Sales statistics can be seen in this menu. Total sales value or counters can be reset.

The total sales counter cannot be reset

COUNTERS [5]
GLOBAL COUNTER 13
TOTAL COUNTER 13
PRODUCT COUNTER 7
RESET COUNTERS?

## 6.6 Manual Cleaning

This menu is used to perform cleaning operation in the machine. Mixers can be cleaned one by one. When required you may enter manual cleaning menu and select a mixer to proceed.



**Place a large empty cup in the product output hole before proceeding with cleaning**

MANUAL CLEANING [6]
CLEAN MIXER1
CLEAN MIXER1 IN PROGRESS

## 6.7 Master Reset

All machine settings except counters data can be returned to factory settings

MASTER RESET [7]
---------------------

DEFAULT SETTINGS APPLY?
----------------------------

## 6.8 Product Selection

The products to be served by the machine are specified in this menu.

A range of 23 products, from Cappuccino to Vanilla Coffee can be assigned to each one of the 8 menu buttons. (See Table-1 / Chapter 10 Menu Tree)

TAKE PRODUCT [8]
---------------------

PRODUCT 1 [8/1]
--------------------



**If the selected product preparation ingredients for the chosen product are not selected correctly, the machine does not allow you to choose that**

**product and the LCD shows "CANISTER SETTINGS INVALID" message**

PRODUCT 1 AMERICANO
------------------------

CANISTER SETTINGS INVALID
------------------------------



	Ingredient 1	Ingredient 2	Ingredient 3	Ingredient 1	Ingredient 2	Ingredient 3	Mixer 1	Mixer 2	Mixer 3	Water
Hot Water	None	None	None	0	0	0	0	0	0	3,8
Espresso	Coffee	None	None	1	0	0	3,5	0	0	1,3
Milk	Milk	None	None	4	0	0	5,5	0	0	3,8
Chocolate Milk	Chocolate	Milk	None	3	3	0	4,5	4,5	0	3,8
Tea	Tea	None	None	0,8	0	0	0	0	0	3,8
Americano	Coffee	None	None	1,5	0	0	5,5	0	0	3
Chocolate	Chocolate	None	None	3,1	0	0	6	0	0	3,8
Light Tea	Tea	None	None	0,5	0	0	0	0	0	3,8
Tea with Milk	Tea	Milk	None	0,8	2	0	0	3,5	0	3,8
Cappuccino	Milk	Coffee	None	2,2	1,5	0	4,5	3	0	3,8
Macchiato	Coffee	Milk	None	1,5	1,8	0	3	3,5	0	3,8
Mocha	Coffee	Milk	Chocolate	1,5	1,8	1,4	3	3	3	3,8
Fruit Tea	Fruit Tea	None	None	0,8	0	0	0	0	0	3,8
Double Espresso	Coffee	None	None	3	0	0	4,5	0	0	3
Decaffeinato	Decaffeinated Coffee	None	None	2	0	0	3,5	0	0	3,8
Soup	Soup	None	None	3,8	0	0	6	0	0	3,8
Coffee with Sugar	Coffee	Sugar	None	2	1	0	3,5	2,5	0	3,8
Cappuccino with Sugar	Coffee	Milk	Sugar	2	3	1	3,5	4,5	2,5	3,8
Espresso with Sugar	Coffee	Sugar	None	2	1	0	3,5	2,5	0	2,1
Coffee with Chocolate	Coffee	Chocolate	None	2	3	0	3,5	4,5	0	3,8
Aromated Coffee	Coffee	Aroma	None	2	1	0	3,5	2,5	0	3,8
Aromated Cappuccino	Coffee	Milk	Aroma	2	3	1	3,5	4,5	2,5	3,8
Salep	Salep	None	None	5	0	0	6,5	0	0	3,8

Units in Seconds

Table-1

## 6.9 Canister (Product Tank) Selection

This is the part where machine canister settings are determined. From Coffee to Aroma, 10 different ingredients can be placed into the canisters (See Chapter 10 Menu Tree)

Select the product preparation ingredient by using **PRODUCT5 / UP** and **PRODUCT6 / DOWN** buttons

**Default-Factory Settings: CN1-EMPTY, CN2-COFFEE, CN3-MILK, CN4-CHOCOLATE**

CANISTER SELECTION  
[9]

CANISTER 1  
[9/1]

CANISTER 1 EMPTY



The definitions of the product preparation ingredients have to be done correctly. The suitable ingredients have to be placed into the four canisters properly in order to dispense the desired products from the machine. Even if one of the ingredients is not defined to the canisters correctly, the product is deleted from button it's assigned to on the keypad. The machine does not dispense that product.

When an ingredient not suitable for the product is defined to the canister, the machine displays warning message "PRODUCT SETTINGS CHANGED" and performs the canister change in the system. In this case the products containing the previous changed ingredient shows "EMPTY" message inside the product selection menu.

PRODUCT SETTINGS  
CHANGED

PRODUCT 1 EMPTY  
[5]

## 6.10 Function Test

This feature is used to test the machine. When the button **PRODUCT8/ENTER** is pressed all canister and mixer motors turn one by one in order and water comes from the silicon hoses.



**Take out the canisters and place a large empty cup in the product output hole before proceeding with the function test.**

FUNCTION TEST  
[10]

RUNNING

## 6.11 Change Password

This menu is used to change the user password. Enter your current password first. Then enter the new password twice to complete the password change.

CHANGE PASSWORD  
[11]

PASSWORD CHANGED  
[11]

## 6.12 Machine Information

In this menu, the vending machine serial number, Firmware version etc. details can be seen.

MACHINE INFO  
[10]

MACHINE INFO  
T/N: 39279458

MACHINE INFO  
S/W: OKH271P1203

MACHINE INFO  
H/W: POO1412

## 6.13 USB Menu

This menu allows software upgrade via a USB disk and also allows the statistical data to be transferred to a computer.

USB MENU  
[13]

**Export Logs:** Exports logs from the machine to a USB disk.

EXPORT LOGS

**Delete Logs:** Deletes the logs saved inside the machine (not inside the USB disk)

DELETE LOGS

**Export Settings:** Exports all settings of the machine onto a USB disk.

EXPORT SETTINGS

**Export Audit:** Allows exporting the statistical data in the machine memory to a USB disk.

EXPORT AUDIT

**Import Settings:** Allows importing settings to the machine taken from another machine.

IMPORT SETTINGS

**Upgrade Software:** Allows machine software upgrade.

UPGRADE SOFTWARE

## 6.14 CLOCK CONFIGURATION

This menu is for date and time settings.

CLOCK CONFIG  
30:01:2015

CLOCK CONFIG  
12:00

## 6.15 TOUCH PAD SENSITIVITY CONFIGURATION

This menu is to adjust the sensitivity of the touch keypad.

**Insensitive:** When pressed for 600 ms the machine starts to dispense product.

TPAD SENSITIVITY  
INSENSITIVE

**Medium:** When pressed for 300 ms the machine starts to dispense product.

TPAD SENSITIVITY  
MIDDLE

**Sensitive:** Product dispense starts as soon as a button is pressed

TPAD SENSITIVITY  
SENSITIVE

## 6.16 WASTE BOX CONFIGURATION

This menu is used to determine if product is to be dispensed or not during waste water detection.

**Waste Box Disable:** Keypad is disabled when full waste water level is detected. The LCD displays that the waste box is full. Dispensing of product stops at this time. Meanwhile if the waste box is emptied, the machine returns to its normal operational status and the LCD displays "WELCOME! MAKE A SELECTION" message.

WASTEBOX CONFIG  
DISABLE

**Waste Box Enable:** The LCD only displays that the waste box is full when full waste water level is detected. The keypad is not disabled. Dispensing process of products continues. If the user presses a button the LCD displays the name of the product given and the dispensing process of the product starts. Once the process is completed the LCD again displays that the waste box is full. Meanwhile if the waste box is emptied, the machine returns to its normal operational status and the LCD displays "WELCOME! MAKE A SELECTION" message.

WASTEBOX CONFIG  
ENABLE

## 7. ERRORS

The errors detected by the machine during operation are displayed in form of codes. The error codes are listed below:

ERROR CODES	ERRORS	
1	L_HEATERTIMEOUTERROR	Heater Time Out Error
2	L_HEATINGCHECKERROR,	Heating Check Error
3	L_HEATERSAFETYERROR,	Heater Safety Error
4	L_NTCUNPLUGGEDERROR,	Ntc Unplugged Error
8	L_EEPROMCHECKSUMERROR,	Eeprom Check Sum Error
11	L_SPECIFICSLAVEERROR,	Specific Slave Error
14	L_TPADCONNECTIONFAILUREERROR,	Tpad Connection Failure Error
15	L_WASTEBOXFULLERROR,	Waste Box Full Error
16	L_OVERCURRENTERROR,	Over Current Error
17	L_OVERCURRENTMIXERERROR,	Over Current Mixer Error
18	L_EEPROMMEMORYFAULTERROR,	Eeprom Memory Fault Error
51	L_PUMPTIMEOUT	Pump Time-Out
153	L_TPADGENERALERROR,	Tpad General Error,
512	L_VENDSUCCESS,	Vend Success
513	L_VENDFAILURE,	Vend Failure
517	L_CONFIGCHANGED,	Configuration Changed
518	L_AUDITCHANGED,	Audit Changed
525	L_DEVICESTARTED,	Machine Started
527	L_MENUENTEREDADM,	Menu Entered as Administrator
529	L_MENUENTEREDERR,	Menu Entered Error
530	L_MENUQUITTED,	Menu Quitted
540	L_DISPENSINGSTARTED,	Dispensing Started
548	L_ENTEREDMASTERRESETMODE,	Entered Master Reset Mode
549	L_MASTERRESETAPPLIED,	Master Reset Applied
550	L_LOGSEXPORTED,	Logs Exported
2001	L_HARDFAULT01,	SystemFault_BufferOverflow
2002	L_HARDFAULT02,	SystemFault_FreezeError
2003	L_HARDFAULT03,	System_HardFaultError
2004	L_HARDFAULT04,	System_MemManageError
2005	L_HARDFAULT05,	System_BusFaultError
2006	L_HARDFAULT06,	System_UsageFaultError

## **8. OPTIONAL COMPONENTS**

### **8.1 Base Stand**

The optional Base Cabinet is made of metal with available space for 2 x 19 l carboys and/or a waste bin and a stock tray. It is electrostatic powder painted and has a mechanical lock.  
Dimensions: (w) 400 x 420 (d) x 700 (h) mm  
Weight: ~ 31 kg

## **9. MAINTENANCE and REPAIR**

As the machine is used for serving food and drink products to people, it definitely has to be cleaned in short periodic time intervals. The machine has been designed to serve products 7/24 considering that recommended proper periodic cleaning and re-fill of ingredients as per the descriptions in this user manual is done.



Metal surface cleaning is recommended to be done by using a soft damp cloth. Electricity power supply definitely has to be disconnected during cleaning.

## 10. Menu Tree

### 1. PRODUCT DOSAGE

- 1.1. HOT WATER**
  - 1.1.1. AMOUNT OF WATER (4,5 s)**
- 1.2. ESPRESSO**
  - 1.2.1. AMOUNT OF COFFEE (2,0 s)**
  - 1.2.2. COFFEE MIX (3,5 s)**
  - 1.2.3. AMOUNT OF WATER (2,5 s)**
- 1.3. MILK**
  - 1.3.1. AMOUNT OF MILK(4,0 s)**
  - 1.3.2. MILK MIX (5,5 s)**
  - 1.3.3. AMOUNT OF WATER (4,0 s)**
- 1.4. CHOCOLATE MILK**
  - 1.4.1. AMOUNT OF CHOCOLATE (3,0 s)**
  - 1.4.2. CHOCOLATE MIX(4,5 s)**
  - 1.4.3. AMOUNT OF MILK (3,0 s)**
  - 1.4.4. MILK MIXER(4,5 s)**
  - 1.4.5. AMOUNT OF WATER (4,0 s)**
- 1.5. CAY**
  - 1.5.1. AMOUNT OF TEA (0,8 s)**
  - 1.5.2. TEA MIX (0,0 s)**
  - 1.5.3. AMOUNT OF WATER (4,0 s)**
- 1.6. AMERICANO**
  - 1.6.1. AMOUNT OF COFFEE(2,0 s)**
  - 1.6.2. COFFEE MIX(3,5 s)**
  - 1.6.3. AMOUNT OF WATER (4,0 s)**
- 1.7. CHOCOLATE**
  - 1.7.1. AMOUNT OF CHOCOLATE (4,0 s)**
  - 1.7.2. CHOCOLATE MIX (5,5 s)**
  - 1.7.3. AMOUNT OF WATER (4,0 s)**
- 1.8. LIGHT TEA**
  - 1.8.1. AMOUNT OF TEA(0,5 s)**
  - 1.8.2. TEA MIX (0,0 s)**
  - 1.8.3. AMOUNT OF WATER (4,0 s)**
- 1.9. TEA WITH MILK**
  - 1.9.1. AMOUNT OF TEA (0,8 s)**
  - 1.9.2. TEA MIX (0,0 s)**
  - 1.9.3. AMOUNT OF MILK (2,0 s)**
  - 1.9.4. MILK MIX (3,5 s)**
  - 1.9.5. AMOUNT OF WATER (4,0 s)**
- 1.10. CAPPUCCINO**
  - 1.10.1. AMOUNT OF COFFEE(1,2 s)**
  - 1.10.2. COFFEE MIX(2,7 s)**
  - 1.10.3. AMOUNT OF MILK (3,5 s)**
  - 1.10.4. MILK MIX (5,0 s)**
  - 1.10.5. AMOUNT OF WATER (4,0 s)**
- 1.11. MACHIATO**
  - 1.11.1. AMOUNT OF MILK(4,0 s)**
  - 1.11.2. MILK MIX (5,5 s)**
  - 1.11.3. AMOUNT OF COFFEE (1,0 s)**
  - 1.11.4. COFFEE MIX (2,5 s)**
  - 1.11.5. AMOUNT OF WATER (4,0 s)**
- 1.12. MOCHACCINO**
  - 1.12.1. AMOUNT OF COFFEE (1,0s)**
  - 1.12.2. COFFEE MIX (2,5 s)**
  - 1.12.3. AMOUNT OF MILK (1,5 s)**
  - 1.12.4. MILK MIX(3,0 s)**
  - 1.12.5. AMOUNT OF CHOCOLATE (1,5 s)**
  - 1.12.6. CHOCOLATE MIX (3,0 s)**
  - 1.12.7. AMOUNT OF WATER (4,0 s)**
- 1.13. FRUIT TEA**
  - 1.13.1. AMOUNT OF FRUIT TEA(0,8 s)**
  - 1.13.2. FRUIT TEA MIX(0,0 s)**
  - 1.13.3. AMOUNT OF WATER (4,0 s)**
- 1.14. DOUBLE ESPRESSO**
  - 1.14.1. AMOUNT OF COFFEE (3,0 s)**
  - 1.14.2. COFFEE MIX(4,5 s)**
  - 1.14.3. AMOUNT OF WATER (4,0 s)**
- 1.15. DECAFFEINATED**
  - 1.15.1. AMOUNT OF DECAF (2,0 s)**
  - 1.15.2. DECAF MIX (3,5 s)**
  - 1.15.3. AMOUNT OF WATER (4,0 s)**
- 1.16. SOUP**
  - 1.16.1. AMOUNT OF SOUP (2,0 s)**
  - 1.16.2. SOUP MIX(0,0 s)**
  - 1.16.3. AMOUNT OF WATER (4,0 s)**
- 1.17. SUGAR COFFEE**
  - 1.17.1. AMOUNT OF COFFEE(2,0 s)**
  - 1.17.2. COFFEE MIX (3,5 s)**
  - 1.17.3. AMOUNT OF SUGAR (1,0 s)**
  - 1.17.4. SUGAR MIX (2,5 s)**
  - 1.17.5. AMOUNT OF WATER (4,0 s)**
- 1.18. SUGAR CAPPUCCINO**
  - 1.18.1. AMOUNT OF COFFEE,0 s)**
  - 1.18.2. COFFEE MIX(3,5 s)**
  - 1.18.3. AMOUNT OF MILK (3,0 s)**
  - 1.18.4. MILK MIX(4,5 s)**
  - 1.18.5. AMOUNT OF SUGAR (1,0 s)**
  - 1.18.6. SUGAR MIX(2,5 s)**
  - 1.18.7. AMOUNT OF WATER(4,0 s)**
- 1.19. ESPRESSO WITH SUGAR**
  - 1.19.1. AMOUNT OF COFFEE(2,0 s)**
  - 1.19.2. COFFEE MIX (3,5 s)**
  - 1.19.3. AMOUNT OF SUGAR (1,0 s)**
  - 1.19.4. SUGAR MIX(2,5 s)**
  - 1.19.5. AMOUNT OF WATER (2,5 s)**
- 1.20. CHOCOLATE COFFEE**
  - 1.20.1. AMOUNT OF COFFEE(2,0 s)**
  - 1.20.2. COFFEE MIX (3,5 s)**
  - 1.20.3. AMOUNT OF CHOCOLATE(3,0 s)**
  - 1.20.4. CHOCOLATE MIX (4,5 s)**
  - 1.20.5. AMOUNT OF WATER(4,0 s)**
- 1.21. AROMA COFFEE**
  - 1.21.1. AMOUNT OF COFFEE(2,0 s)**
  - 1.21.2. COFFEE MIX(3,5 s)**
  - 1.21.3. AMOUNT OF AROMA (1,0 s)**
  - 1.21.4. AROMA MIX (2,5 s)**
  - 1.21.5. AMOUNT OF WATER (4,0 s)**
- 1.22. AROMA CAPPUCCINO**
  - 1.22.1. AMOUNT OF COFFEE(2,0 s)**
  - 1.22.2. COFFEE MIX (3,5 s)**
  - 1.22.3. AMOUNT OF MILK (3,0 s)**
  - 1.22.4. MILK MIX(4,5 s)**
  - 1.22.5. AMOUNT OF AROMA (1,0 s)**
  - 1.22.6. AROMA MIX(2,5 s)**
  - 1.22.7. AMOUNT OF WATER (4,0 s)**
- 1.23. SALEP**
  - 1.23.1. AMOUNT SALEP (5,0 s)**
  - 1.23.2. SALEP MIX (6,5 s)**
  - 1.23.3. AMOUNT OF WATER(4,0 s)**

- 2. TEMPERATURE SET**
  - 2.1. THERMOSTAT SETTING(80 °C)**
- 3. LIMITS SET**
  - 3.1. LIMITS SETTING (60 °C)**
- 4. SELECT LANGUAGE**
  - 4.1. TURKISH**
  - 4.2. ENGLISH**
- 5. COUNTERS**
  - 5.1. GENERAL COUNTER**
  - 5.2. TOTAL COUNTERS**
  - 5.3. PRODUCT 1 COUNTER**
  - 5.4. PRODUCT2 COUNTER**
  - 5.5. PRODUCT 3 COUNTER**
  - 5.6. PRODUCT 4 COUNTER**
  - 5.7. PRODUCT 5 COUNTER**
  - 5.8. PRODUCT 6 COUNTER**
  - 5.9. PRODUCT 7 COUNTER**
  - 5.10. PRODUCT 8 COUNTER**
  - 5.11. RESET COUNTERS**

- 6. MANUAL CLEANING
  - 6.1. MIXER 1 CLEAR
  - 6.2. MIXER 2 CLEAR
  - 6.3. MIXER 3 CLEAR (No 2 MIXER)
- 7. FACTORY DEFAULT
  - 7.1. FACTORY SETTINGS ARE APPLIED
- 8. PRODUCT SELECTION
  - 8.1. PRODUCT 1
    - 8.1.1. CAPPUCCINO
    - 8.1.2. MACHIATO
    - 8.1.3. MOCHACCINO
    - 8.1.4. FRUIT TEA
    - 8.1.5. DOUBLE ESPRESSO
    - 8.1.6. DECAFFEINATED
    - 8.1.7. SOUP
    - 8.1.8. COFFEE WITH SUGAR
    - 8.1.9. CAPPUCINO WITH SUGAR
    - 8.1.10. ESPRESSO WITH SUGAR
    - 8.1.11. CHOCOLATE COFFEE
    - 8.1.12. AROMA COFFEE
    - 8.1.13. AROMA CAPPUCCINO
    - 8.1.14. SALEP
    - 8.1.15. EMPTY
    - 8.1.16. HOT WATER
    - 8.1.17. ESPRESSO
    - 8.1.18. MILK
    - 8.1.19. CHOCOLATE MILK
    - 8.1.20. TEA
    - 8.1.21. AMERICANO (Default)
    - 8.1.22. CHOCOLATE
    - 8.1.23. LIGHT TEA
    - 8.1.24. TEA WITH MILK
  - 8.2. PRODUCT 2
    - 8.2.1. ESPRESSO (Default)
  - 8.3. PRODUCT 3
    - 8.3.1. COFFEE MILK (Default)
  - 8.4. PRODUCT 4
    - 8.4.1. 2 X ESPRESSO (Default)
  - 8.5. PRODUCT 5
    - 8.5.1. CAPPUCCINO (Default)
  - 8.6. PRODUCT 6
    - 8.6.1. MOCHACCINO (Default)
  - 8.7. PRODUCT 7
    - 8.7.1. CHOCOLATE (Default)

- 8.8. PRODUCT 8
  - 8.8.1. HOT WATER (Default)
- 10. CANISTER SCHEME
  - 9.1. CANISTER 1
    - 9.1.1. COFFEE
    - 9.1.2. CHOCOLATE
    - 9.1.3. MILK
    - 9.1.4. TEA
    - 9.1.5. SUGAR
    - 9.1.6. FRUIT TEA
    - 9.1.7. SALEP
    - 9.1.8. DECAFFINE
    - 9.1.9. SOUP
    - 9.1.10. AROMA
    - 9.1.11. EMMPTY (Default)
  - 9.2. CANISTER 2
    - 9.2.1. COFFEE (Default)
  - 9.3. CANISTER 3
    - 9.3.1. MILK (Default)
  - 9.4. CANISTER 4
    - 9.4.1. CHOCLATE (Default)
- 10. FUNCTION TEST
- 11. CHANGE PASSWORD
- 12. MACHINE INFO
  - 12.1. TRACKING NUMBER
  - 12.2. PROGRAM NUMBER
  - 12.3. CARD NUMBER
- 13. USB MENU
  - 13.1. EXPORT LOGS
  - 13.2. DELETE LOGS
  - 13.3. EXPORT SETTINGS
  - 13.4. EXPOT AUDIT
  - 13.5. IMPORT SETTINGS
  - 13.6. UPGRADE SOFTWARE
- 14. CLOCK CONFIG
- 15. TPAD CONFIG
  - 15.1. INSENSITIVITY
  - 15.2. MIDDILE
  - 15.3. SENSITIVITY
- 16. WASTE BOX CONFIG
  - 16.1. DISABLE
  - 16.2. ENABLE

**IMPORTANT NOTE:** THE VALUES STATED ARE DEFAULT FACTORY SETTINGS. THEY DO NOT REPRESENT A REFERENCE. THEY MAY VARY ACCORDING TO THE INGREDIENTS USED.

## 11. SERVICE CENTRE AND CERTIFICATE OF WARRANTY

SERVICE STATION:

ELEKTRAL ELEKTROMEKANİK SAN. VE. TIC. A.Ş.

IZMIR ATATURK INDUSTRIAL ZONE, M.K. ATATURK BLV. 23 CIGLI

35620, IZMIR/TURKEY

Tel: +90 (232) 376 7300 Fax: +90 (232) 376 7030

email: [elektral@elektral.com.tr](mailto:elektral@elektral.com.tr)

### FULL WARRANTY CERTIFICATE

Your Unit, Model :.....

Serial/Model No :.....

Which you purchased on \_\_/\_\_/20\_\_ is hereby warranted against defect in workmanship and material for a period as follows: **1 YEAR**

1. Within the Warranty period, ELEKTRAL will repair or replace, without charge, any part or parts that prove to be defective. The defective instruments should be returned, accompanied by the attached SERVICE OR REPAIR CARD to ELEKTRAL Izmir Ataturk Industrial Zone M.K. Ataturk Blv. 23 Cigli 35620 Izmir-Turkey where the overhaul is performed also.
2. Upon expiration of the Warranty, ELEKTRAL A.S. further guarantees to repair this merchandise at a cost of the current listed ELEKTRAL price.
3. This warranty is void if
  - the instrument has been damaged or broken down through misuse
  - instrument has been altered or tampered with in any way
  - instrument has been damaged through accident, misuse or negligence
  - the seal, ties or stickers on the instrument has been broken
  - damage or defects occur because of through lightning and fire
  - replacement or repair is necessitated be loss or damage resulting from any cause beyond the control of ELEKTRAL
  - the instrument has been used against the instructions stated in the user's manual
  - your warranty has not been among our files by your request with "Warranty Information Card"
  - only ELEKTRAL A.S. is authorized to confirm above mentioned particulars.
  - all price and costs are EXW Izmir-TR. All the transport or travel costs to be borne by the buyer.
4. ELEKTRAL is not to be labelled for loss of other damage allegedly resulting from defects in its products.
5. This Warranty gives you specific legal rights. Please Include Model Number and purchase date in correspondence regarding this instrument.

**All Warranty Services are at our Factory. All transportation risks and costs to and pro our Factory belongs to Customer.**

*Thank you for selecting a product manufactured by ELEKTRAL A.S. Before using your new item please take a minute to read and fill out the forms on the reverse side of this card.*

*The Warranty Information Card helps us learn more about you and what you purchase. From this information come improvements and new products for you, our valued customers. Please return this card within 10 days of purchase.*

*The full Warranty Certificate tells you that we stand behind our products and will repair this item as long as you own the product, per the terms of the warranty certificate.*

*The Service or repair card is your way of communicating with our Customer Service Department should a problem occur. It helps us to quickly service your product and return it as soon as possible. Please complete and include this card whenever you return a product again.*

*Thank you once again for selecting our product. We hope this will be one of the many ELEKTRAL products you will own.*

Date/Place Purchased :.....

Invoice Date, No :.....

Dealer Company's Title :.....

Address :.....

.....

Telephone-Fax :.....

E-mail :.....

DEALER COMPANY :.....



Seal & Signature