SERVICE & INSTALLATION MANUAL

COMBI KING

Models: CPE & KPE

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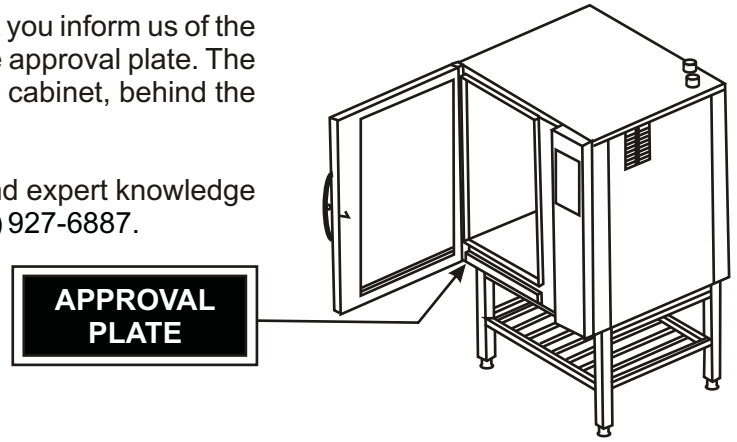
APPROVAL PLATE

When communicating with BKI, we kindly ask you inform us of the serial number of the oven that is stated on the approval plate. The approval plate is usually located on the oven cabinet, behind the oven door, as shown.

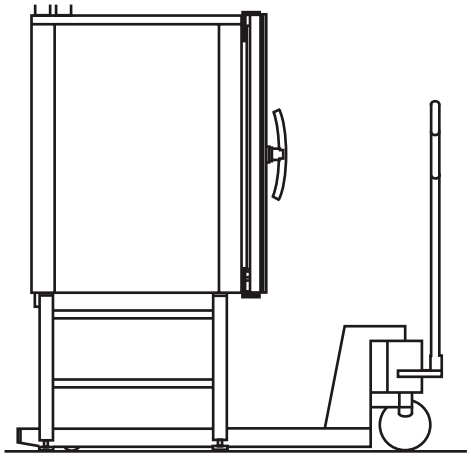
BKI Technical Support, whose experience and expert knowledge are at your disposal, can be contacted at (800) 927-6887.



INSTALLATION & CONNECTION

Unpacking the oven

The oven is best handled while still in its wrapping. Wherever possible, use a lifting trolley.



Introduce the lifting trolley under the lower cross tube of the stand and place a couple of wooden blocks between the cross tube and the lifting trolley.

To achieve the best possible balance, introduce the lifting trolley from the front of the oven or from the motor side. Note that the oven can be lifted off the stand.

Remove the original packaging from the oven. Do not remove the foil that covers the surfaces until the oven has been installed, as once the foil has been removed the surfaces are vulnerable to sharp objects such as tools.

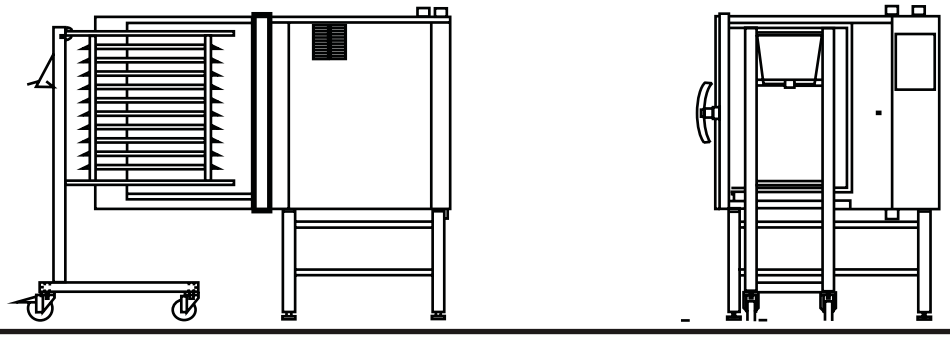
Remove all packaging material that secures the racks in the oven chamber.

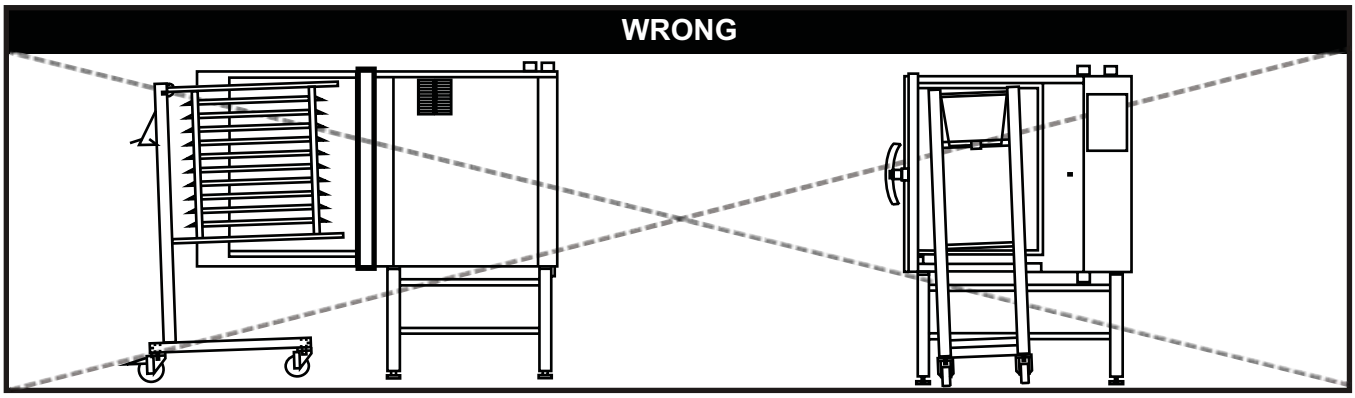
NOTE: The packaging should be destroyed in accordance with national rules and regulations governing waste disposal. Information on the composition of the packaging material can be obtained from the BKI Customer Center.

Installing the oven

To ensure that the oven functions correctly when installed, it should be placed upright and level (horizontally). This is measured at the front and side edge of the roof, and adjustment is made by means of the adjusting screws on the stand or on the legs of table models. The height of the oven can also be adjusted to fit the trolley for rack.

CORRECT





CAUTION: The oven should be placed 2” (5 cm) from the rear wall and the distance between the right side of the oven and the nearest wall or piece of furniture, etc. should be at least 3” (7 cm). This is to ensure the necessary flow of cooling air to the oven. Strong sources of heat such as hotplates, tilting frying pans, deep fat fryers, etc. should not be placed near the oven, otherwise the warranty may cease to apply.

Water connection
Combi King ovens have one or two water connections.

To facilitate cleaning and service, the oven should be connected with an approved flexible ½” hose and the permanent installations should be fitted with a stop-tap and a non-return valve. Before connecting the oven to water, flush the tubes thoroughly. Connect the oven.

Hardness of the water:	max. 3 dH
Conductivity:	min. 75 microsiemens
Water pressure:	min. 2.5 bar (36.3 psi) dynamic pressure (when CombiClean activated). When CombiClean not activated: min. 1.5 bar (21.8 psi), max. 6 bar (87 psi).
Water temperature:	max. 68°F (20°C)
Chloride concentration:	max. 100 mg/litre (.083 lb./gallon)
Sulphate:	max. 150 mg/litre (.125 lb./gallon)

If the feeder is connected to the water distribution system with a flexible hose, this hose should be VA approved.

CAUTION: If the water temperature exceeds 68°F (20°C), problems with regard to ClimaOptima calibration and cooling of the oven may occur.

CAUTION: Ovens with a steam generator must not be connected to a reversed osmosis plant, as this may cause problems with the reading of the water level in the steam generator.

CAUTION: The water connection must be carried out by an authorised plumber in accordance with existing rules and regulations.

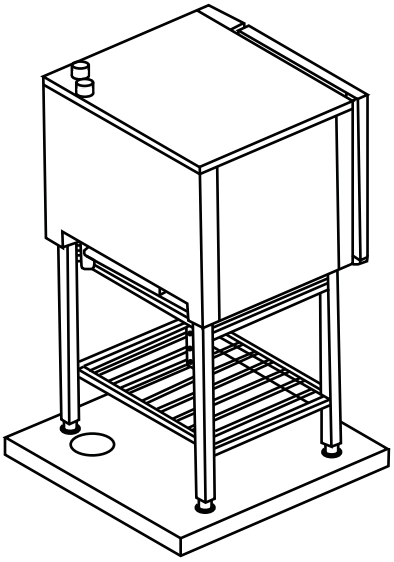
CAUTION: Clogged up water filters and dirt in the solenoid valves are not covered by the warranty.

In the case of two water connections, the following applies:

1. 1 connection for raw water for the condensation jet (cold water).
2. 1 connection for the steam generator and the jet in the oven chamber. Must meet the requirements applying to water supplied to household appliances; however, hot water with a temperature not exceeding 122°F (50°C) can be used.

Drain connection

From the factory, the BKI ovens are equipped with a drain system that removes surplus water from the oven chamber. This water may be condensed water from the products, or it may occur when the oven chamber is cooled down with cold water, or when the oven chamber is cleaned.



CAUTION: Connection **must** be carried out by an authorised plumber, to an open or to a closed drain.

CAUTION: The drain must never end directly beneath the oven.

The drain must be of **stainless steel** or an equally temperature-resistant material, have a diameter of at least 2" (50 mm) and a fall of at least 3° or 5%.

Electrical connection/survey of supply lines

- The electrical connection must be carried out by an authorised electrician in accordance with existing rules and regulations.
- The wiring diagram is located in the motor compartment.
- The terminal for the electrical connection is located behind the right side plate.

CAUTION: An approved plug outlet or a safety cutout must be located close to the oven so that the oven can be disconnected during installation and repair. The safety cutout must be able to cut off all poles with a total distance of break of at least .12" (3 mm). Each of the two units in a stacked arrangement (CombiPlus) must have its own plug outlet or safety cutout

The warranty does not cover incorrect connection.

Supply lines - survey (applies to all models (C, B, K, CPE, BPE, KPE)

(All cross sections in mm²)

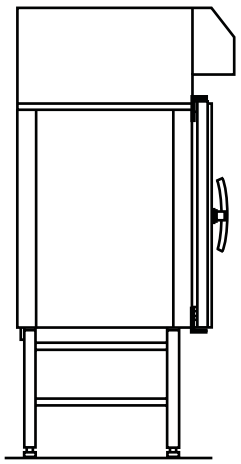
	1.06	1.06	1.08 - 1.10 - 1.12	1.08 - 1.10 - 1.12	1.16	1.16	1.20	1.20	2.10 2.14	2.10 2.14
	9 kW	Fuse	18 kW	Fuse	24 kW	Fuse	36 kW	Fuse	27 kW	Fuse
400V 3N ~ 50/60 Hz	5x2,5	16A	5x4	35A	5x10	50A	5x16	63A	5x10	50A
400V 3 ~ 50/60 Hz	4x2,5	16A	4x4	35A	4x10	50A	4x16	63A	4x10	50A
415V 3N ~ 50/60 Hz	5x2,5	16A	5x4	25A	5x10	50A	5x10	50A	5x10	50A
440V 3 ~ 50/60 Hz	4x2, 5	16A	4x4	25A	4x10	50A	4x10	50A	4x6	35A
200V 3 ~ 50/60 Hz	4x4	35A	4x16	63A	4x25	100A	4x35	125A	4x25	80A
230V 3 ~ 50/60 Hz	4x4	25A	4x10	50A	4x25	80A	4x35	100A	4x25	80A
230V 1 ~ 50/60 Hz	3x10	50A	3x25	80A	*	*	*	*	*	*
480V 3 ~ 50/60 Hz	4x2,5	16A	4x4	25A	4x6	35A	4x10	50A	4x6	35A
208V 3 ~ 50/60 Hz	4x4	25A	4x10	50A	4x25	80A	4x35	100A	4x25	80A

*Not Possible

Recommended Supply Line: **H07RN-F**

Exhaust

The BKI ovens are equipped with an open/direct exhaust system that removes surplus humidity from the oven chamber. The exhaust system has an electrically operated damper. The exhaust tube can be connected to a ventilating system. In that case, a special extraction funnel is fitted to avoid suction directly from the oven chamber. This extraction funnel can be ordered from BKI. The scope of supply also includes a specially designed extraction hood, see adjacent illustration.



If an extraction hood is installed in the ceiling above the oven, it should project 20" (50 cm) over the front of the oven. The suction effect should be 400 – 800 m^3/h (523 - 1046 yd^3/h).

The ventilation motor can be controlled directly from the oven. This means that the ventilation starts when a program is started and runs for 10 minutes after the program is completed.

Checking Before Use

The oven should be checked before you start using it.

On The Outside

- Check that the oven has not been damaged in transit (dents, scratches, etc.)
- Check/adjust oven door
- Check/adjust the height and check that the oven is placed level (horizontally)

Connections

- Check for correct water connection
- Turn on water supply
- Check for leaks
- Turn off water supply
- Check and clean dirt filter
- Turn on water supply again
- Check handshower
- Check for correct electrical connection
- Check connection to trip tray
- Check for correct mounting of drip tray
- Check for correct fall of hose from drip tray, and check for leaks
- Check for correct exhaust and drain connection
- Clean oven

Oven chamber

- Check that filter housing is mounted correctly
- Check interior light
- Clean oven

Operation panel

- Check and adjust, if necessary, each of the preset values
- Heat up the oven at 482°F (250°C) for approx. 5 min.

OPERATION PANEL - MODELS CPE & KPE

The operation panel is so designed that the modes are activated by pressing the keys next to the symbols or digits (6 keys on either side).

In the case of for instance time and temperature, the left as well as the right side next to the mode are active. The right key increases time, temperature, etc. and the left key reduces time, temperature, etc.

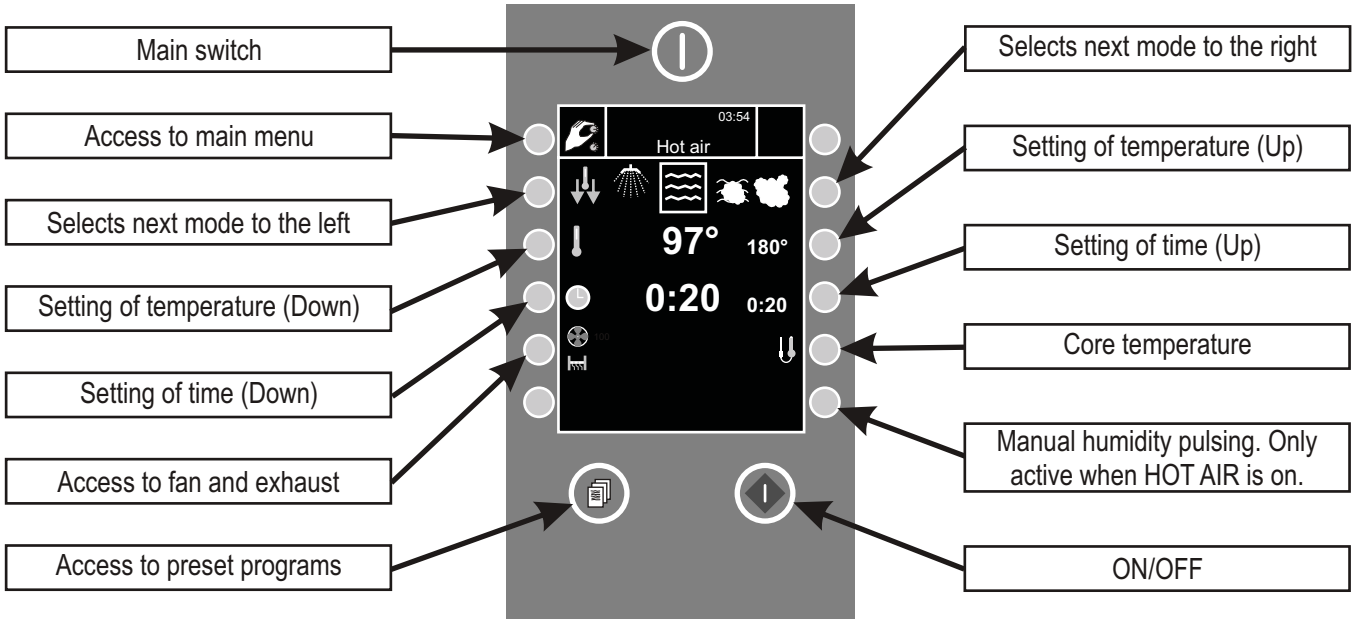
Some of the symbols are shown on one side only and will lead you to a submenu. When you have made changes in the submenu, press OK at the upper right hand corner.

The read circle with the green line at the top of the panel is the main switch.

The green square with the white line at the lower right-hand corner is ON/OFF.

The white circle with the small symbol at thelower left-hand corner gives you access to the programme menu.

SETTING OF MODE AND TIME



The white digits next to the symbols for TEMPERATURE and TIME show the actual oven temperature and the actual time remaining. When there is one minute left, the computer counts down from 59 seconds. The alarm sounds when time is up. The red digits are the preset time and temperature.

When the oven is on (a program or a function has been activated – the square around the function flashes), it is still possible to set TIME, TEMPERATURE, FAN and EXHAUST.

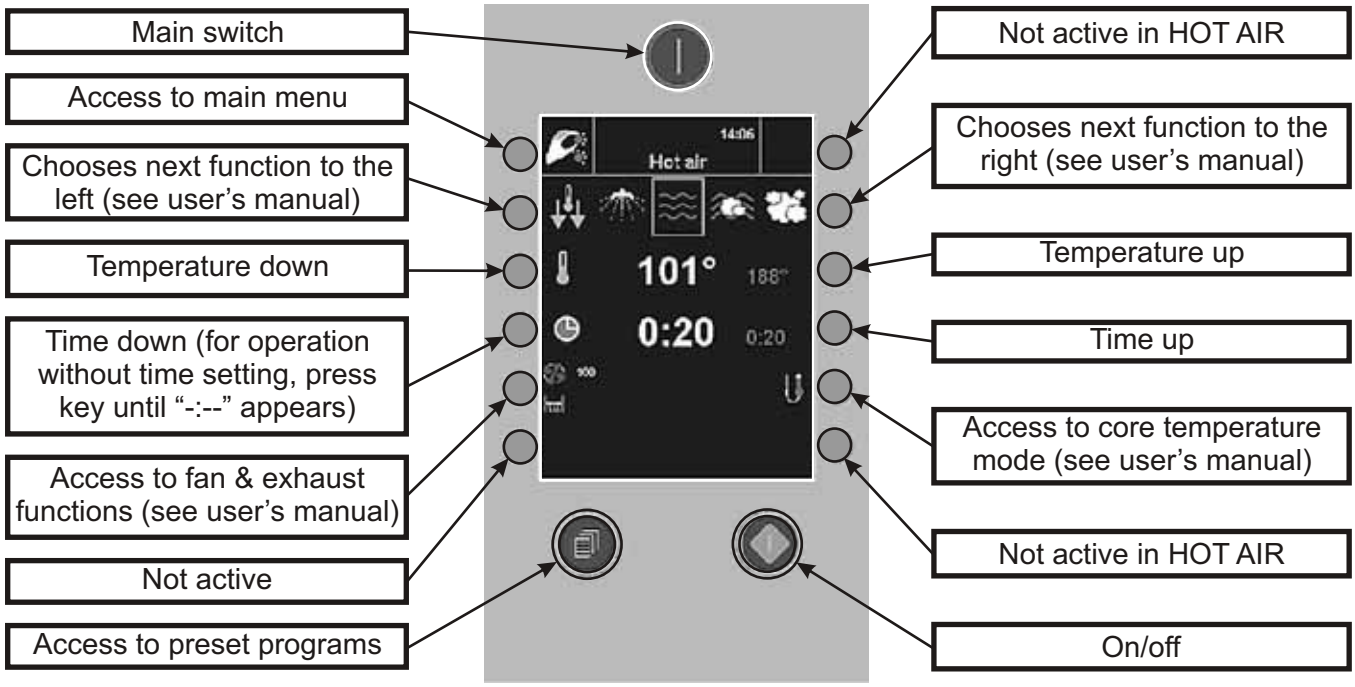
Note that the fan wheel is reversible. This means that the wheel can run leftwards as well as rightwards with a small interval when changing direction.

The core temperature should be set before the program is started.

On the following pages, the above initial display image will be referred to as the “work menu”.

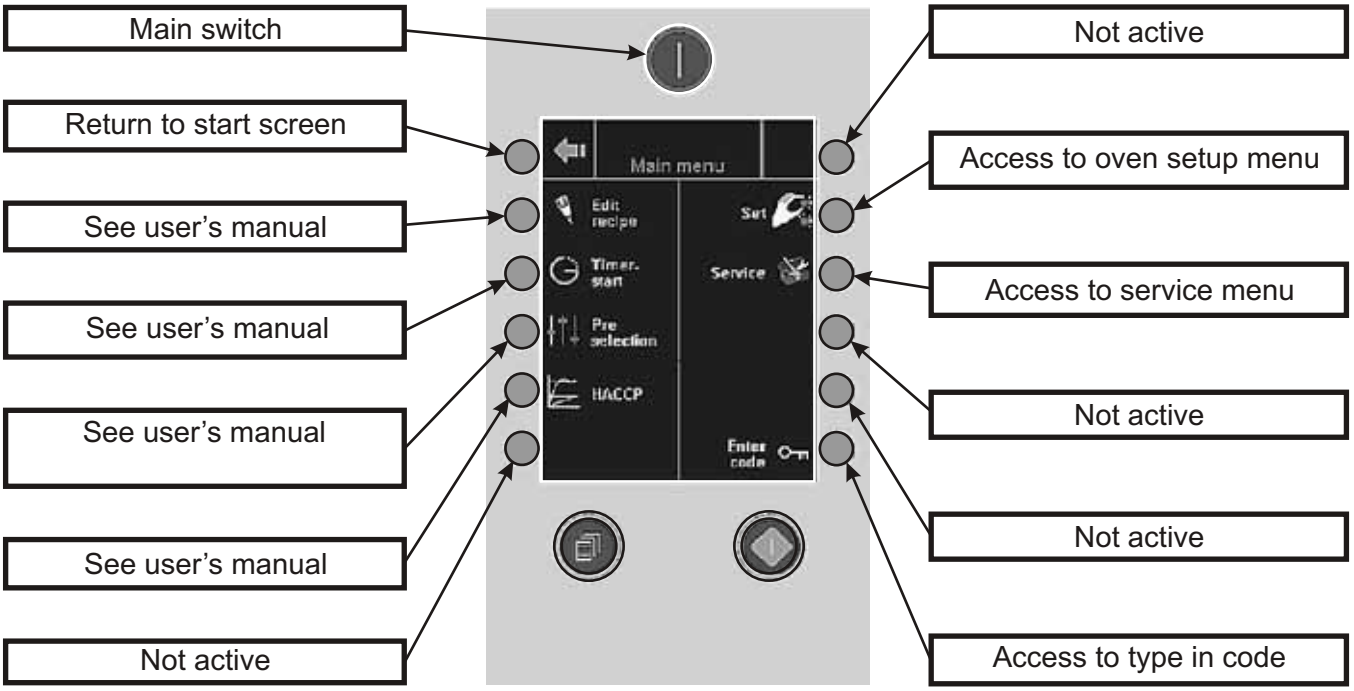
* For continuous operation, press the left key until the indication of time disappears.

START MENU



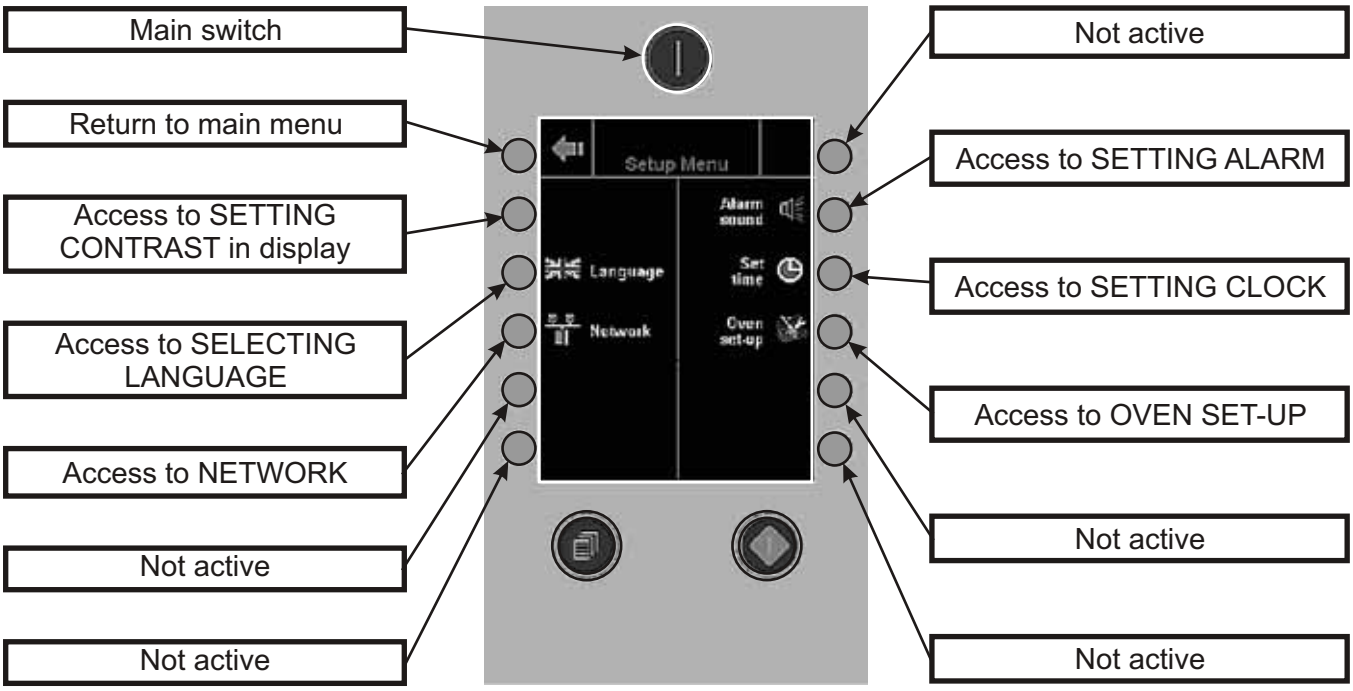
- For further information on the modes shown on this page, see user's manual.

MAIN MENU



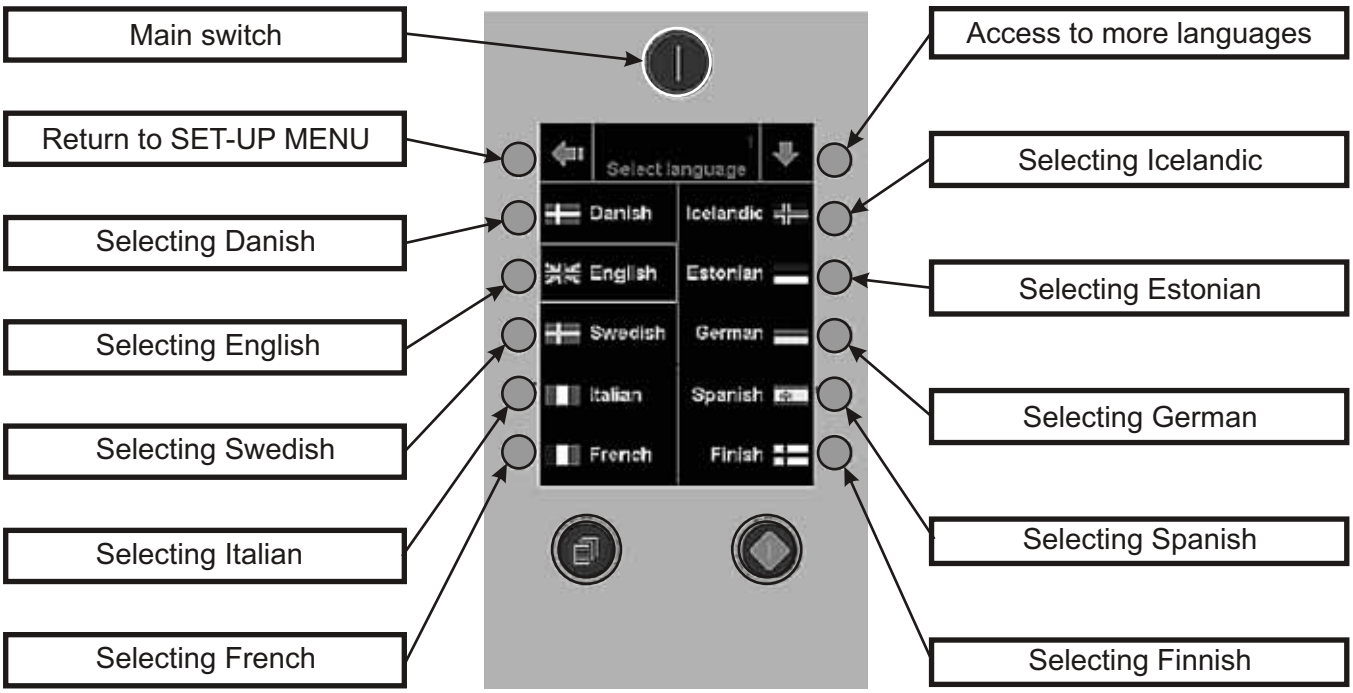
- Please note that prior to delivery, the oven's computer has been thoroughly tested and correctly set up and we therefore recommend that all users, with or without a code, navigate in the engineering with the utmost care. Incorrect handling may result in inappropriate changes to the computer set-up.
- Changing the computer set-up requires extended knowledge as to the design and structure of the oven. If in doubt, please contact your oven supplier.

SET-UP MENU



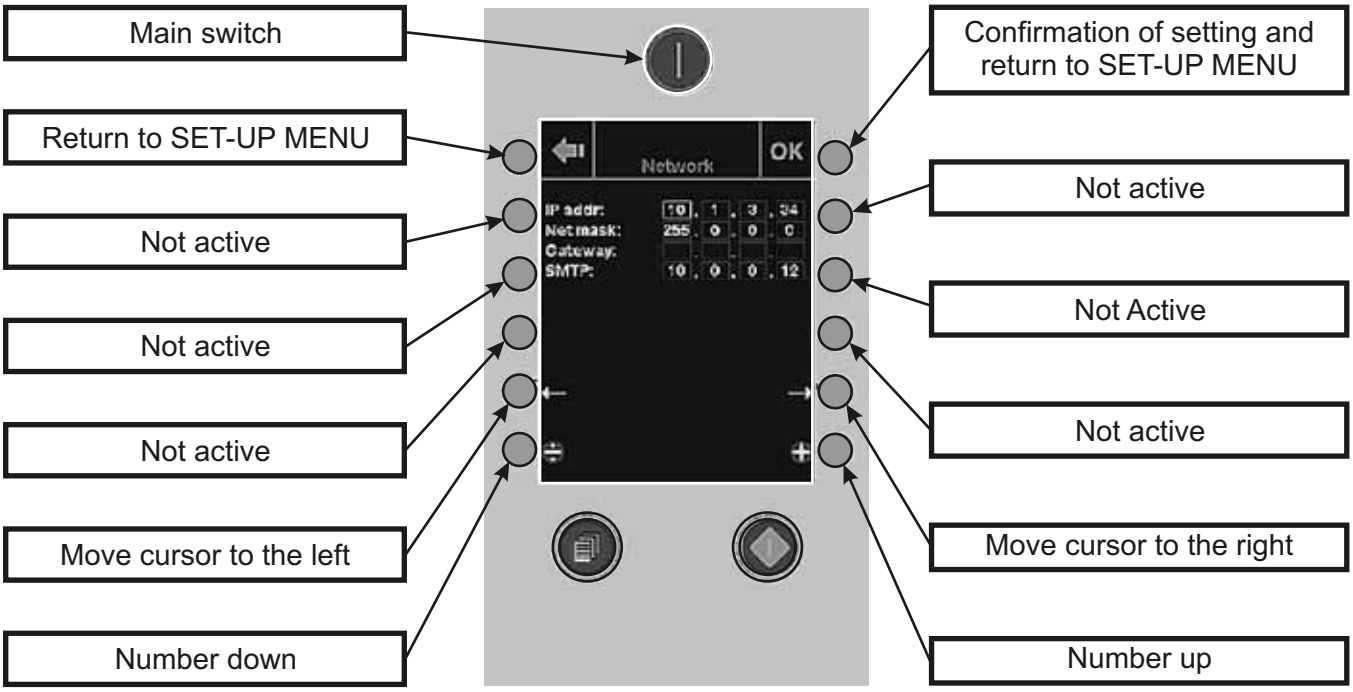
- Access to various settings. Avoid changing the settings inappropriately (contact your oven supplier for further information).

SELECT LANGUAGE



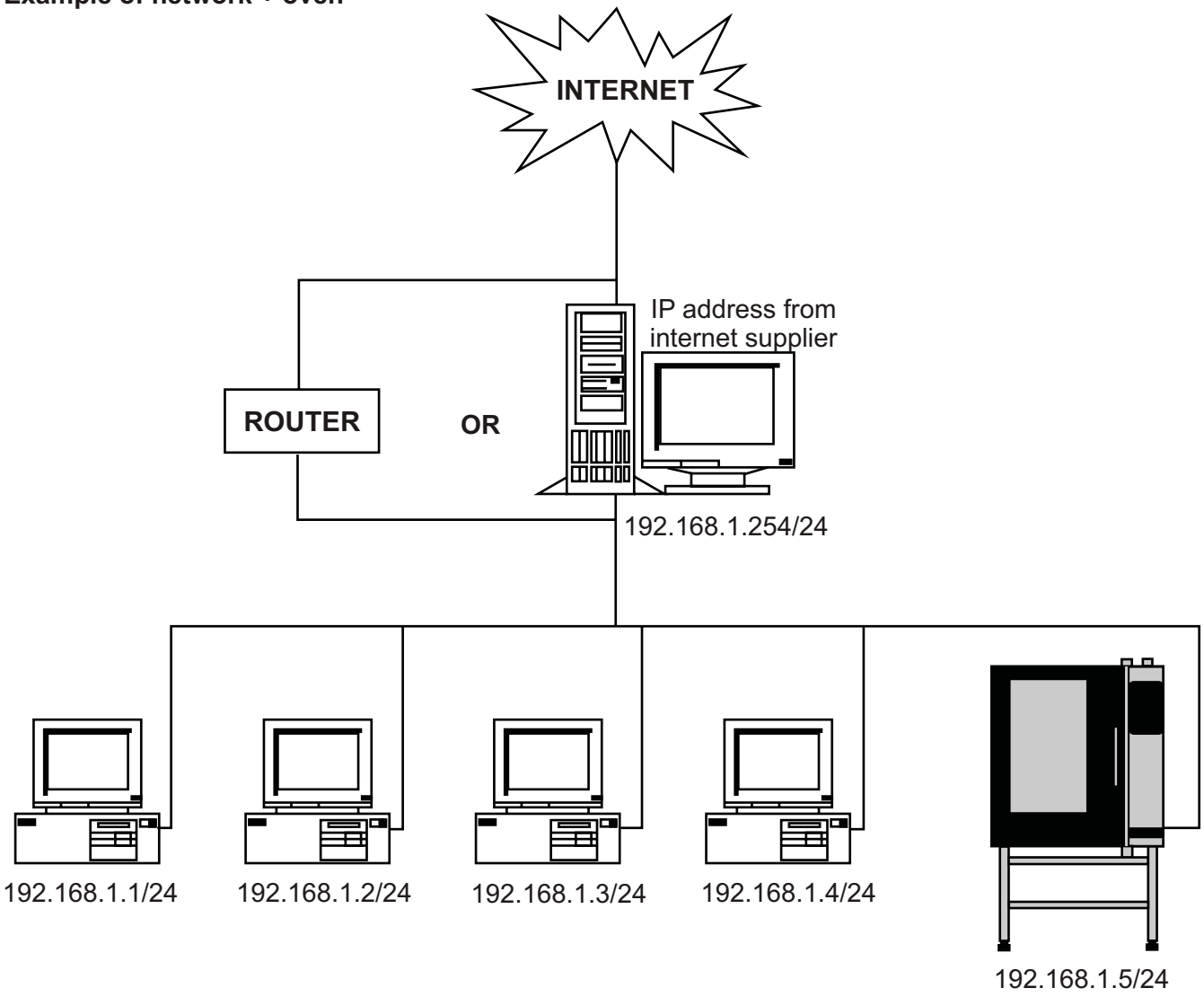
- Showing the language available. The red square indicates which language has been selected.

NETWORK



- IP addr: Use Not active IP address that is compatible with the network in question.
- Netmask: Use Not active netmask that is compatible with the network in question.
- Gateway: Set for internet router in question.
- SMTP: Set for mail server of internet access provider.
- INFO: PORT FORWARD 5900 and 80 of the internet router should be open for the IP address of the oven if the user wants BKI to have free access to the oven.
- INFO: If the user wants the oven to be updated via the BKI server, it suffices to set the Gateway, however, BKI must be named as UPDATE SERVER in the SET-UP SECTION.
- Only an internet browser is required to access the oven from a computer.

Example of network + oven



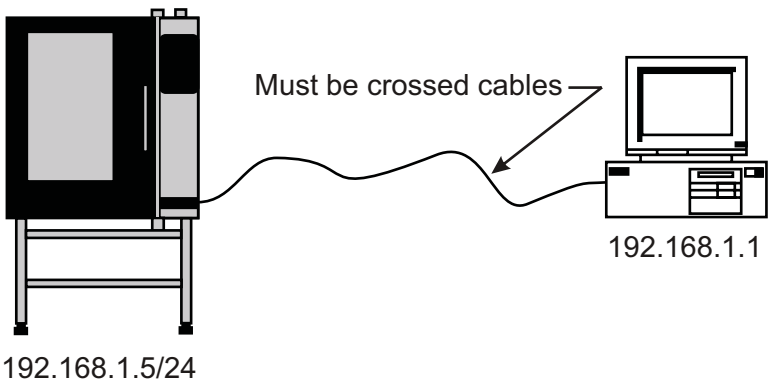
IP / 24 = IP / 255.255.255.0

Network set-up for oven:
IP addr: 192.168.1.5
Netmask: 255.255.255.0
Gateway: 192.168.1.254

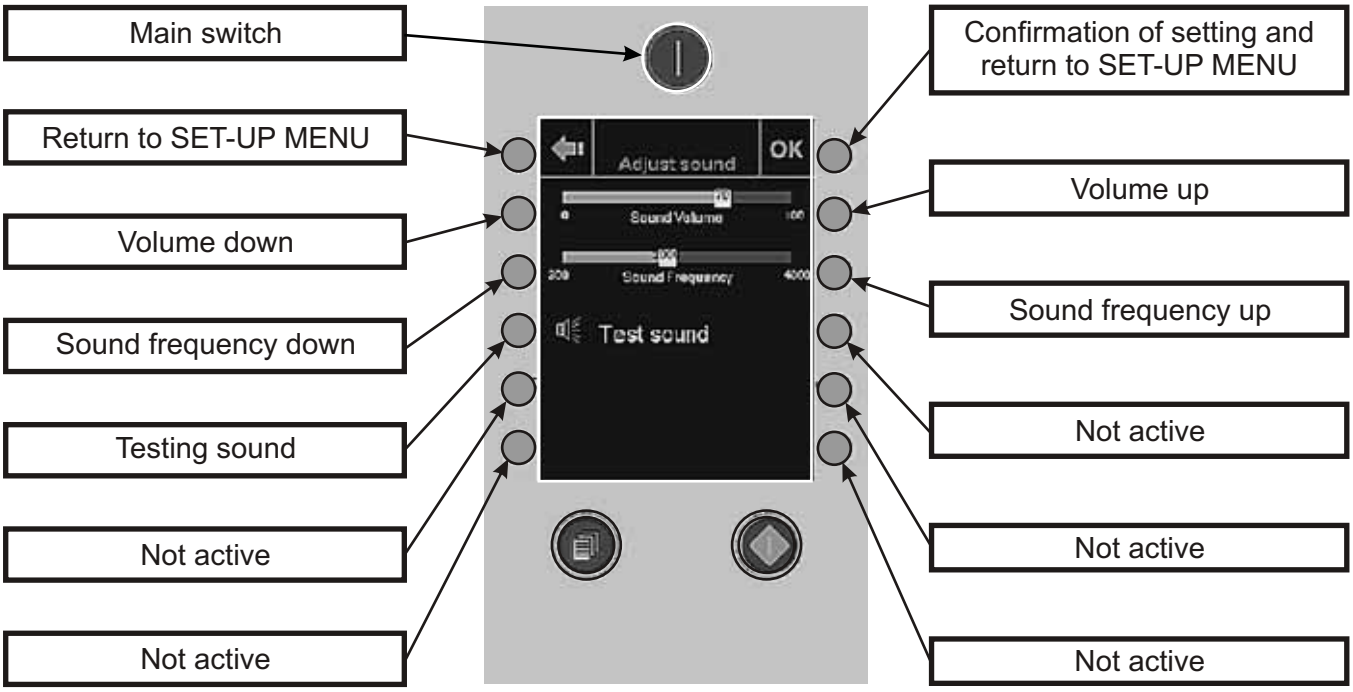
Access code for CombiNet:
USER: Superuser
Access code: 87 64 12

Example of direct connection to computer

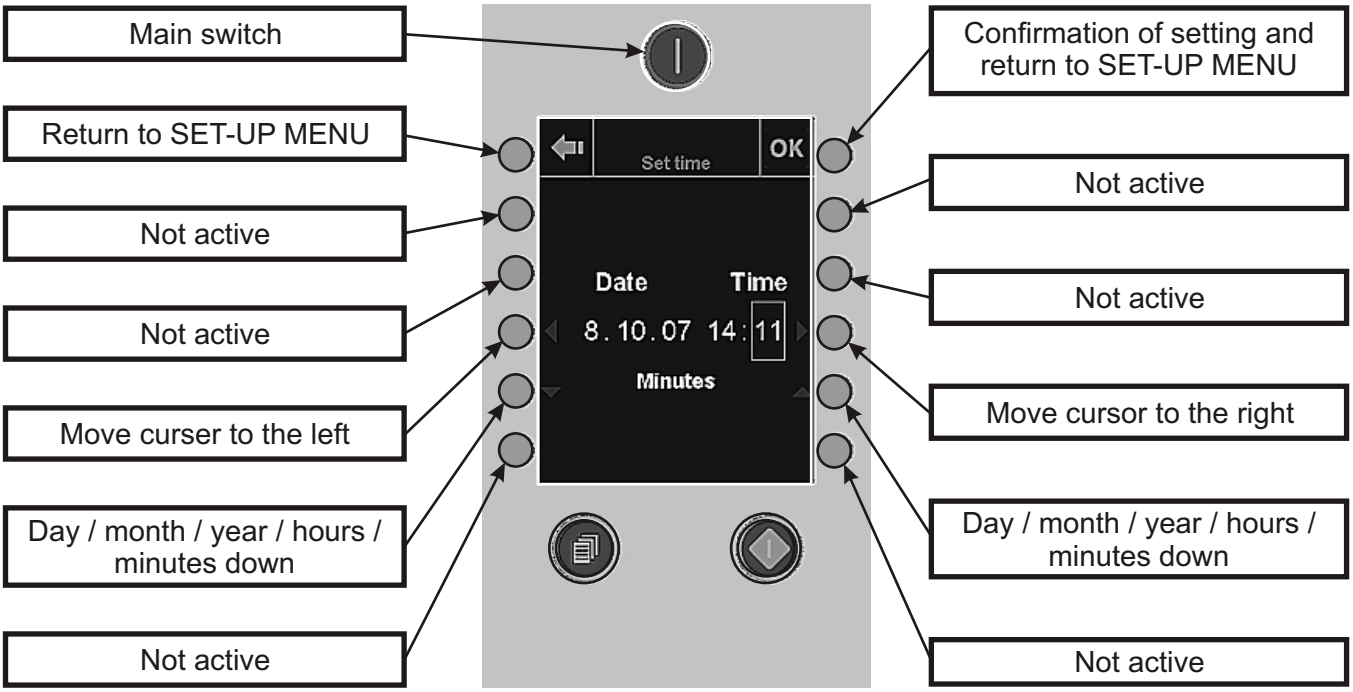
Network set-up for oven:
IP addr: 192.168.1.5
Netmask: 255.255.255.0



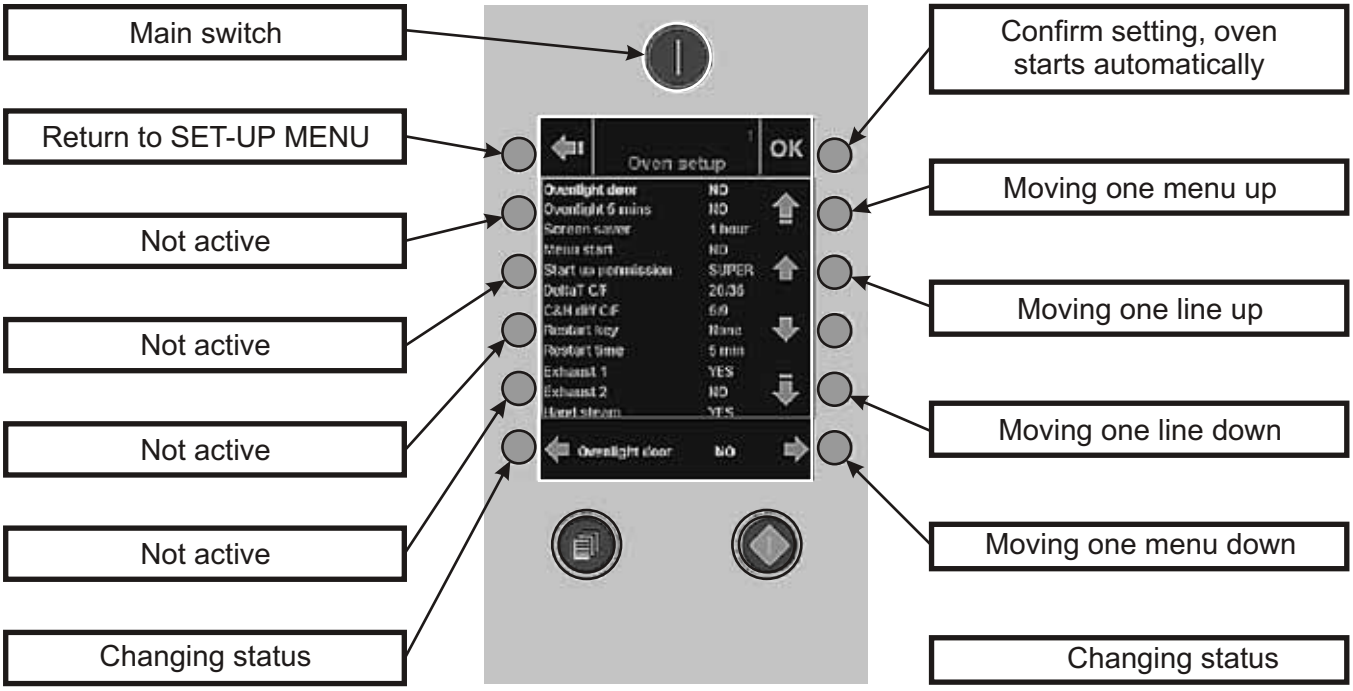
SETTING SOUND



SETTING CLOCK

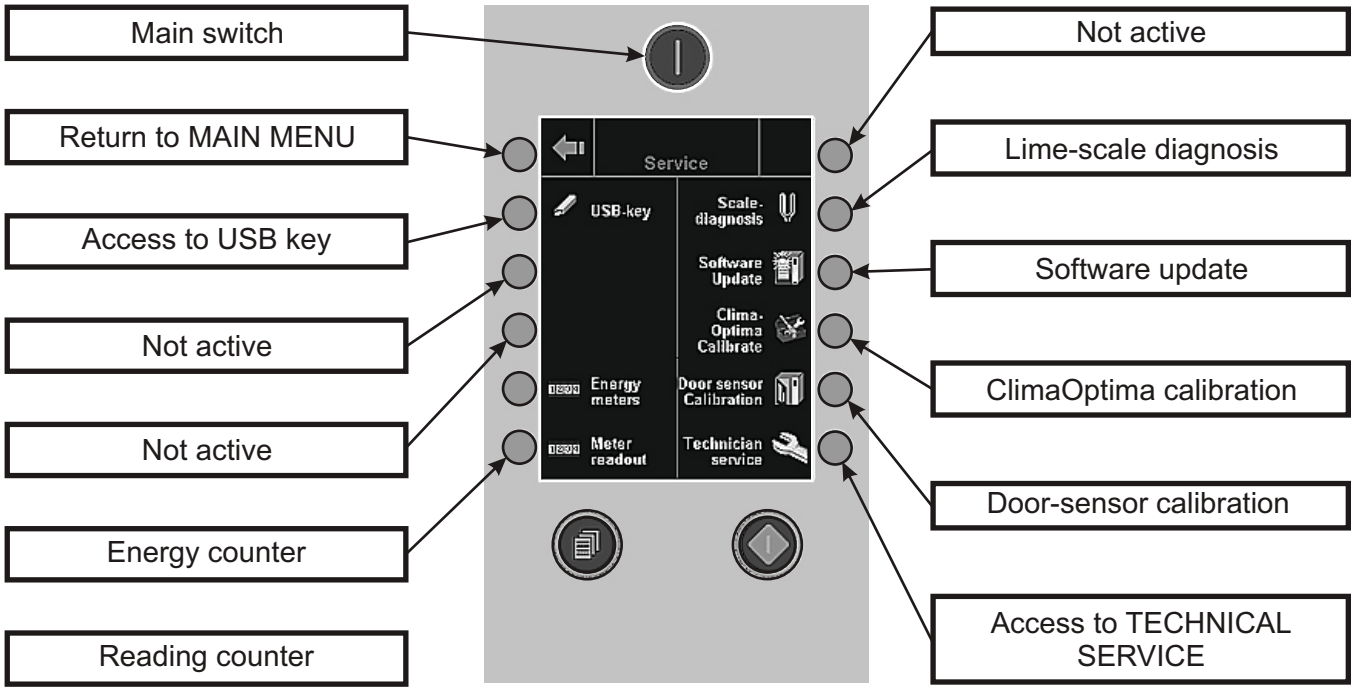


OVEN SET-UP



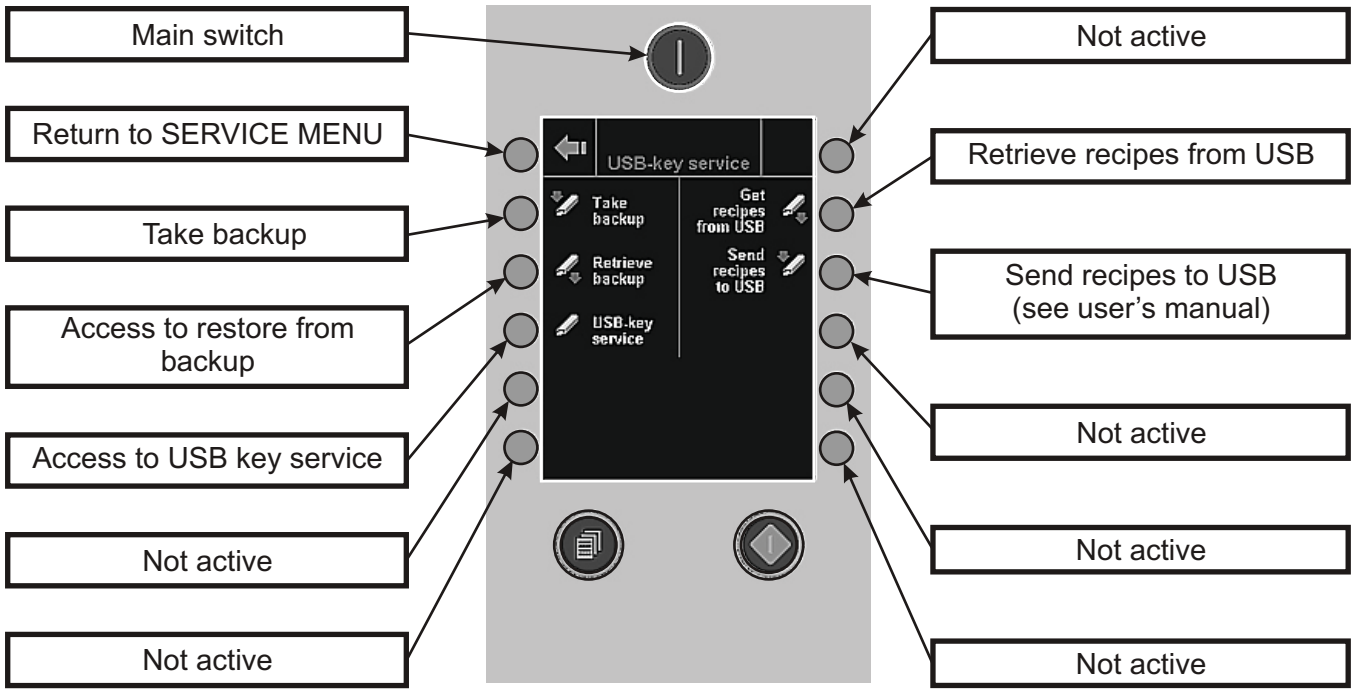
- With a code for the computer, the service engineer has the option of many settings. Changing the set-up requires extended knowledge of the BKI ovens. Unnecessary or incorrect changes to the settings may change the computer set-up inappropriately.
- See Appendix 3, for a survey of the oven set-up.

SERVICE MENU



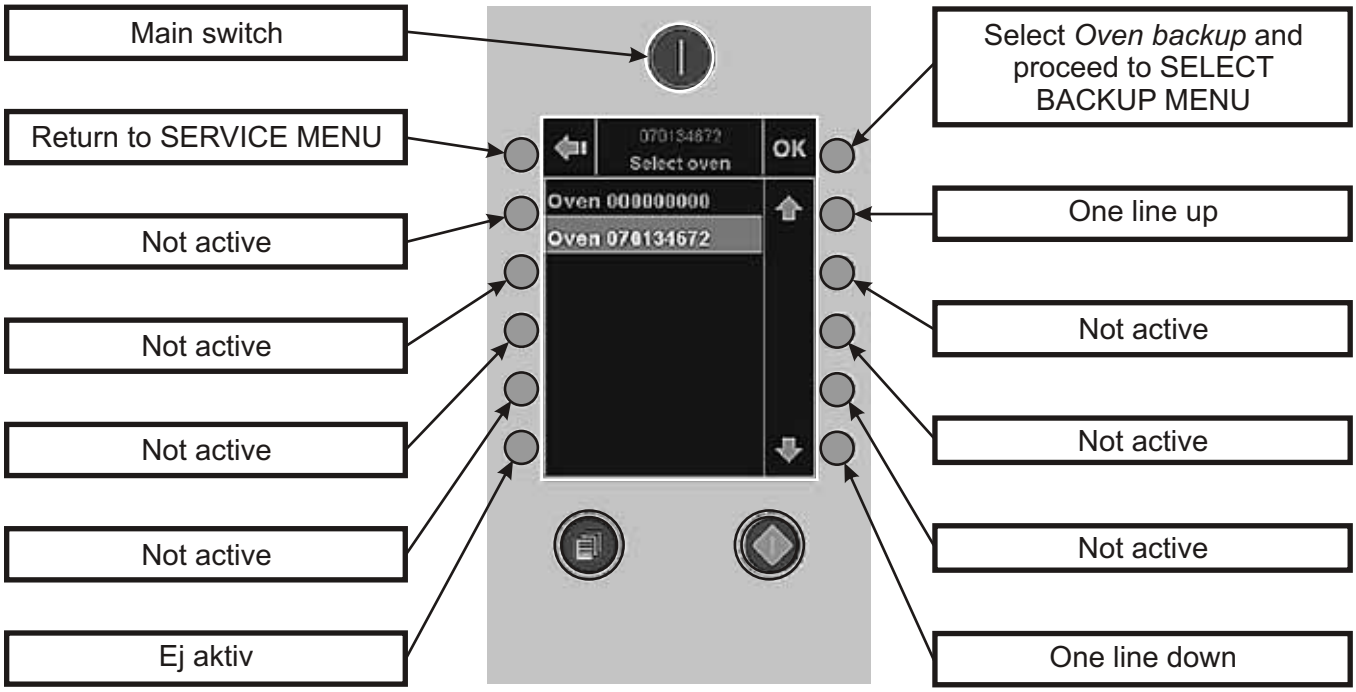
- Access to various service functions.
- USB key is only active if a USB key is inserted. If the controller does not find a USB key, the text “USB key” will be grey.

SELECT USB KEY SERVICE



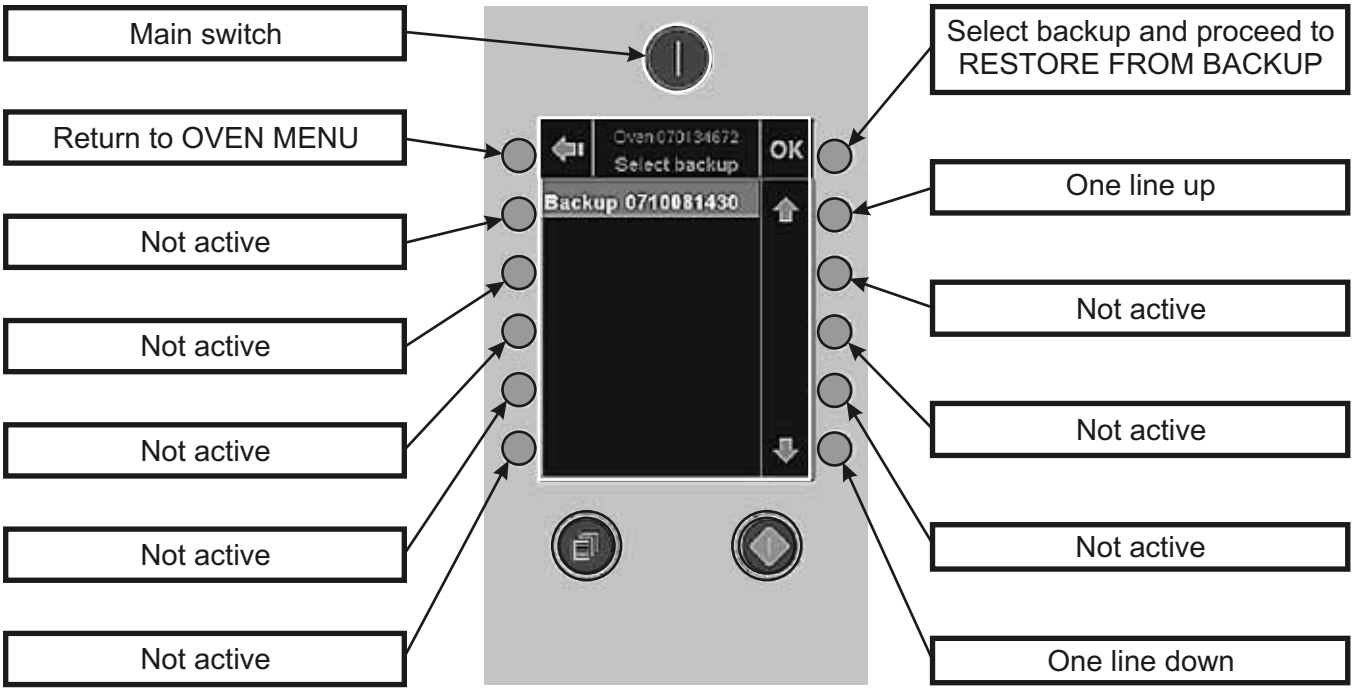
- In this menu, you can take a backup. It is possible to take backup and restore from the backup of the oven set-up and of the programs.

RESTORE BACKUP



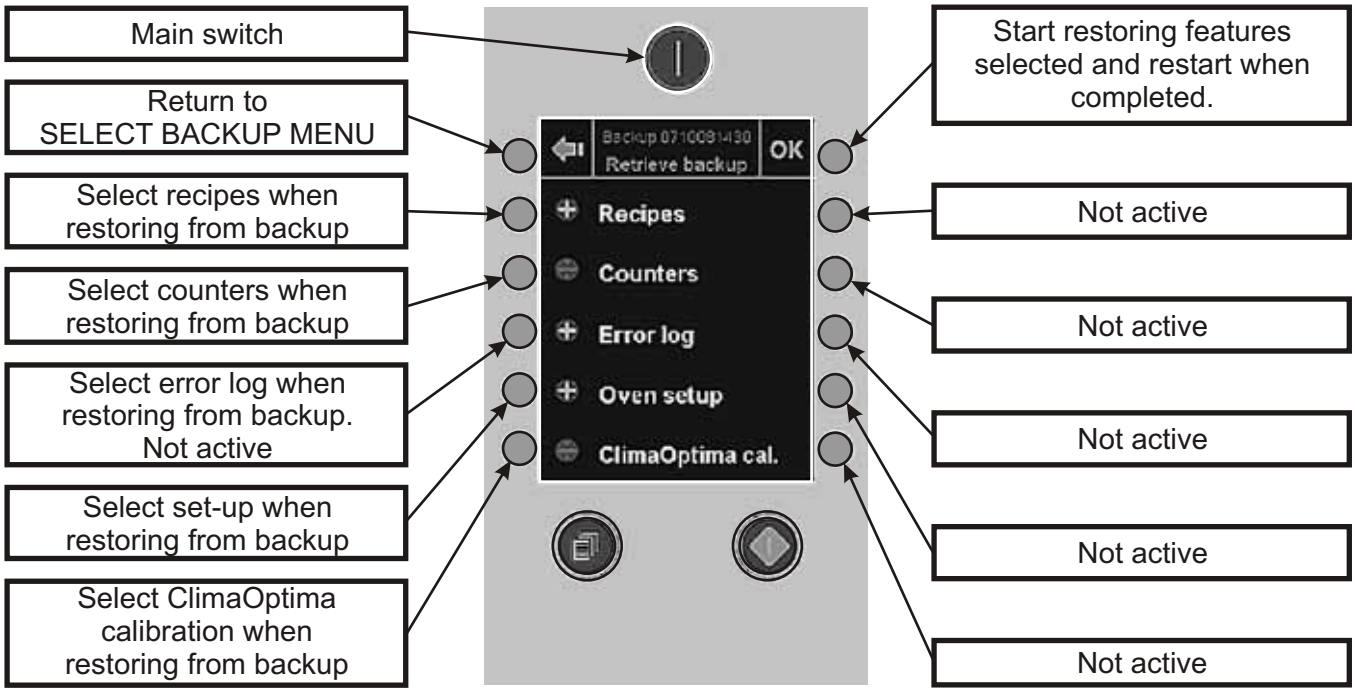
- In this menu, you select the oven backup to restore from.
- This oven XXXXXXXX(A/B) (ex. this oven 010755667): Shows the number of the oven in question.

SELECT BACKUP MENU



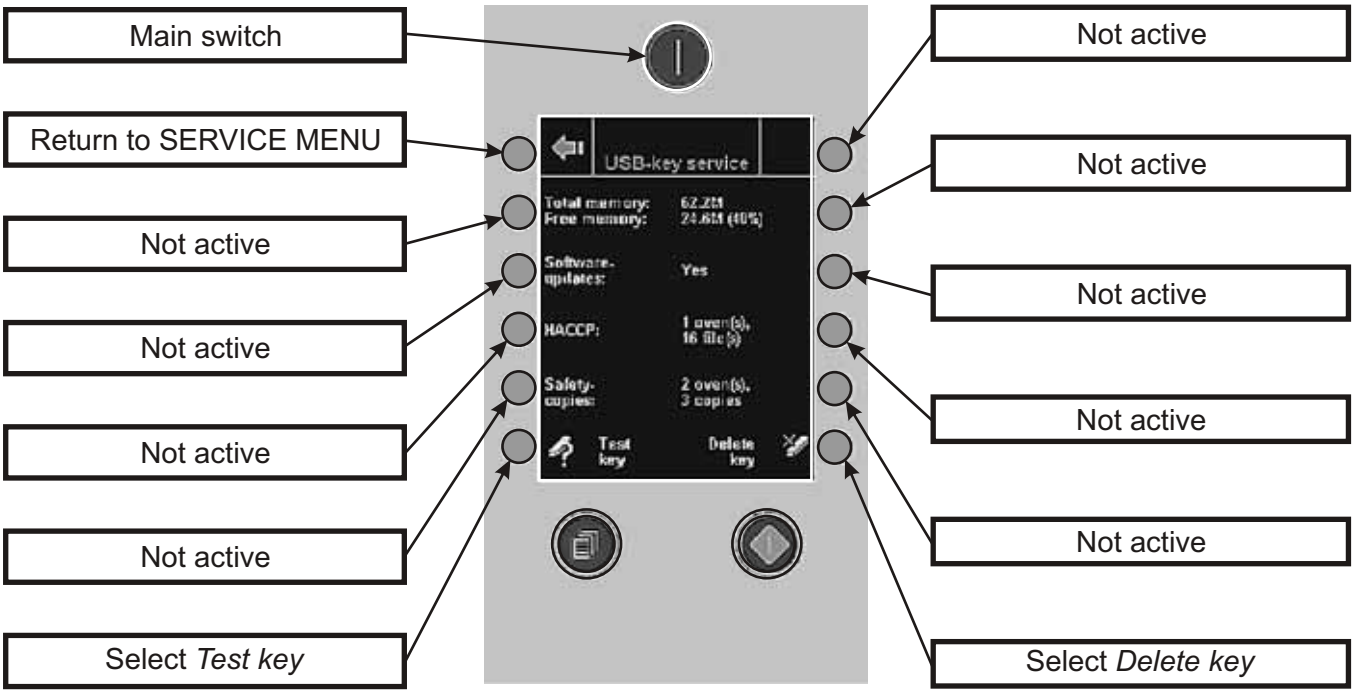
- In this menu, you select the backup to restore from.
- Format: Backup ÅÅMMDDTTMM.

RESTORE FROM BACKUP MENU



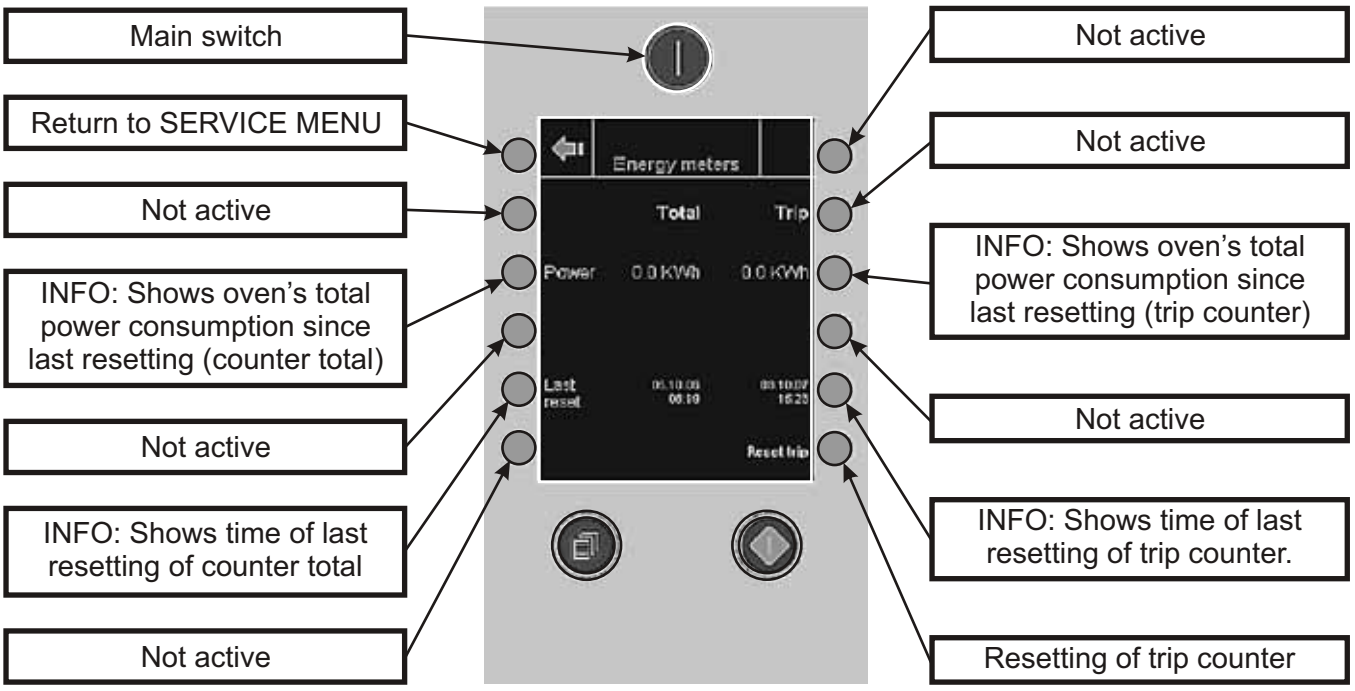
- In this menu, you select the features to be restored from the backup.

USB KEY SERVICE MENU



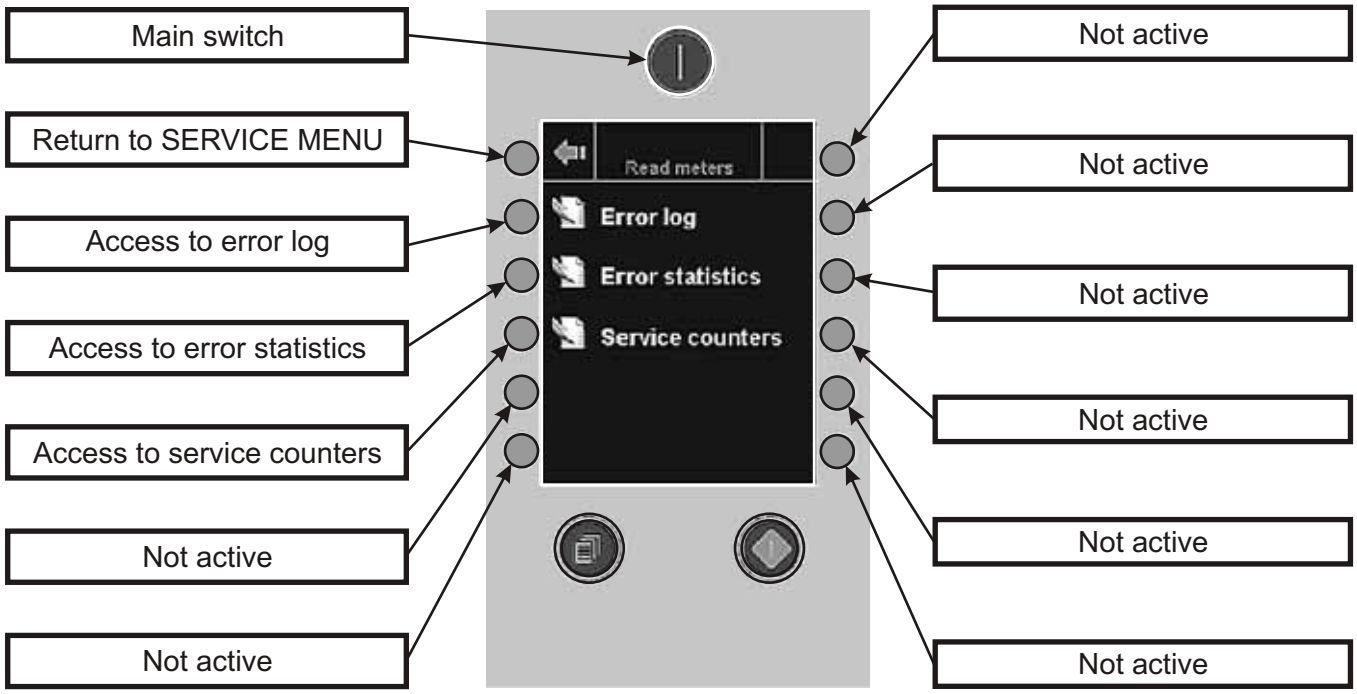
- This menu is a survey of the contents of the USB memory key.
- With this menu, it is possible to test the USB memory key.
- NOTE that when pressing Delete key, the entire contents of the key are deleted.

ENERGY COUNTERS



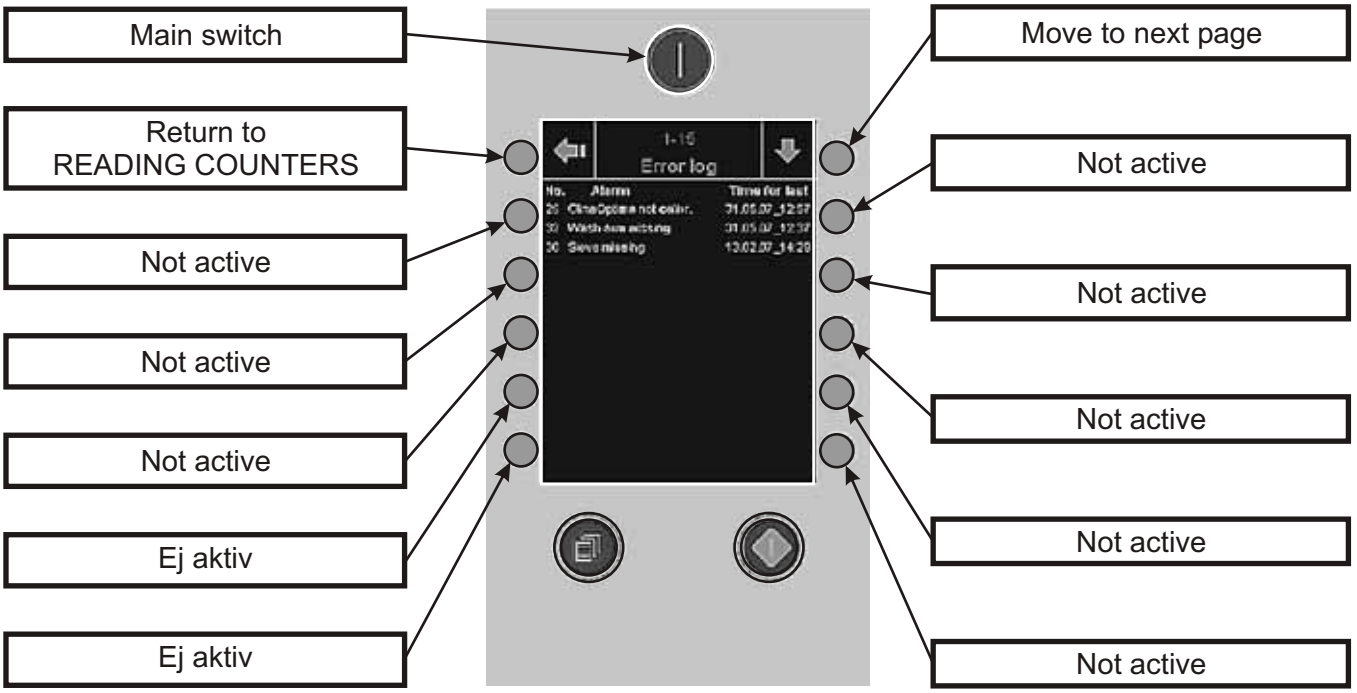
- Shows consumption of electricity – in total and since last resetting (trip).

READING COUNTERS



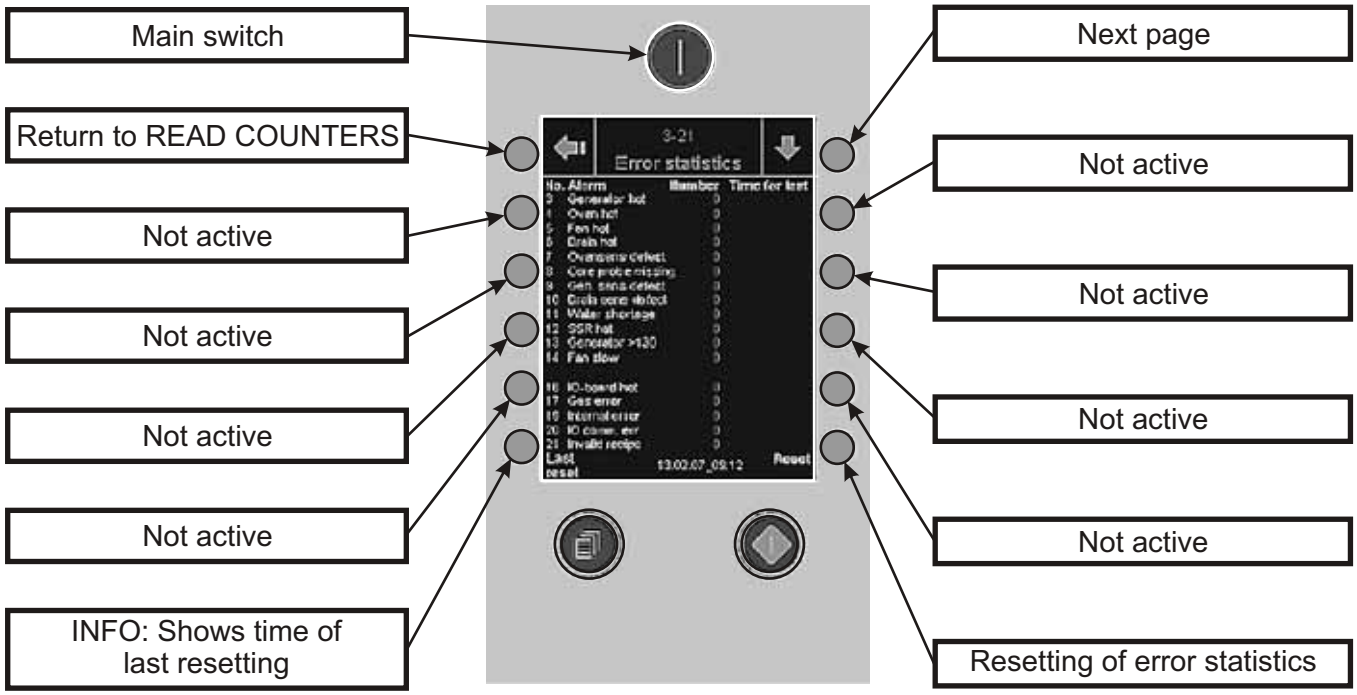
- Reading of various counters (units, consumption, errors).

ERROR LOG



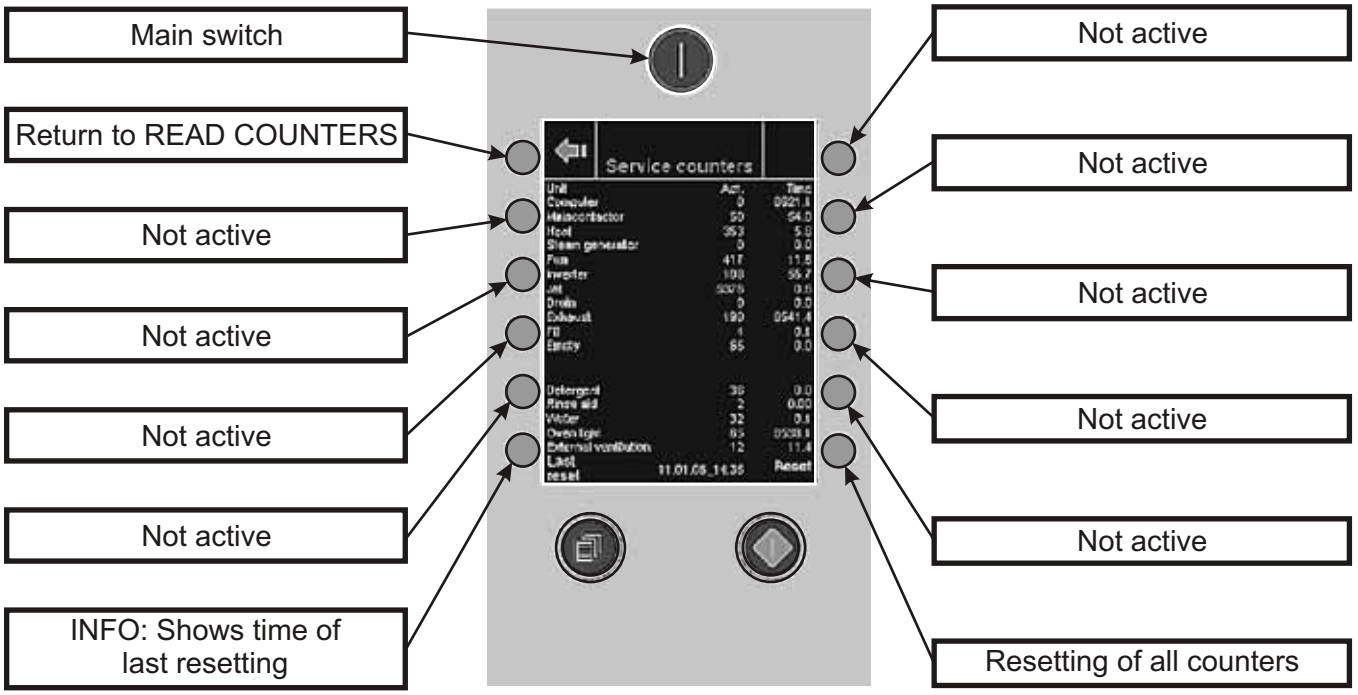
- This menu shows the last 30 errors that have occurred, the most recent one at the top.

ERROR STATISTICS 3-20



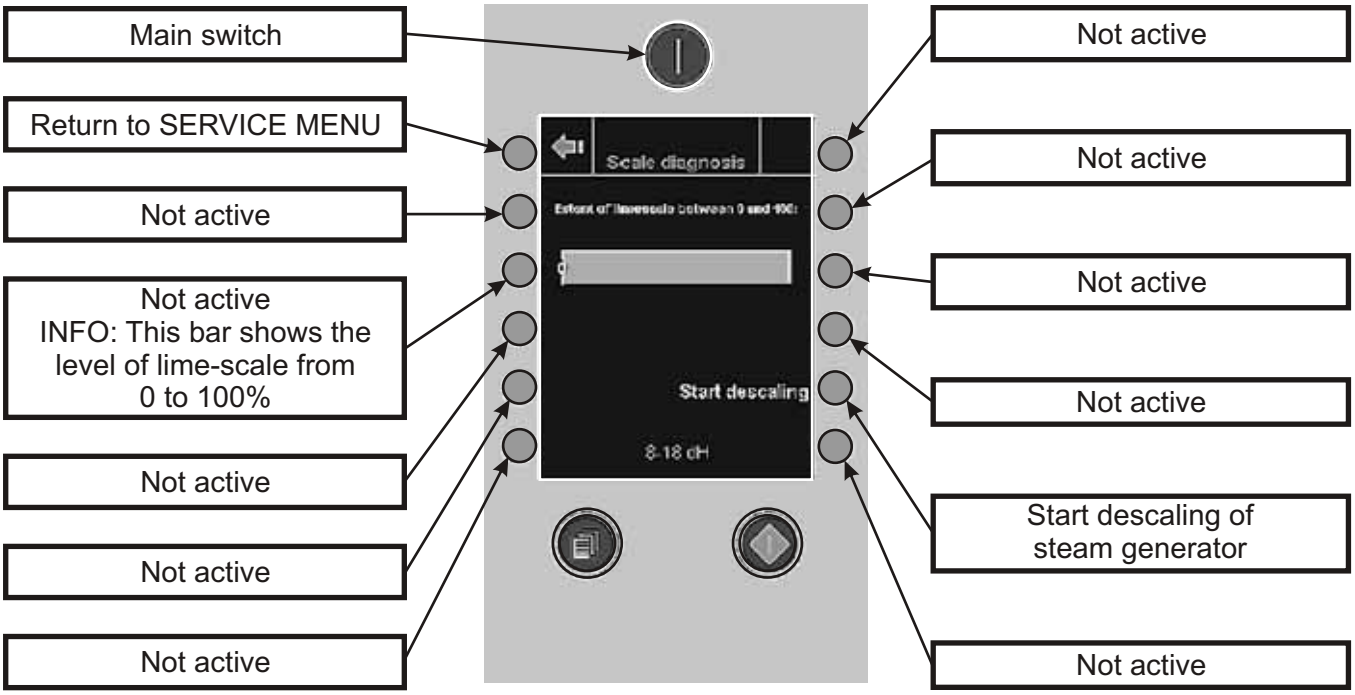
- This menu shows the number of times the various errors have occurred, and the time of the most recent error.

SERVICE COUNTERS



ACT: Shows how many times the unit in question has been active.
TIME: Shows for how long the unit in question has been active.

LIME-SCALE DIAGNOSIS



- Do not interrupt the descaling process.

LIME-SCALE DIAGNOSIS - DESCRIPTION OF STEPS

Step 1 of 14
Emptying (40 sec.), filling, heating to 104°F (40°C)

Step 2 of 14
Display shows: „Remove exhaust valve and add BKI descaling agent by means of BKI descaling funnel“ Alarm sounds for 5 sec.
Press OK

Step 3 of 14
Display shows: „Fit exhaust valve“
Press OK

Step 4 of 14
Heating to 194°F (90°C)

Step 5 of 14
3-minute interval

Step 6 of 14
Heating to 221°F (105°C)

Step 7 of 14
3-minute interval

Step 8 of 14
Heating to 221°F (105°C), interval (cooling down to 210.2°F (99°C) duration: 30 min.

Step 9 of 14
Emptying for 40 seconds.

Step 10 of 14
Filling to upper level

Step 11 of 14
Heating to 221°F (105°C)

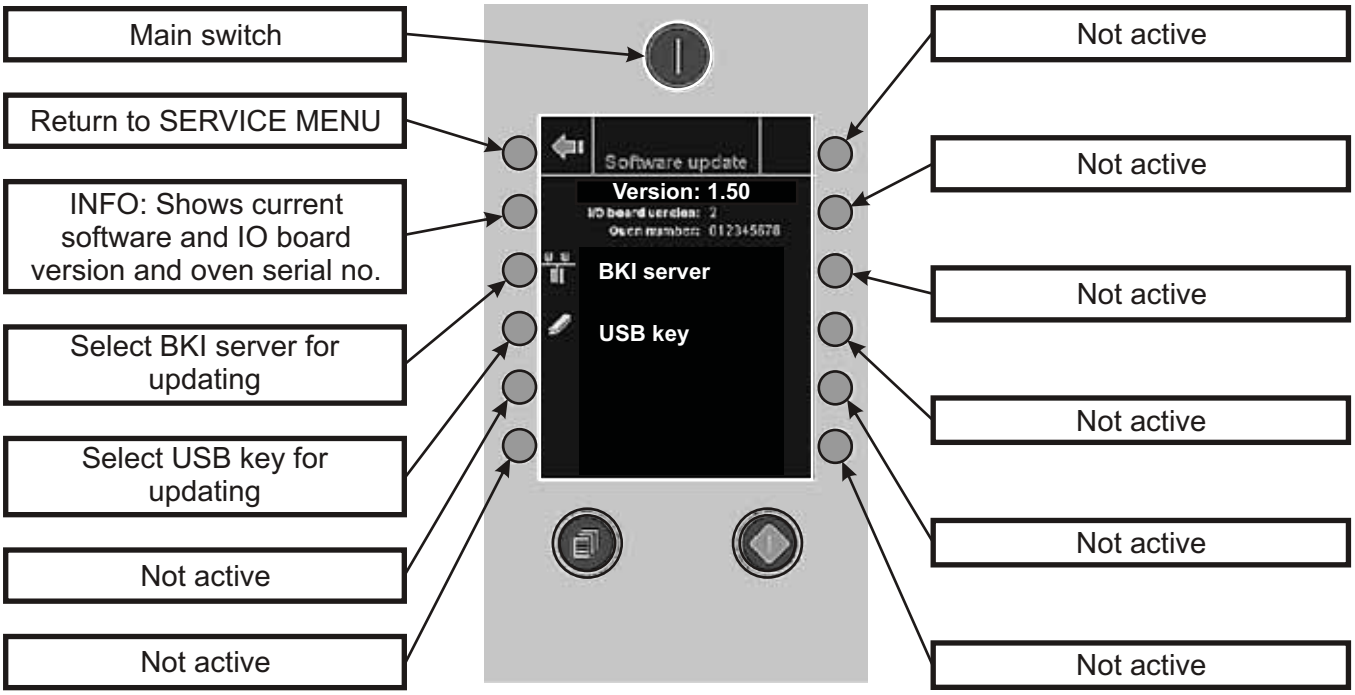
Step 12 of 14
1/3 rinsing – emptying
1/3 rinsing – filling
2/3 rinsing – emptying
2/3 rinsing – filling

Step 13 of 14
Re-boil at 221°F (105°C) – to flush tubes

Step 14 of 14
3/3 rinsing – emptying
3/3 rinsing – filling

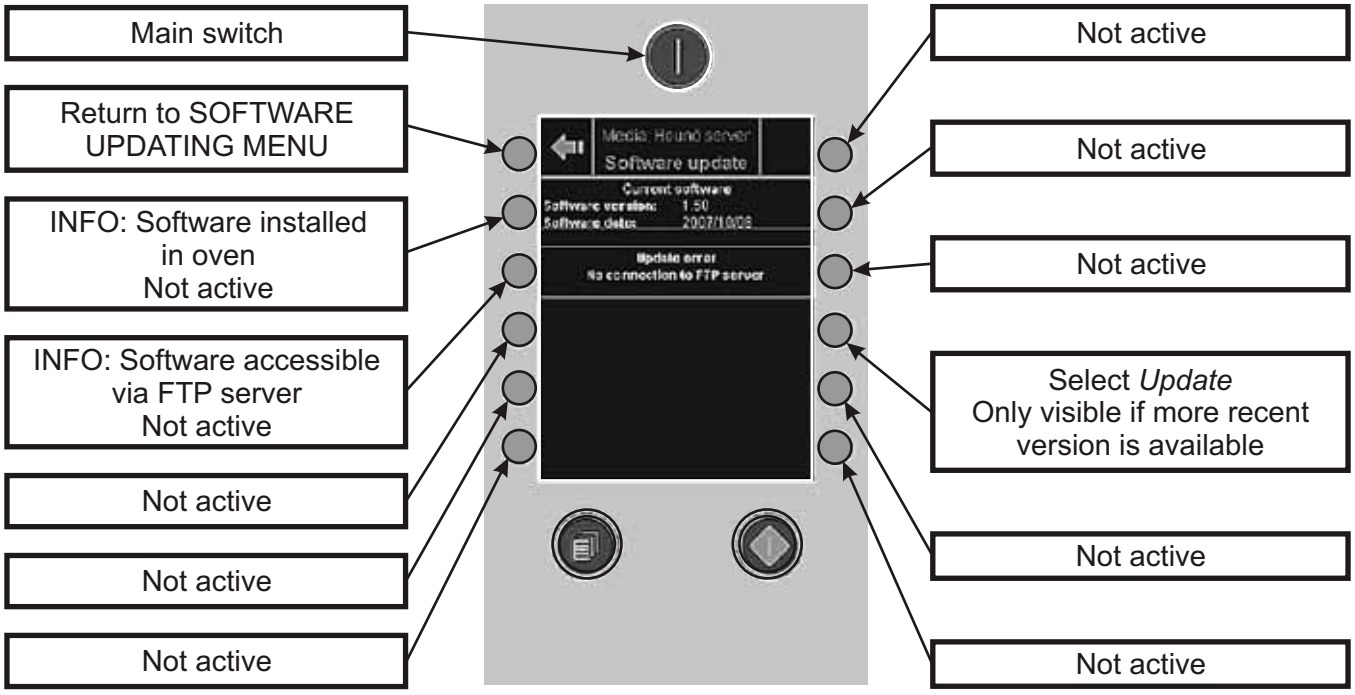
Done
Display shows: “Descale is done“ Alarm sounds for 5 sec.
Press OK

SOFTWARE UPDATING MENU



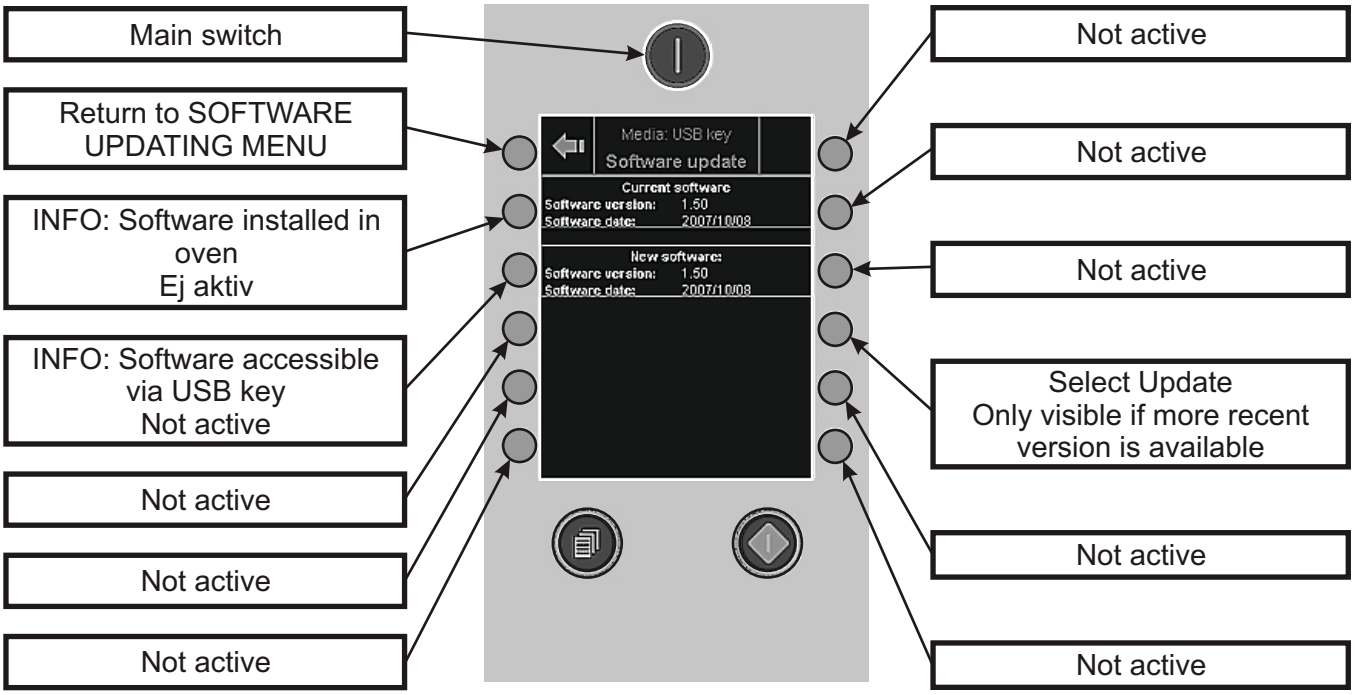
- Software updating via BKI server, requires Internet access.

BKI SERVER, SOFTWARE UPDATING MENU



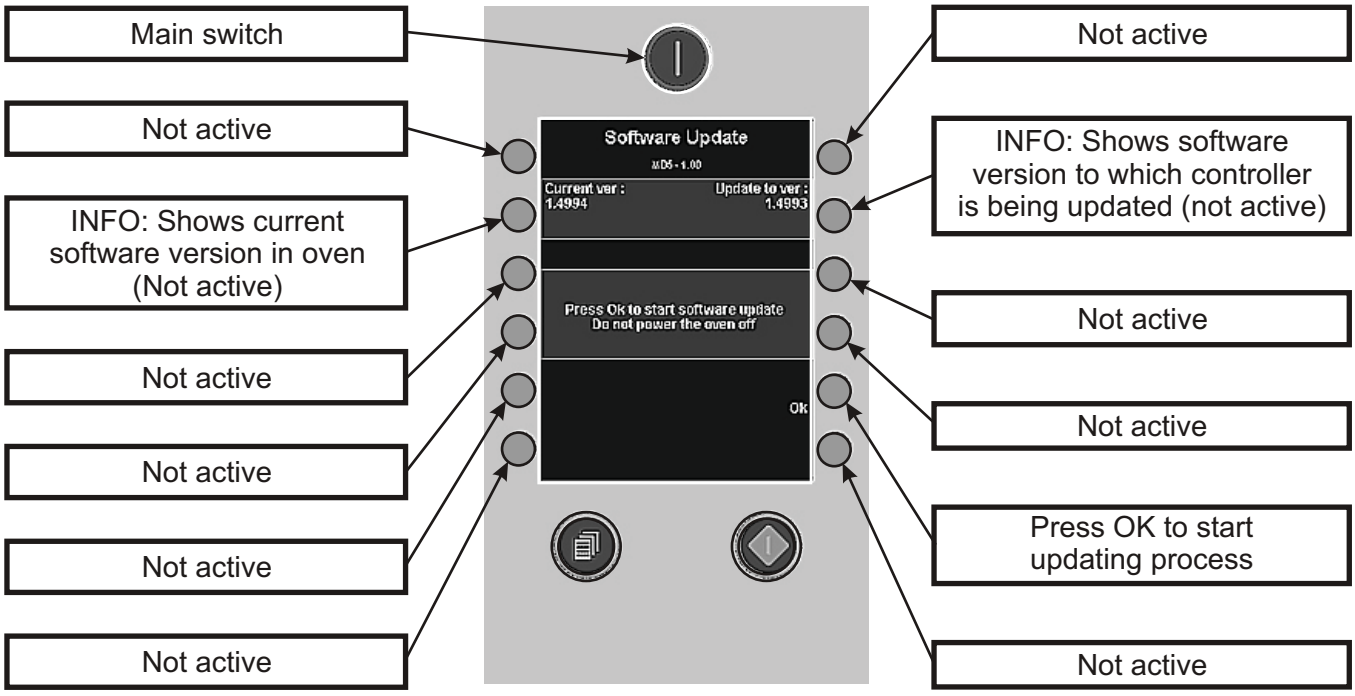
- In this menu, you update the controller with the latest version of the software via the Internet.
- This process usually takes 10 – 20 minutes; the oven must not be turned off during this time.
- The oven restarts automatically and is ready for use when the main menu appears.

USB KEY (1), SOFTWARE UPDATING MENU



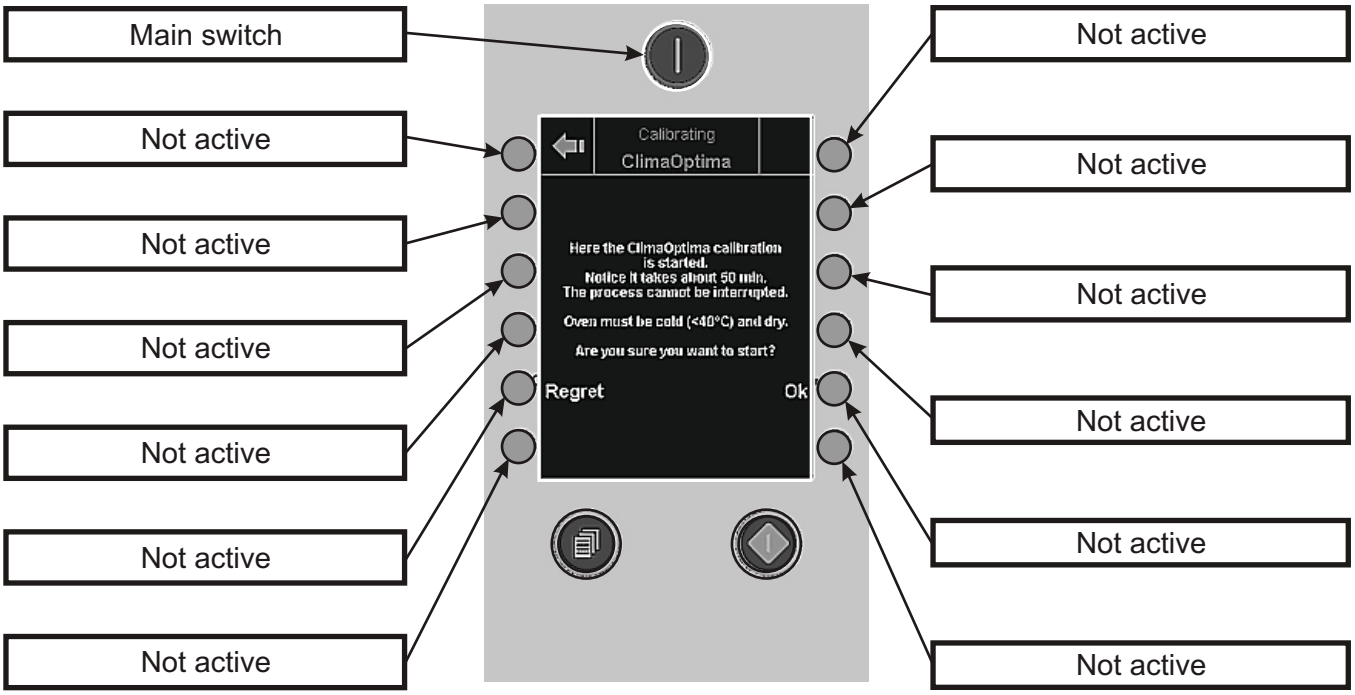
- In this menu, you update the controller with the latest version of the software via a USB key.
- This process usually takes 10 – 20 minutes; the oven must not be turned off during this time.
- The oven restarts automatically and is ready for use when the main menu appears.

USB KEY (2), SOFTWARE UPDATING MENU



- This function is possible if the controller is updated with software version 1.50 or higher. Can be downloaded from www.bki.com.
  1. Oven must be off. **2.** Insert USB key in oven. **3.** Turn oven on. **4.** This menu appears.

CLIMAOPTIMA CALIBRATION



Calibration should be carried out when

- CPU board is replaced
- Differential pressure sensor is replaced
- Fan wheel is removed and mounted again or replaced
- Filter housing is replaced

STEP		TIME	TEMP.	OVEN	EXHAUST
1	Cal.	About 15 min,	158°F (70°C)	Dry	Open
2	Cal.	About 2 min.	158°F (70°C)	Dry	Open
3	Cal.	About 2 min.	158°F (70°C)	Dry	Closed
4	Cal.	About 8 min	482°F (250°C)	Dry	Open
5	Cal.	About 3 min.	482°F (250°C)	Dry	Closed
6	Cal.	About 5 min.	374°F (190°C)	Wet	Closed
7	Cooling	About 30 sec	221°F (105°C)		Open
8	Cal.	About 5 min.	266°F (130°C)	Wet	Closed
9	Cooling	About 8 min.	113°F (45°C)		Open
10	Cal	About 4 min.	158°F (70°C)	Wet	Closed

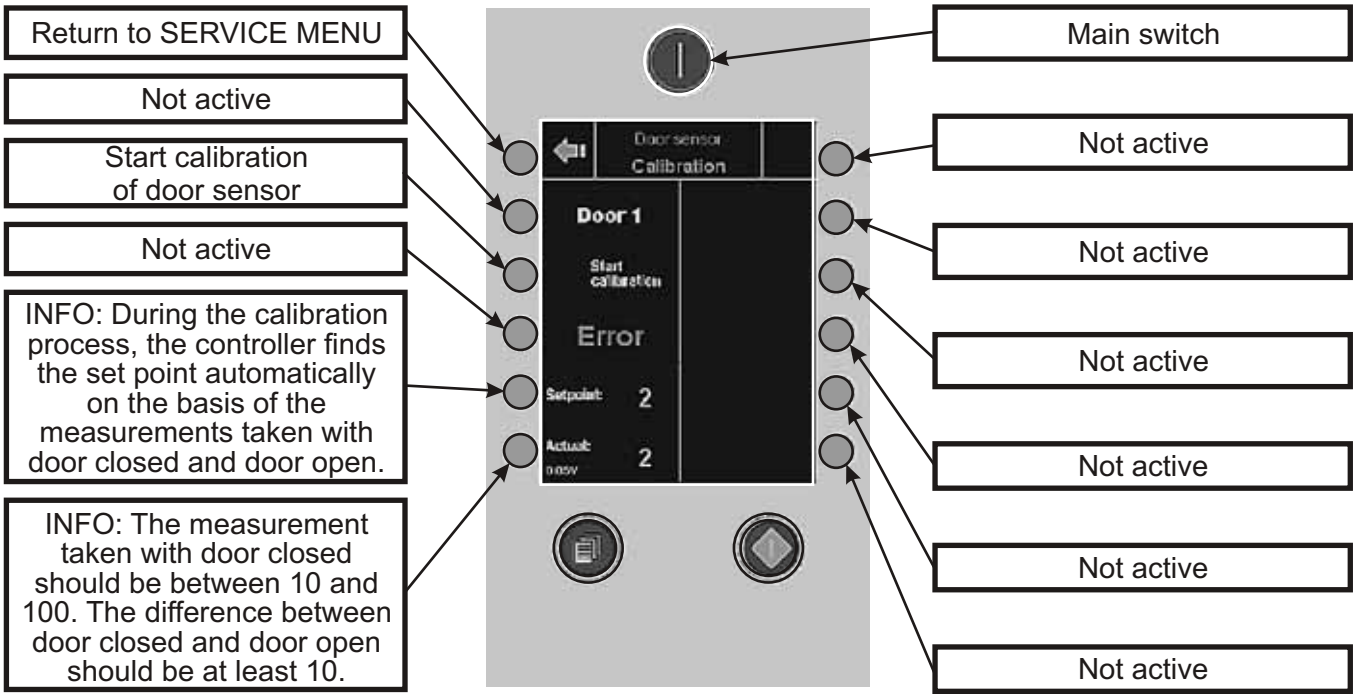
CAUTION: The oven should be as dry as possible before calibration is carried out.

CAUTION: The oven temperature must not be higher than 104°F (40°C) when calibration is started.

NOTE: If calibration is started by mistake, turn off the oven (no other keys are active).

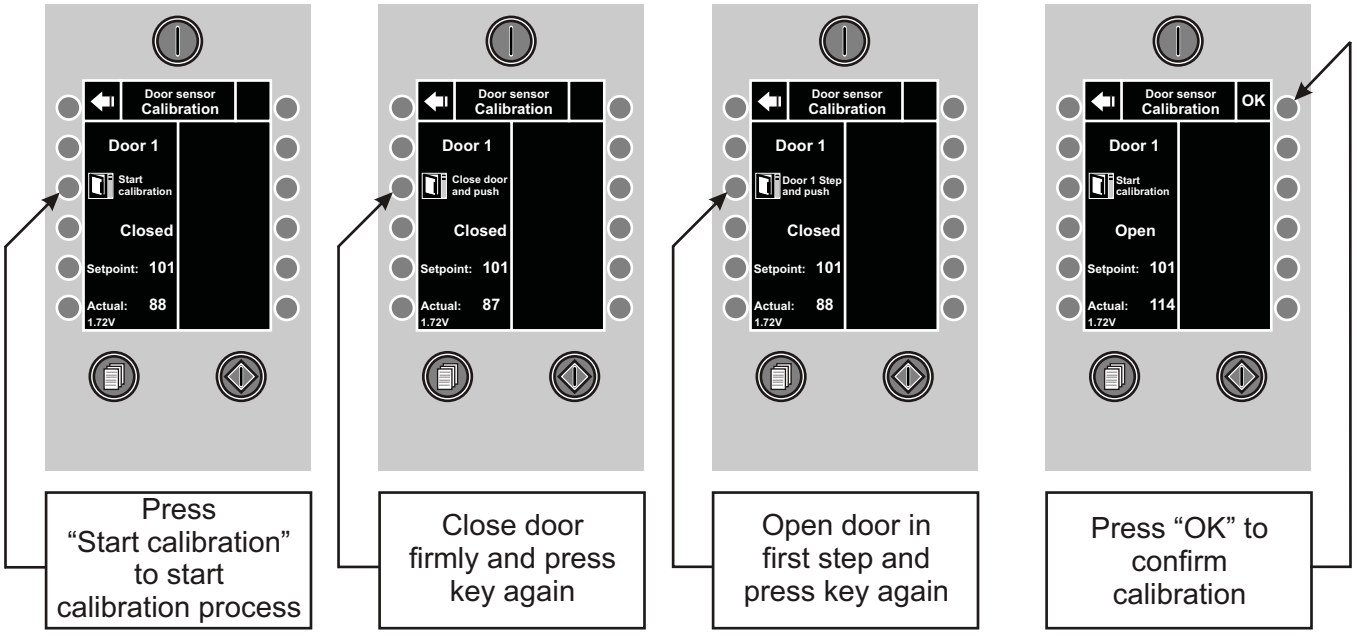
NOTE: Do not interrupt the calibration process.

DOOR SENSOR CALIBRATION



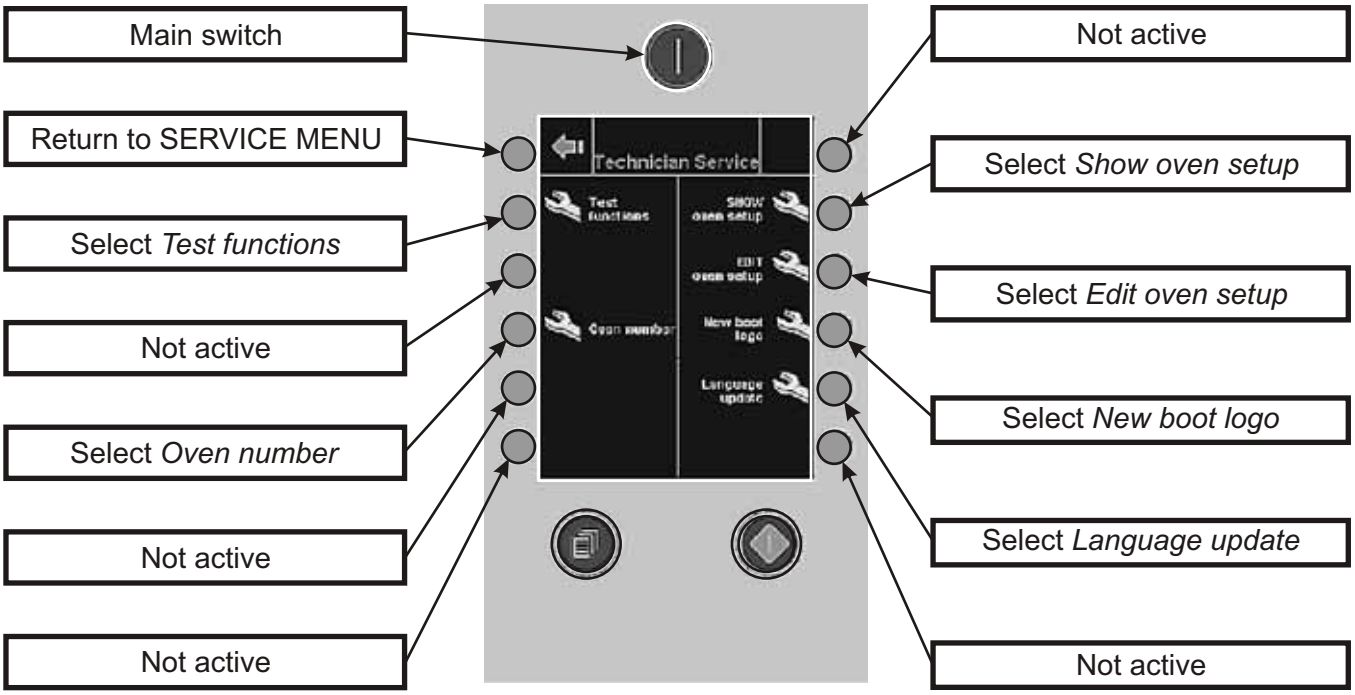
- With this menu, you calibrate the door sensor. Below, the calibration process is explained step by step.
- The measurement is an internal value for the distance between the magnet and the sensor.
- With the door open, the voltage is approx. 2.5 V.
- With the door closed, the voltage moves towards 5 or 0 V depending on the direction of the magnet.
- When PassThrough is active, door 2 appears on the right side of the menu.

HOW TO CALIBRATE DOOR SENSOR



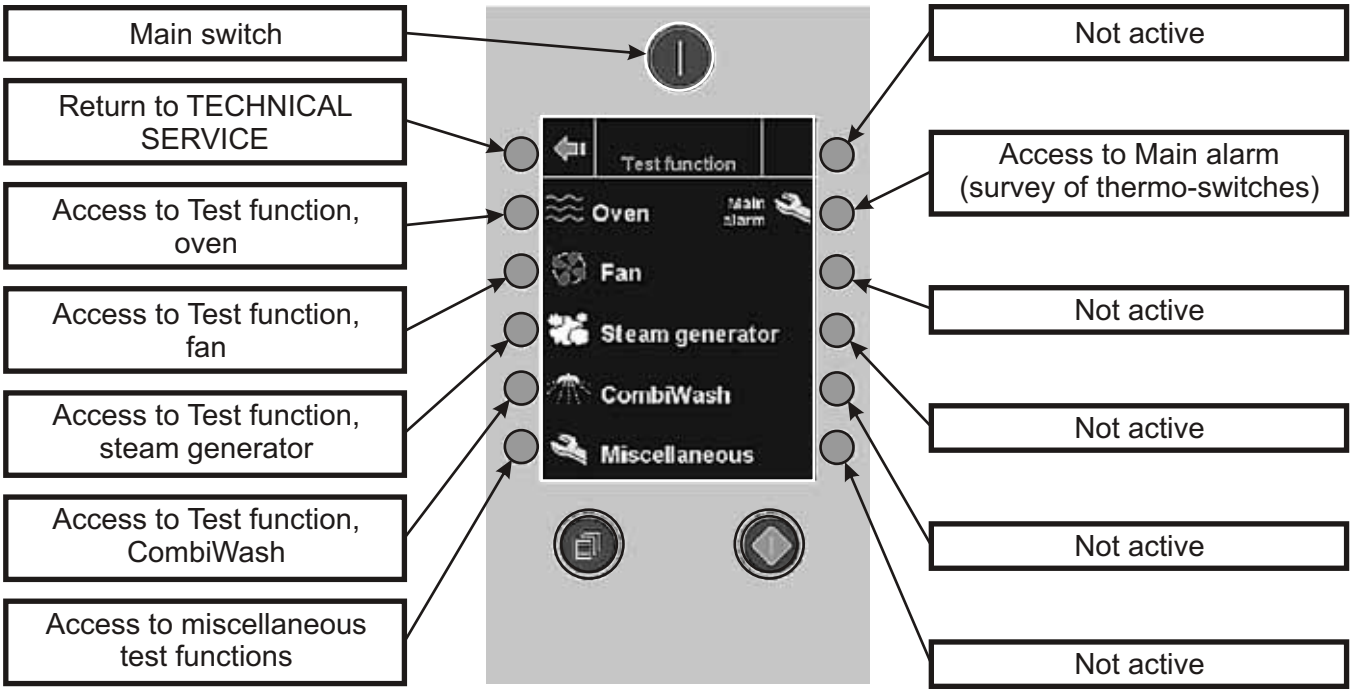
- Note that if the oven is a PassThrough oven, there are two doors to be calibrated.
- It is not possible to adjust the door sensor physically, only by means of software.

TECHNICAL SERVICE

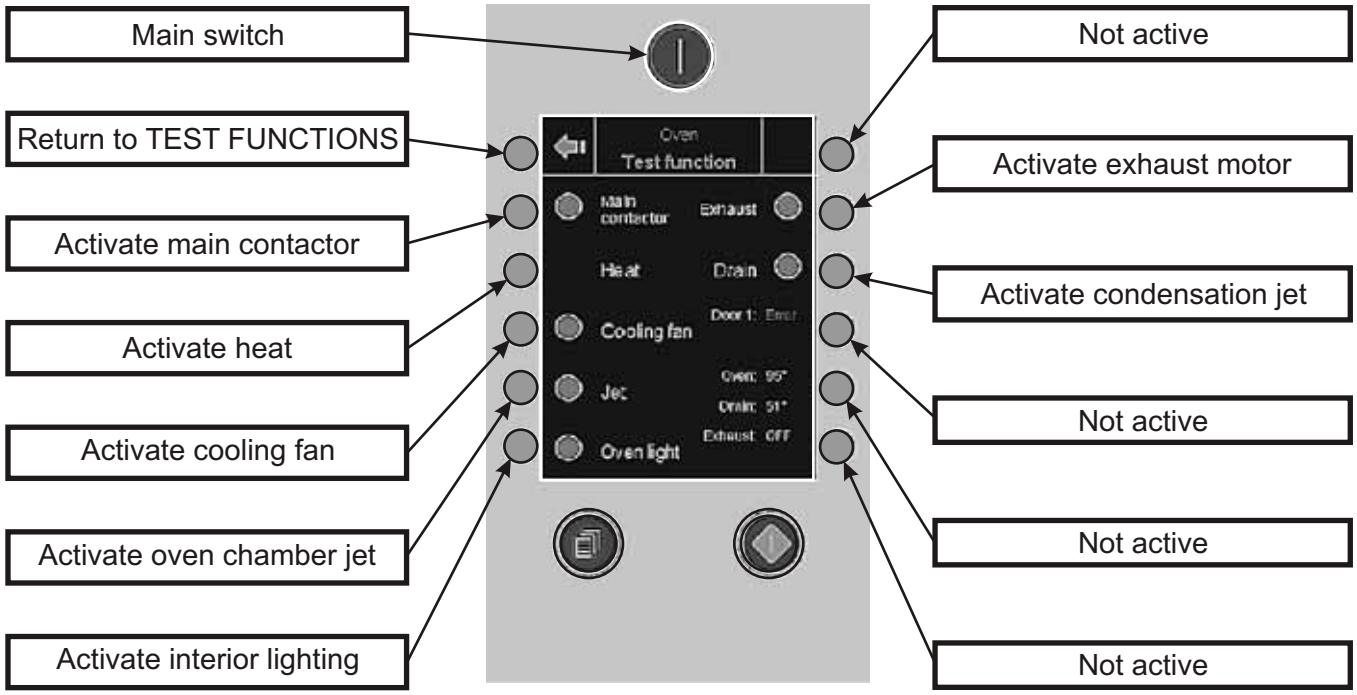


- In this menu, you access TEST FUNCTIONS and SHOW/EDIT OVEN SET-UP and enter a new boot logo.

TEST FUNCTIONS

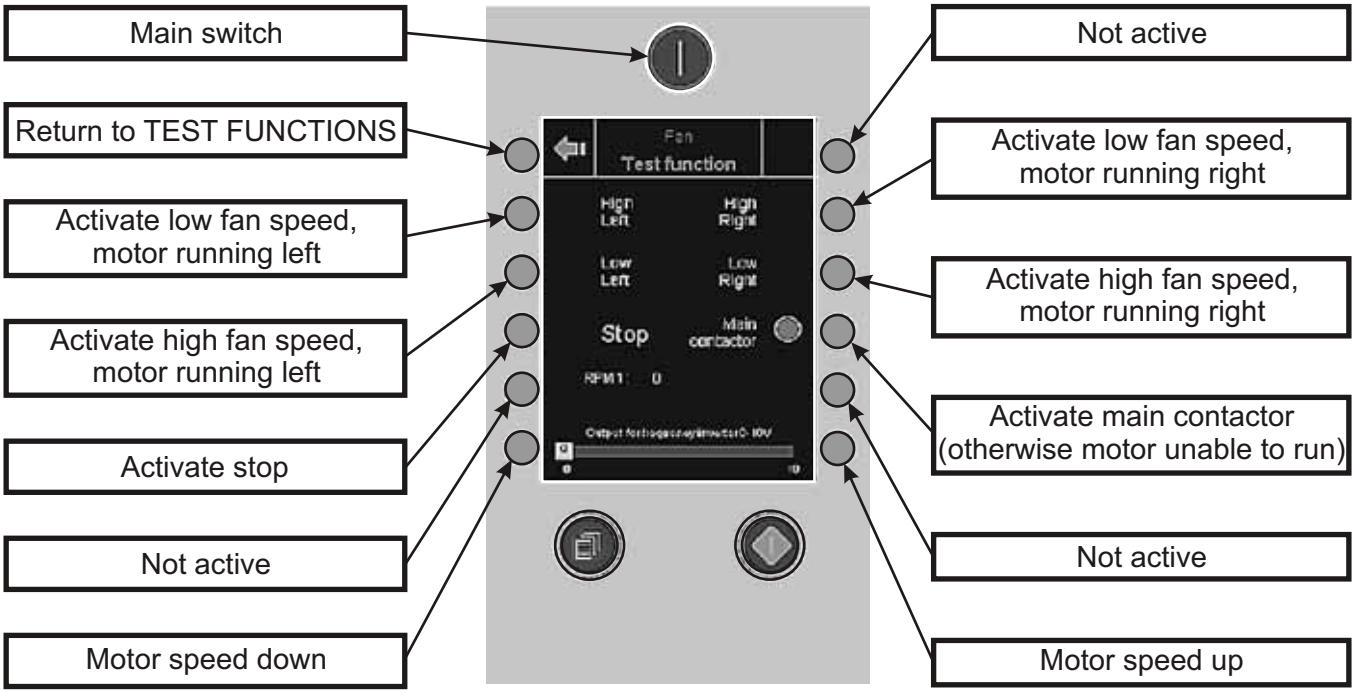


TEST FUNCTIONS, OVEN



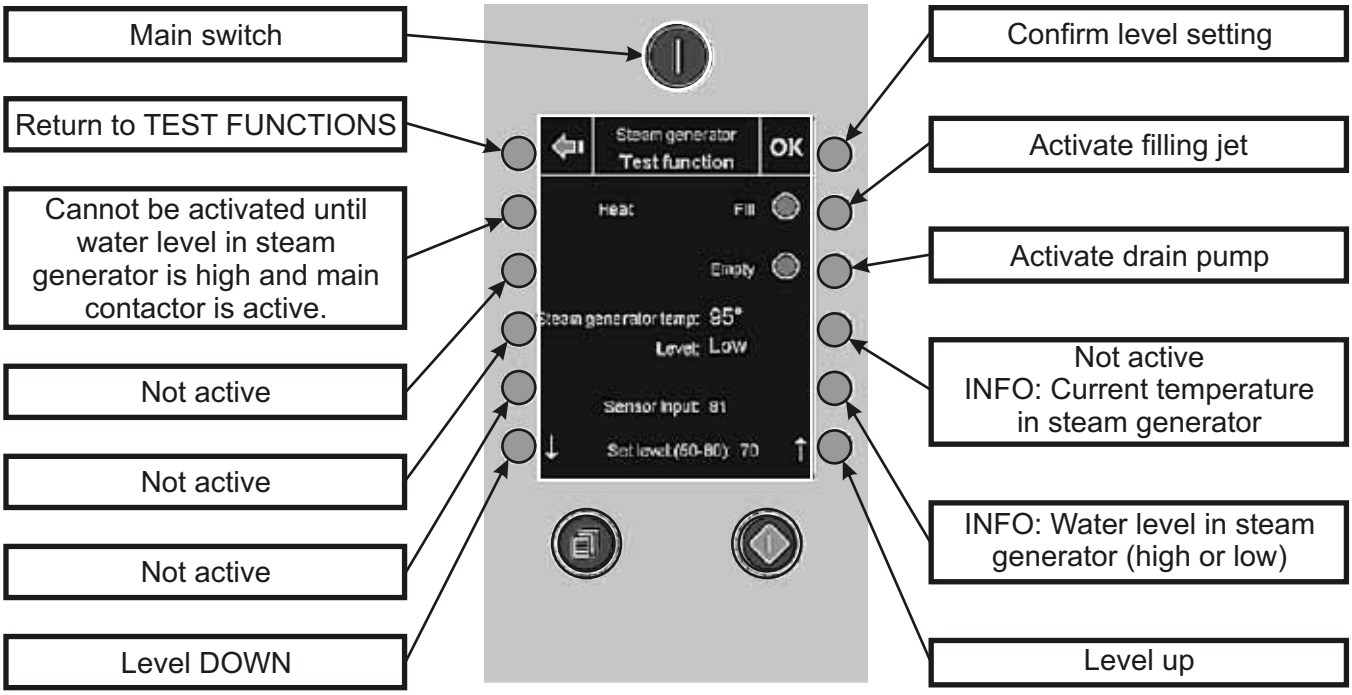
- Heat can only be activated when main contactor and fan motor are on.
- Door 1 and Door 2 show status of doors. Door 2 will/must always be closed unless the oven in question is a PassThrough.
- Oven shows current temperature in oven chamber.
- Drain shows current temperature in drain.
- Exhaust shows status of exhaust motor.

TEST FUNCTIONS, FAN



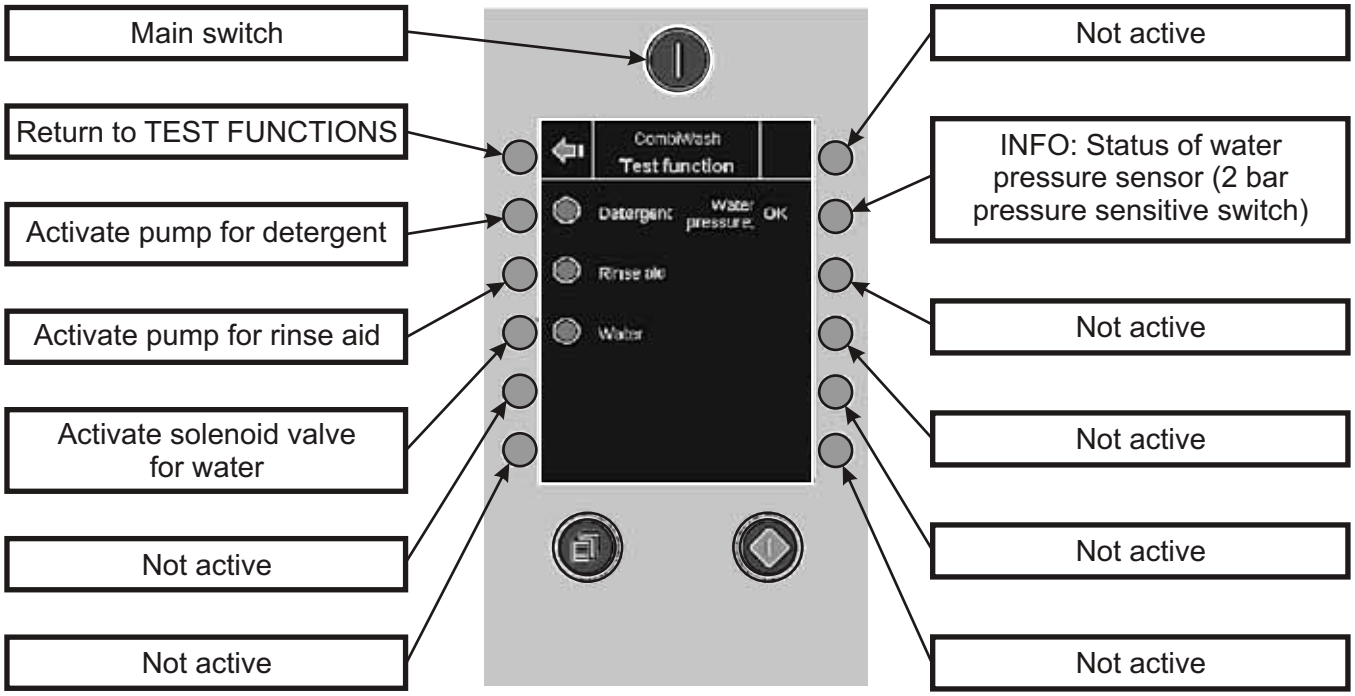
- RPM 1 is used for all oven models.

TEST FUNCTIONS, STEAM GENERATOR

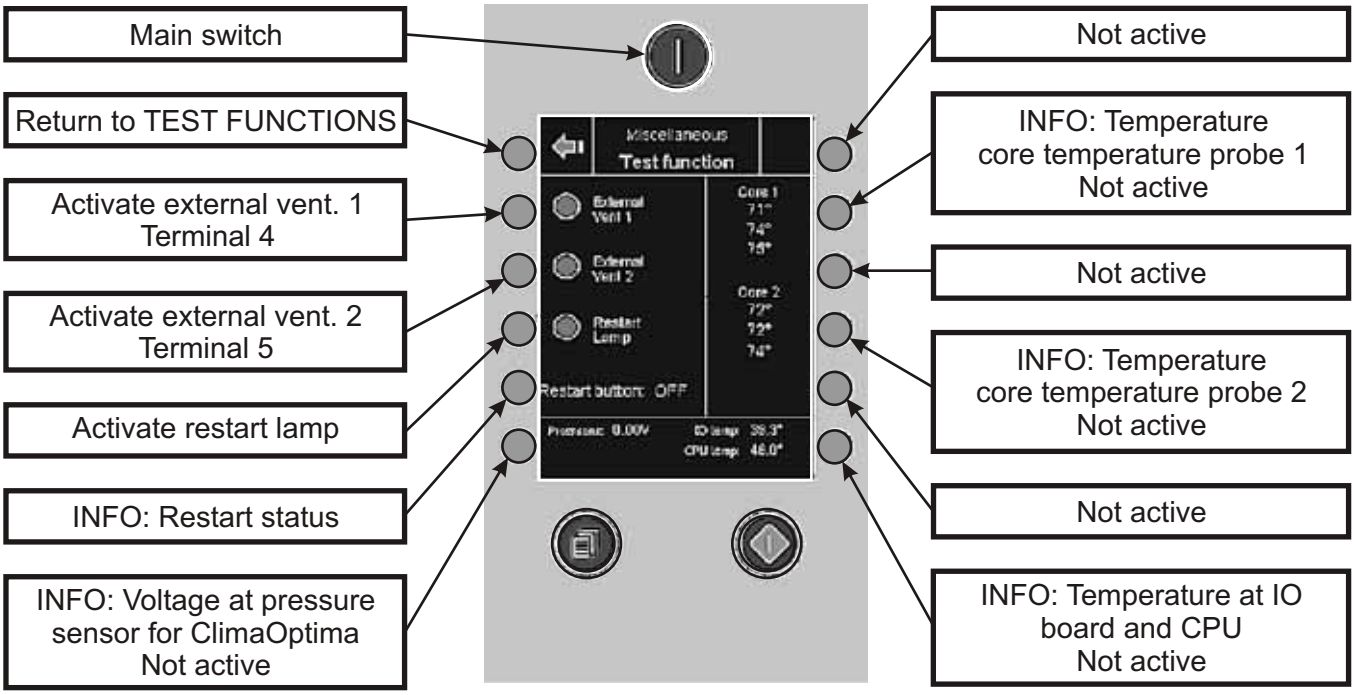


- How to set the water level:
  1. Empty steam generator and read sensor input.
  2. Fill steam generator until water level is high, and read sensor input.
  3. Set level to a value between high and low sensor input.
  4. Conclude by pressing OK.

TEST FUNCTIONS, COMBIWASH

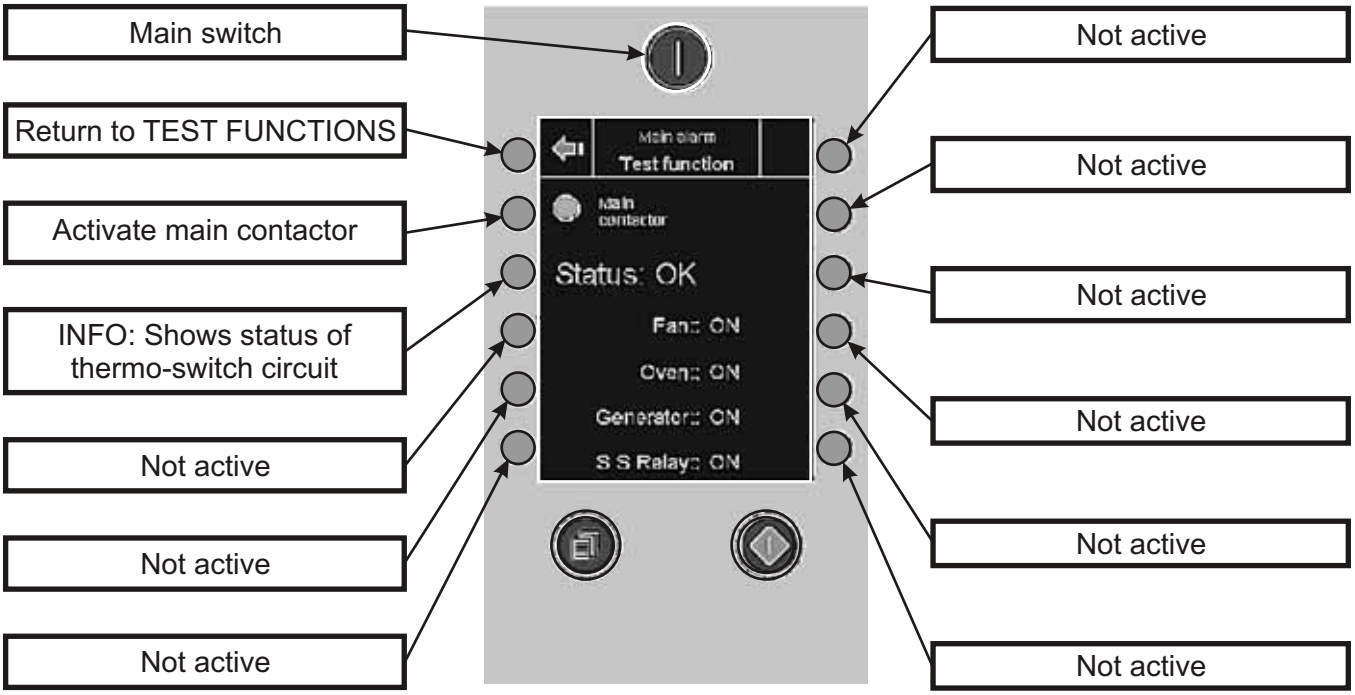


TEST FUNCTIONS, MISC.

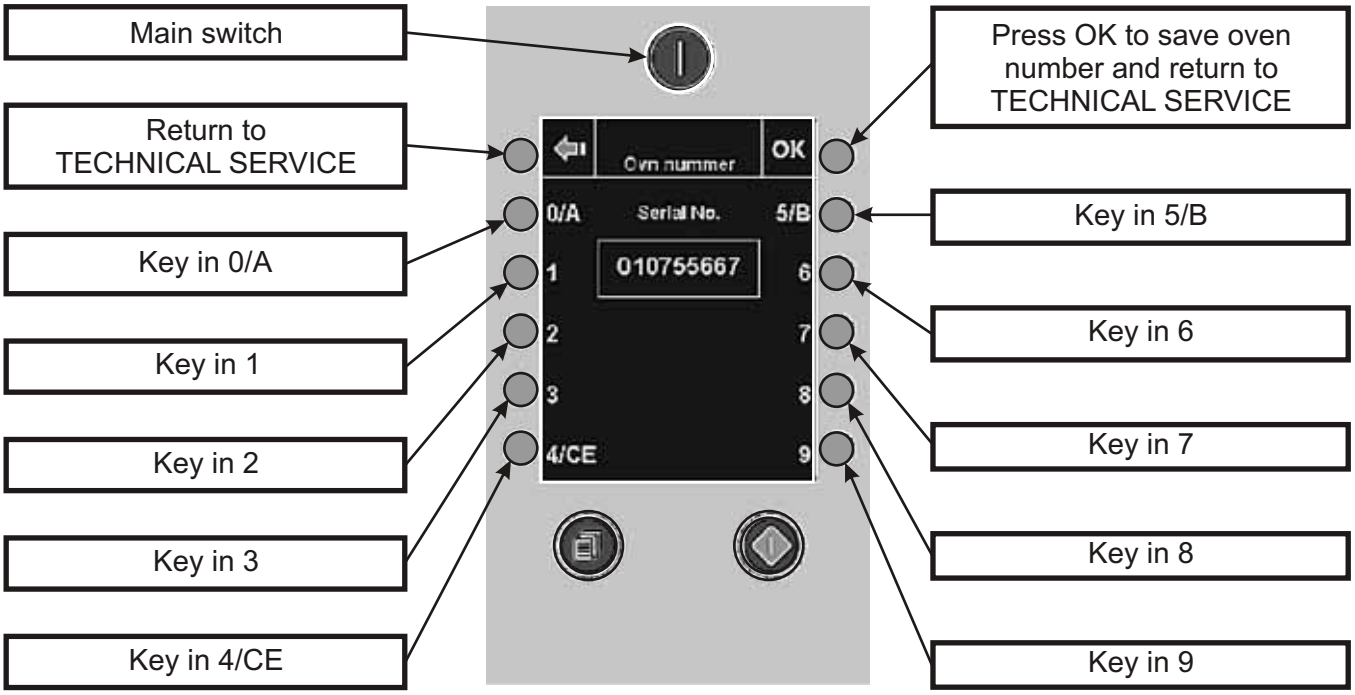


- *Core 1:* Shows current temperature of core temperature probe 1 (3 measuring points).
- *Core 2:* Shows current temperature of core temperature probe 2 (3 measuring points).
- When the external ventilation is activated, the oven control leaves the outlet active during program performance and 10 minutes after the program has ended.
  - ⚠ Note that as external vent. 1 and 2 are merely control voltage, they should be connected through an external relay (max.: 24V).
- *Press sens* shows voltage from pressure sensor (between 0 and 5 volts).
- *IO temp* shows temperature of IO board.
- *CPU temp* shows temperature of CPU board.

TEST FUNCTIONS, MAIN ALARM

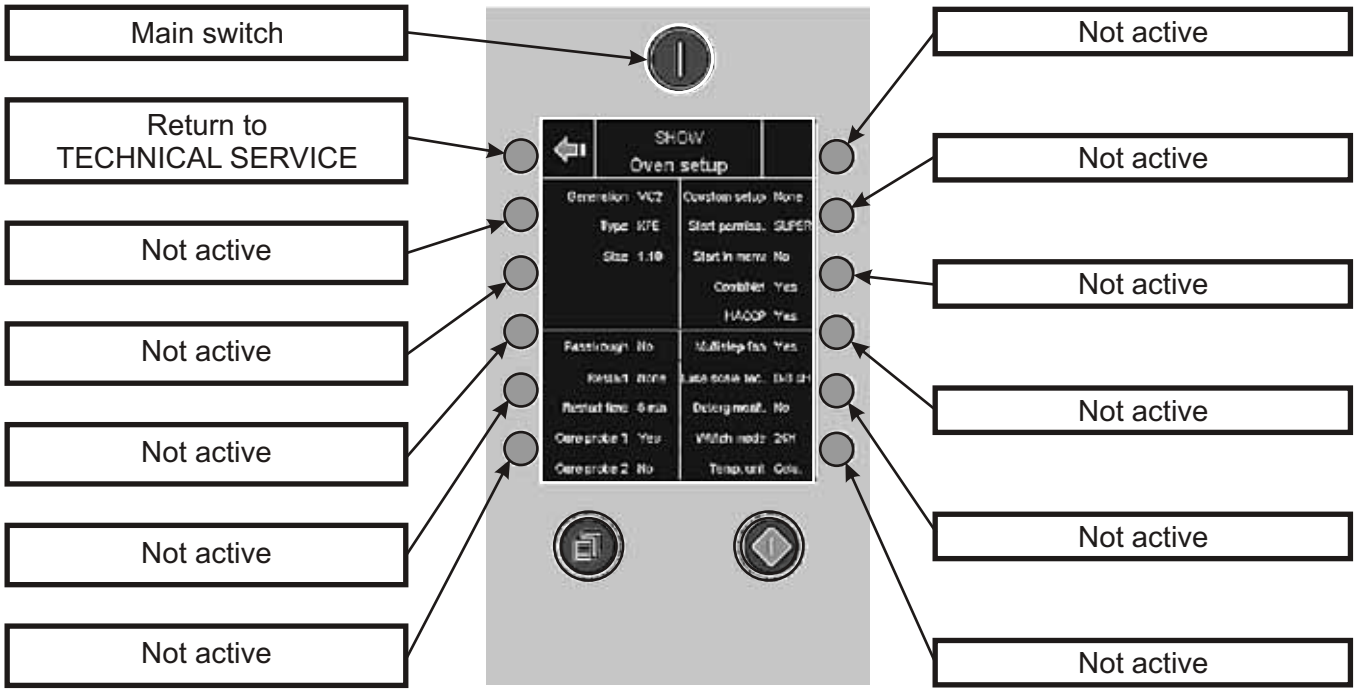


OVEN NUMBER



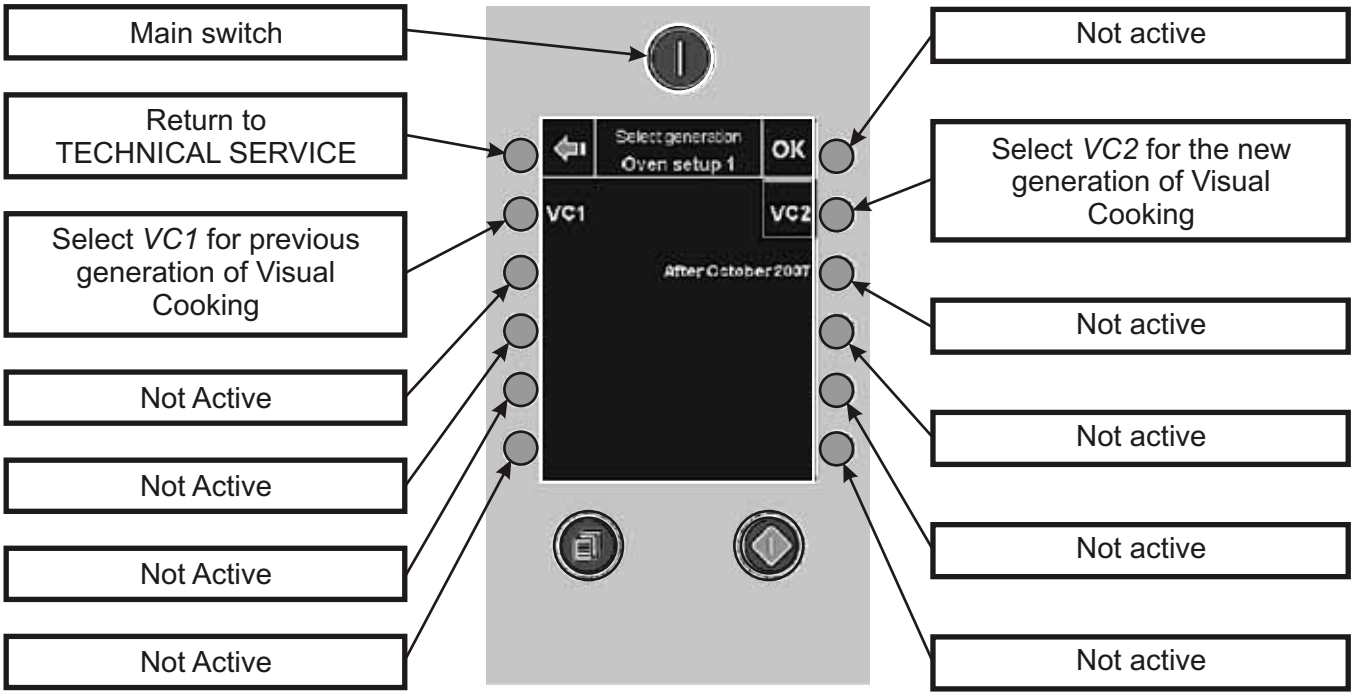
- In this menu, you enter the serial number of the oven.
- The serial number consists of 9 figures. The serial number of the CombiPlus models includes the letters A or B (A = upper oven – B = lower oven).
- The serial number is printed on the approval plate.
- The serial number is used in the HACCP mode and in the menus Oven back-up and Restore from backup.
- The serial number can only be deleted if it holds 9 figures. Press 4/CE.

DISPLAY OVEN SET-UP



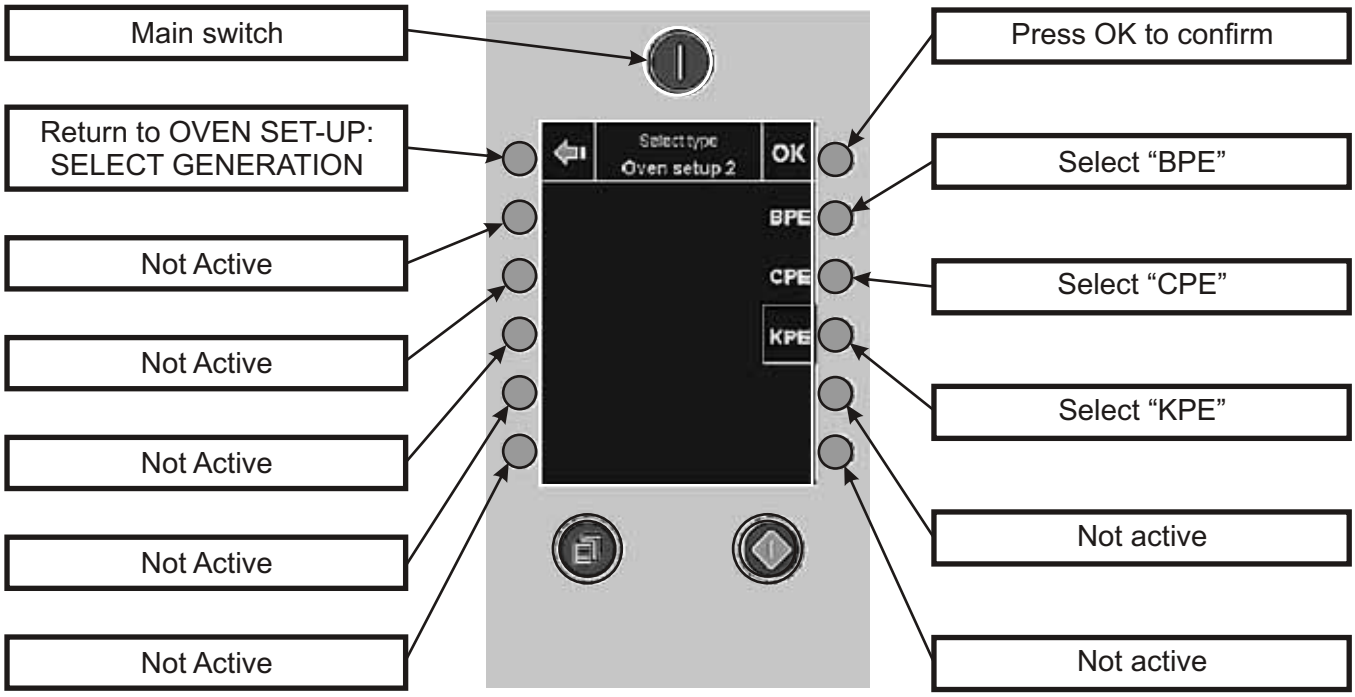
- This menu shows the features incorporated in this particular oven. Changes not possible.

OVEN SET-UP 1: SELECT GENERATION



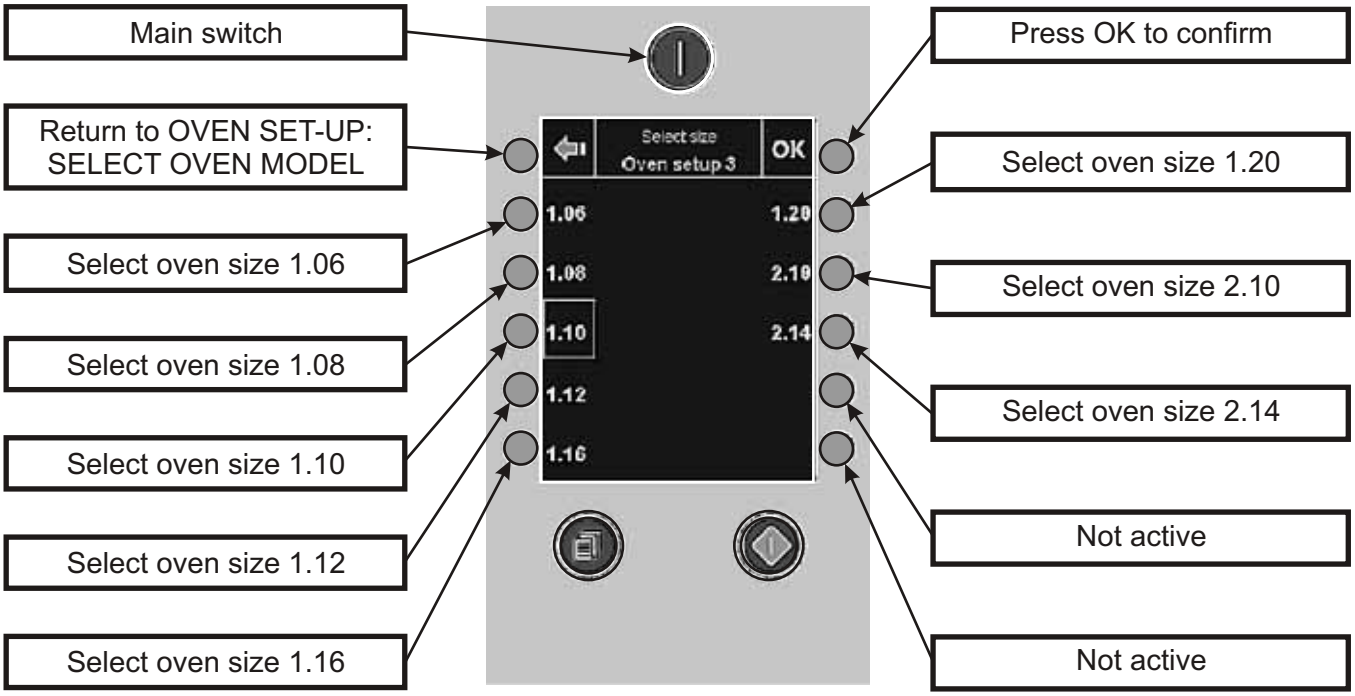
- We recommend that you write down the settings of DISPLAY OVEN SET-UP before making any changes to the set-up.

OVEN SET-UP 2: SELECT OVEN MODEL



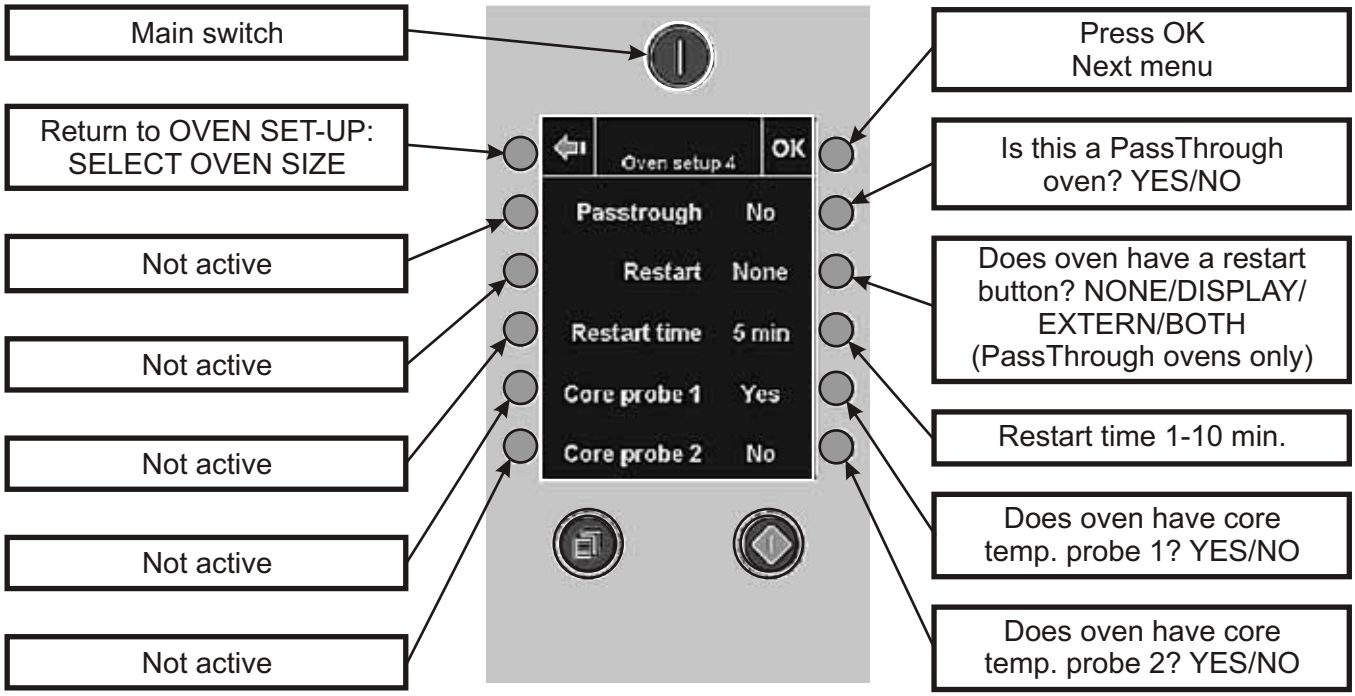
- We recommend that you write down the settings of DISPLAY OVEN SET-UP before making any changes to the set-up.

OVEN SET-UP 3: SELECT OVEN SIZE

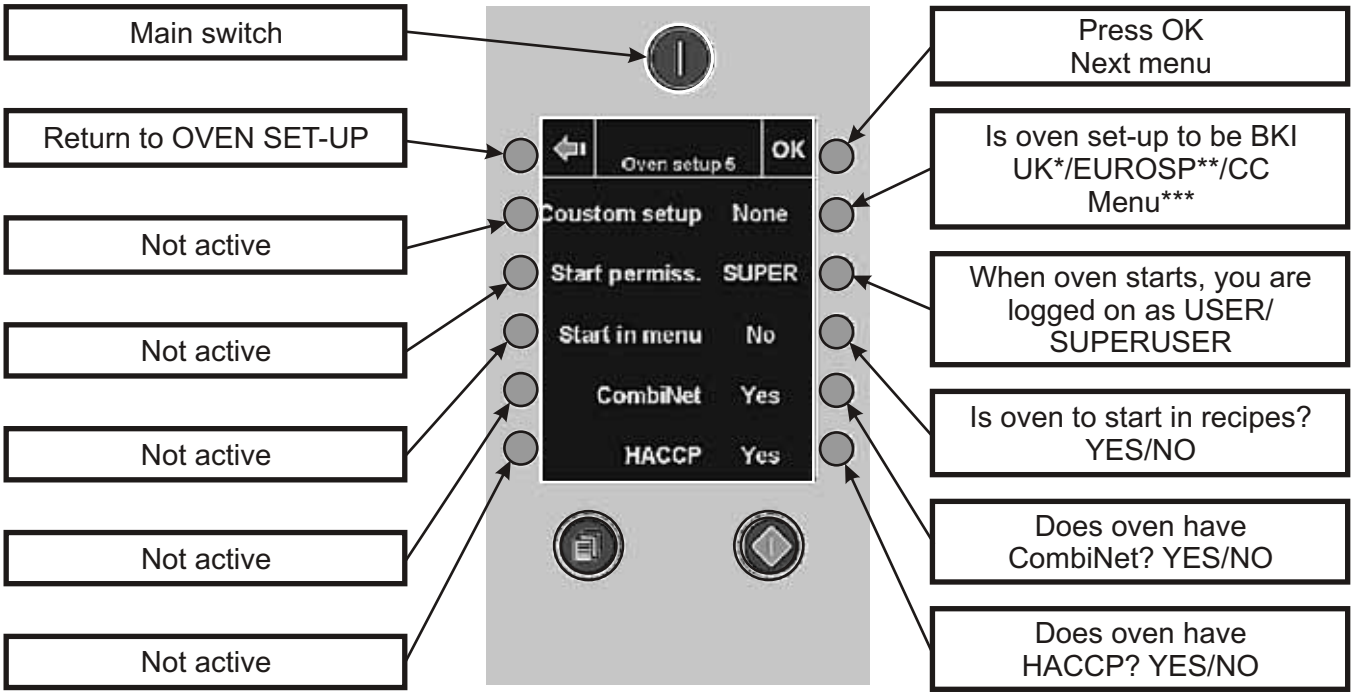


- We recommend that you write down the settings of DISPLAY OVEN SET-UP before making any changes to the set-up.

OVEN SET-UP 4

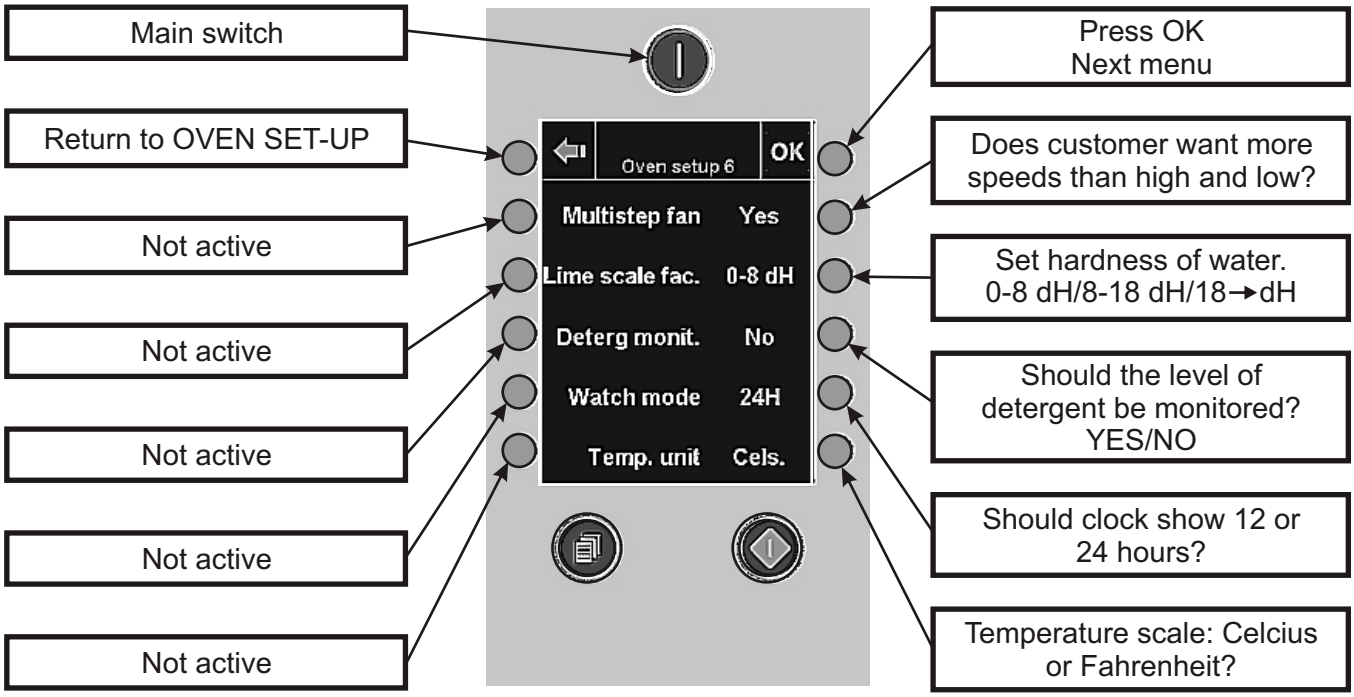


OVEN SET-UP 5

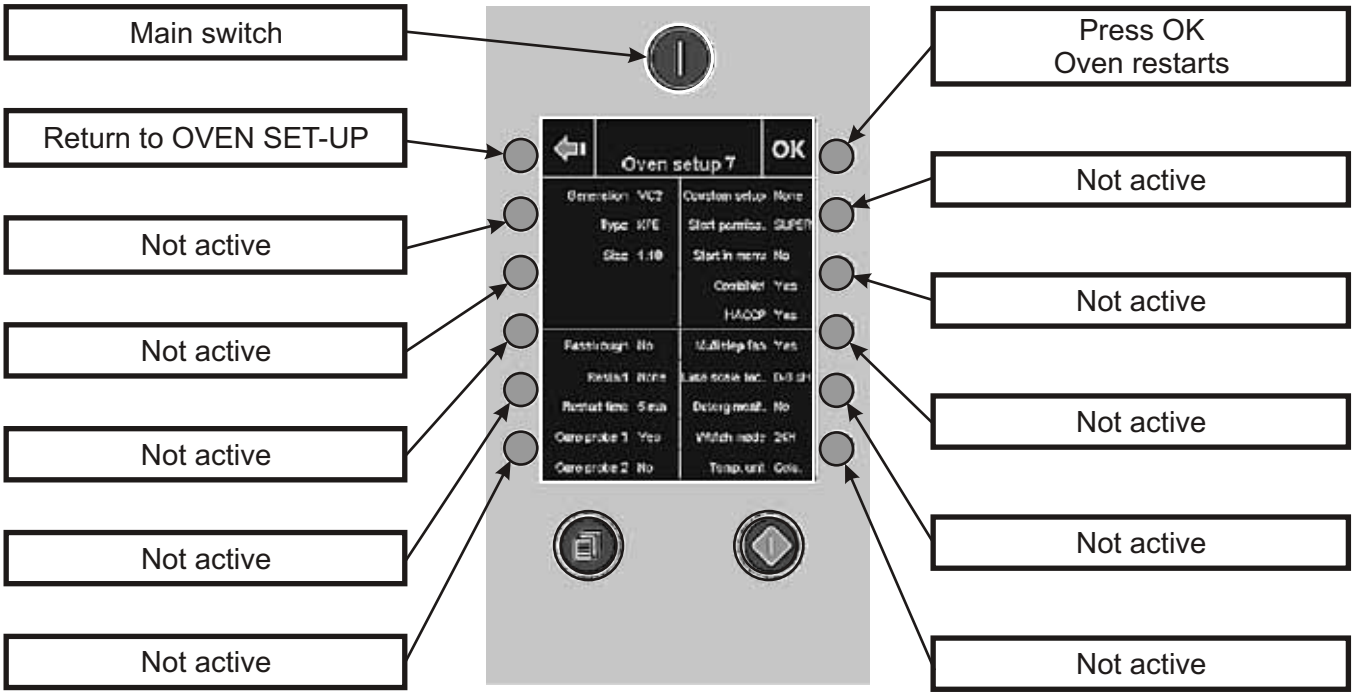


- *Special oven set-up for BKI UK.
- **Special oven set-up for EUROSPICE in Sweden.
- *** For ovens that start up in the recipes menu (not in the start menu). CombiClean / CombiWash is then found with each recipe.

OVEN SET-UP 6

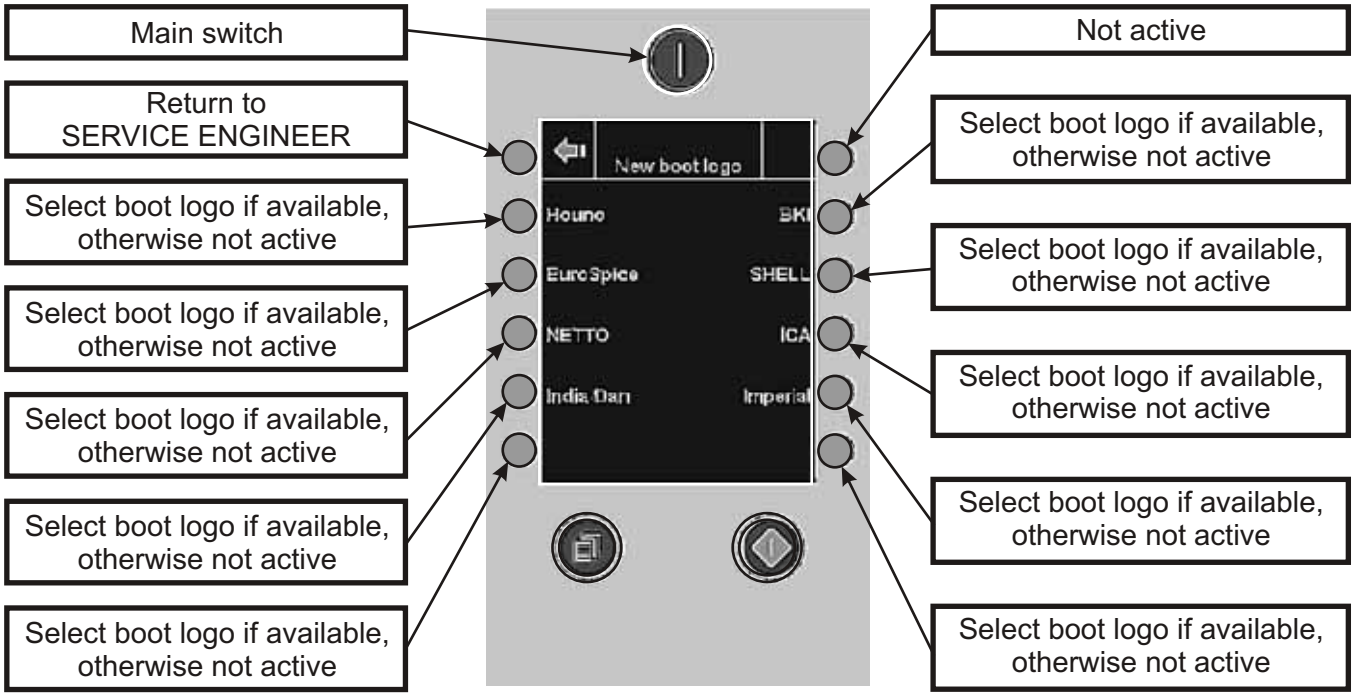


OVEN SET-UP 7



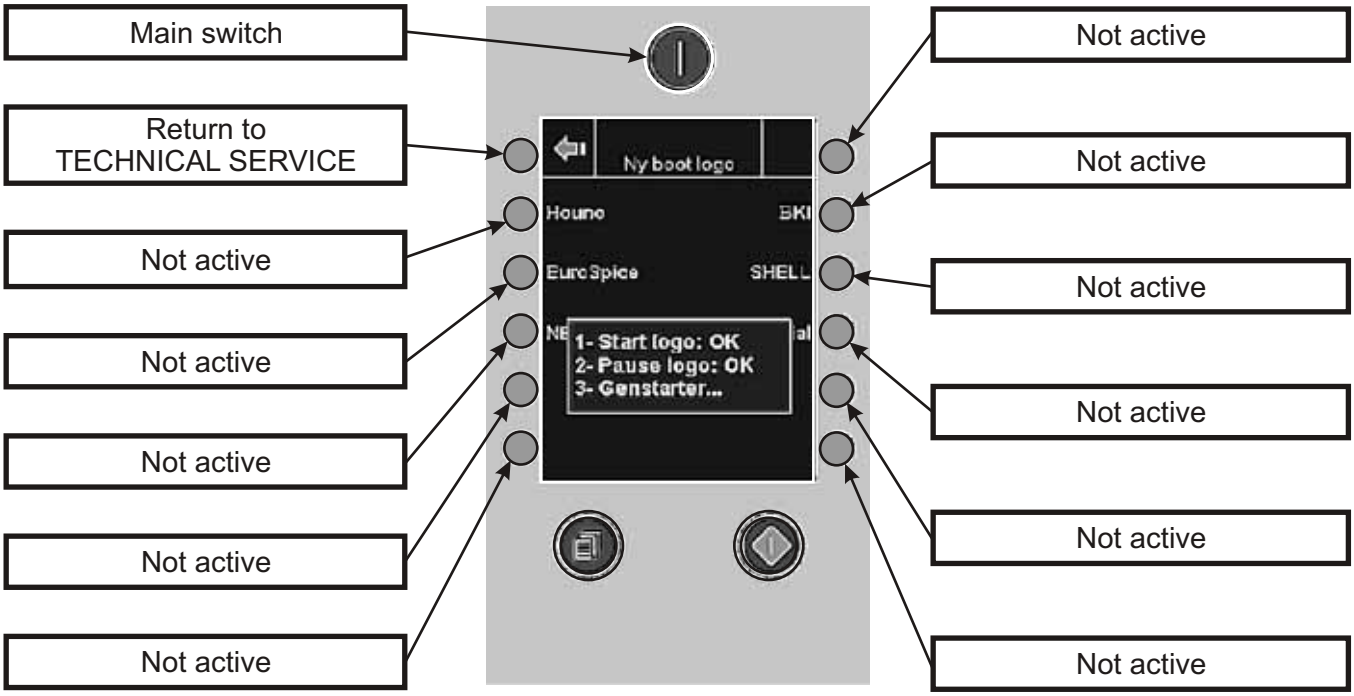
- This is the final set-up of the oven. Changes not possible.

LOGO



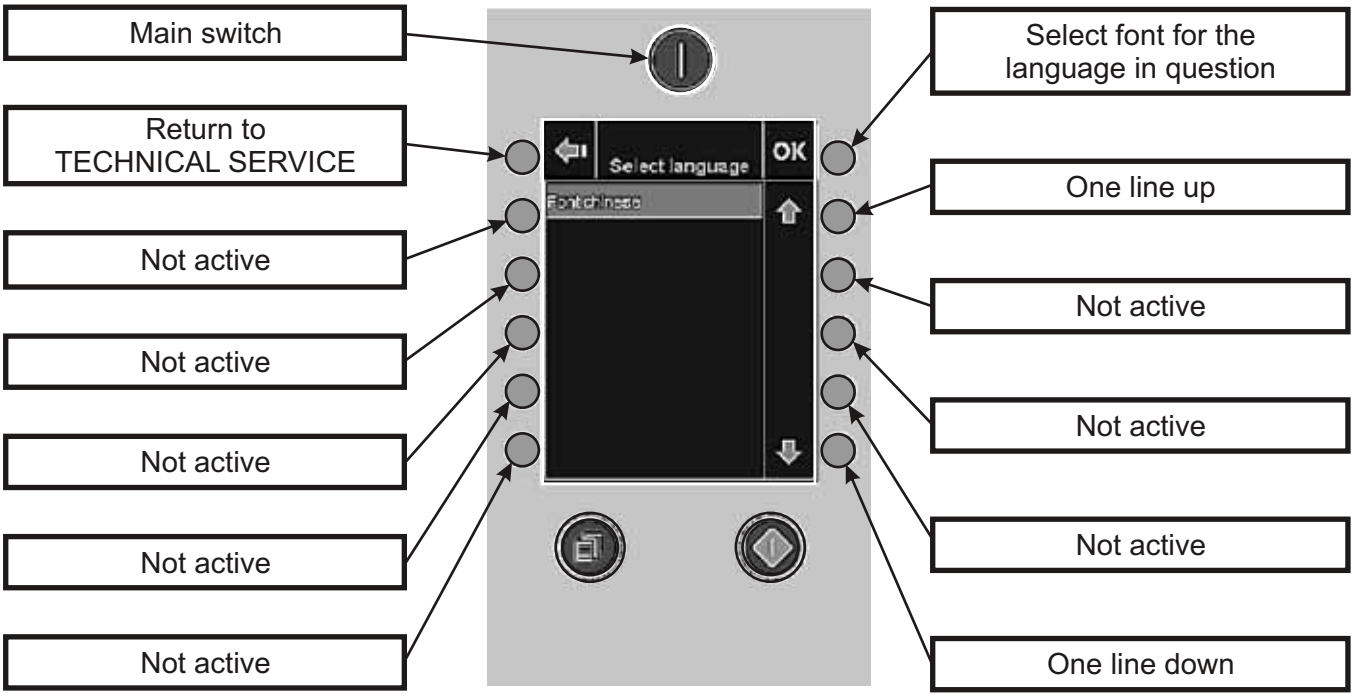
- In this menu, you select new boot logo / logo screen saver.
- You can have your own logo affixed to the oven. Please contact BKI.

LOGO



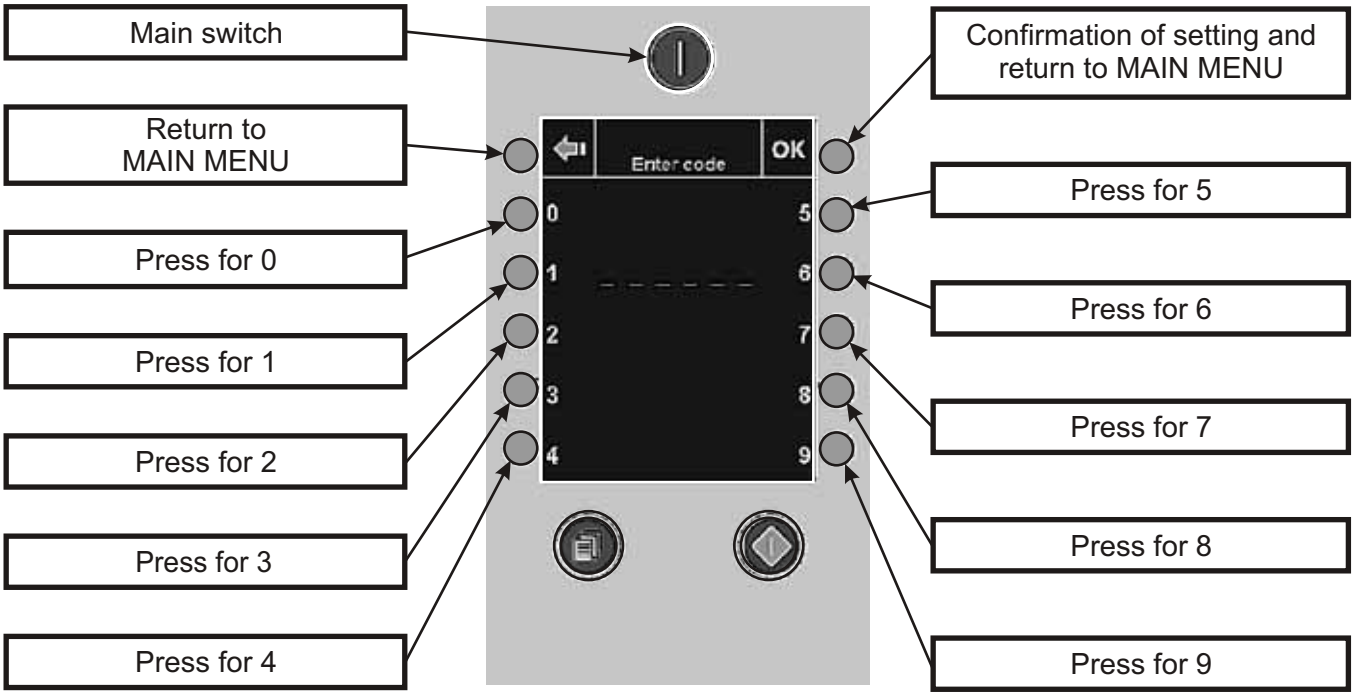
- Oven restarts automatically after downloading of new logo.
- The new boot logo will be active after restart and the logo screen saver appears when oven has been idle for a while.

LANGUAGE UPDATE



- In this menu, you update language files from the USB key.

ENTER CODE



Codes:

- SUPER USER: 87 64 12
- SERVICE ENGINEER: 57 60 21

ERROR CODES

Error code 2:	**Door open** (Close oven door)
Error code 3:	**Generator too hot** (Generator thermo-switch has tripped. Reconnect by pressing button under operation panel)
Error code 4:	**Oven too hot** (oven thermo-switch has tripped. Reconnect by pressing button under operation panel)
Error code 5:	**Fan too hot** (Thermo-switch in motor has tripped. Wait for 10 min. and try again.)
Error code 6:	**Drain too hot** (Drain temperature has been too hot (above 75°C) for more than 5 min. Check that jet in drain is working. Check for dirt in solenoid valve, jet or dirt filter. Check if by mistake hot water has been connected. Check if sensor is defective or jet is sprinkling in the wrong direction.)
Error code 7:	**Oven sensor defective** (Temperature sensor in oven not working properly. Check wire connections or replace sensor)
Error code 8:	**Core temp. probe not connected** (A program using core temp. probe has been selected but probe has not been connected)
Error code 9:	**Generator sensor defective** (Temperature sensor in generator not working. Recipes prescribing use of steam generator cannot be used. Check wire connections or replace sensor.)
Error code 10:	**Drain sensor defective** (Sensor in drain not working. Oven can still be used. Check wire connections or replace sensor.)
Error code 11:	**Water shortage** (Steam generator was not filled within two minutes. Check that the water has been turned on. Check if solenoid valve or dirt filter is blocked. Check water pressure (should be at least 2 bar)
Error code 12:	**SSR too hot.** Thermo-switch for solid-state relay has tripped. Wait for 10 20 minutes and try again. Check that the cooler opening is not blocked.)
Error code 13:	**Generator too hot** (Temperature in steam generator higher than 130°C. If error recurs, descale generator)
Error code 14:	**Fan too slow**
Error code 16:	**IO board too hot**
Error code 19:	**Internal defect** (Oven server process does not respond. Oven server process fails. Restart oven)
Error code 20:	**Internal defect** (Failure in communication between computer and IO board)
Error code 21:	**Invalid program** (Program uses a function which the oven does not support)
Error code 22:	**Program interrupted** (Power cut-out during program performance. Cut-out has lasted so long that program cannot be restarted)
Error code 23:	**CombiWash** (Oven is so hot that CombiWash cannot start. Cool down oven and start again.
Error code 24:	**Draining defect** (Steam generator could not be emptied during flushing. Level sensor reports high water level when generator is emptied)
Error code 25:	**ClimaOptima** (ClimaOptima not calibrated. Enter service menu and calibrate)
Error code 26:	**ClimaOptima** (ClimaOptima sensor defective. Pressure sensor does not give out correct signal.)
Error code 27:	**ClimaOptima** (Calibration could not be performed. Start calibration when oven is cold and dry.
Error code 28:	**Not in use**
Error code 34:	**Water pressure too low** (Check that water is turned on)
Error code 36:	**Detergent insufficient** (Detergent or rinse aid has run out)
Error code 38:	**Detergent in oven** (CombiClean interrupted while detergent in oven chamber. Run CombiWash step 0 before using oven. Food products and oven may be damaged if oven is used before soap is removed.
Error code 39:	**Memory insufficient** (Memory insufficient for this operation)

ANNUAL SERVICE CHECK

Customer:_____

Address:_____ City:_____ State:____ Zip code:_____

Serial No:_____ Model:_____ By:_____

	Functions Correctly YES	NO
1. Connection:		
Water connection – dirt filter	☐	☐
(May need tightening)		
Electrical connection	☐	☐
(may need tightening)		
Drain connection	☐	☐
(may need tightening)		
Positioning of oven	☐	☐
2. Door:		
Closing device	☐	☐
(may need adjusting)		
Catch	☐	☐
(may need adjusting)		
Sealing	☐	☐
(must be tight at 212°F (100°C) steam or combi steam)		
Hinging	☐	☐
(may need adjusting)		
Interior glass	☐	☐
(hinging, fastening)		
3. Inside:		
Interior light	☐	☐
Jets	☐	☐
(may need cleaning)		
Fan	☐	☐
(should rotate freely and be tightly fitted)		
Heating element	☐	☐
(may need tightening)		
4. Beneath oven:		
Drain system	☐	☐
(Check for leaks and blocks)		
Condensation jet and drain sensor	☐	☐
Drip tray	☐	☐
Drip slide on oven door	☐	☐

	Functions Correctly YES	NO
5. Motor room:		
Connection to heating elements	☐	☐
Load distribution on phases	☐	☐
Wire connection	☐	☐
(overloading, bad connection, & tightening)		
Exhaust motor	☐	☐
Fan motor	☐	☐
(may need tightening)		
Frequency transformer	☐	☐
(check regulation)		
ClimaOptima	☐	☐
Cooling fan	☐	☐
Filter for intake	☐	☐
(may need cleaning)		
Check for moisture		
6. Steam generator:		
Heating elements	☐	☐
(check for leaks)		
Load distribution on phases	☐	☐
Level sensor – to be cleaned	☐	☐
Drain pump	☐	☐
May need descaling		
7. Functional test:		
Components	☐	☐
(Use test function)		
Core temperature probe	☐	☐
Operation modes	☐	☐
CombiWash	☐	☐

_____ _____

Service Engineer Date

APPENDIX NO 1

BKI INSTALLATION CHECKLIST FOR VISUAL COOKING OVENS

To be filled out at each installation of a BKI oven.

In order for the oven to qualify for warranty, this check list must be filled out by the service engineer installing the oven and returned to BKI within 30 days of the date of installation.

Serial No:_____Installed by:_____Date of installation:_____

The installation was carried out ☐ not carried out ☐ on the basis of the requirements specified in the service and installation manual, please tick. If the measurements do not correspond with the values stated in the service and installation manual, your BKI distributor should be notified.

We confirm that the installation has been carried out on the basis of the attached check list and in compliance with the rules/requirements applying in the country/area in question. When the oven was handed over, it was free from any kind of defect.

_____ _____

Service Engineer: Signature / Date Customer: Signature / Date

Send this form by e-mail to: customerservice@bkideas.com or fax it through at (864) 963-5316.

Access to the oven:

	All Ovens	Distance Measured in mm
Left Side Minimum	50 mm (2”)	
Rear Side Minimum	50 mm (2”)	
Right Side Minimum	400 mm (15”)	

Drain Connection:

Heat-resistant drain tube connected. → YES ☐ NO ☐

Fall of at least 3° or 5% → YES ☐ NO ☐

CombiPlus fitted with open drain for both ovens. → YES ☐ NO ☐

The drain must never end directly beneath the oven.

Voltage and Water Supply:

(Please insert the measured value)

Voltage measured at: → ☐

Water Pressure measured at: (minimum 2 bar/28,5 psi - maximum 6 bar/88 psi) → ☐

Does the voltage on site comply with the voltage stated on the approval plate? → YES ☐ NO ☐

Dirt filter fitted? → YES ☐ NO ☐

Function Test:

All electrical connections are tight? → YES ☐ NO ☐

All water connections are tight and have been fastened? → YES ☐ NO ☐

All functions are operable? → YES ☐ NO ☐

All equipment is operable? → YES ☐ NO ☐

APPENDIX NO 2

BKI INSTRUCTION CHECKLIST FOR VISUAL COOKING OVENS

To be filled out at each installation of a BKI oven.

In order for the oven to qualify for warranty, this check list must be filled out by the service engineer installing the oven and returned to BKI within 30 days of the date of instruction.

Customer:_____ Serial No._____

Address:_____ City:_____ State:____ Zip code:_____

Serial No:_____ Model:_____ By:_____

Telephone No.:_____ Fax No.:_____ E-mail:_____

Instruction carried out by:_____ Date of instruction:_____

(Please tick the appropriate box)

Customer has been instructed in the manual use and programming of the oven. → YES ☐ NO ☐

Customer has been instructed in the daily cleaning of the oven. → YES ☐ NO ☐

Customer has been instructed in the maintenance of the oven. → YES ☐ NO ☐

When the oven was handed over, it was free from any kind of defect. The handling, maintenance and cleaning of the oven have been explained to the customer.

_____ _____

Sales person: Signature / Date Customer: Signature / Date

Send this form by e-mail to: customerservice@bkideas.com or fax it through at: (864) 963-5316

APPENDIX NO 3

OVEN SET-UP (SET-UP MENU)

NO	PARAMETER	SETTING	DESCRIPTION
1	**Oven light door**	NO, YES	Oven light off when door is open (B oven with lights in door).
2	**Ovenlight 5 mins**	NO, YES	Oven light timer 5 min, otherwise constant oven light.
3	**Screen saver**	Off, 5-15sec, 1-5-15min, 1hr	Show pause logo after selected time of inactivity.
4	**Menu start**	NO, YES	Oven shows selection of programs instead of manual functions.
5	**Start up permission**	User, SUPER	Select if oven has to start in User or Super user mode.
6	**Delta T C/F**	10/18 - 20/36 - 70/126	Select difference between core & oven temp. under delta-T.
7	**C&H diff C/F**	3/5.4, 5/9, 10/18	Cook & Hold: Select at which difference between actual & set point core temp. the oven temp. has to be regulated down.
8	**Restart key**	None, Display, Extern, Both	Passthru restart last step. From which side of oven will this be operated.
9	**Restart time**	1-5-10min	Passthrough. Select minutes the oven has to restart.
10	**Exhaust 1**	YES, NO	External ventilation speed 1 on-off.
11	**Exhaust 2**	NO, YES	External ventilation speed 2 on-off (is not implemented yet).
12	**Hand steam**	YES, NO	Selection of possibility of manual steam while oven is running.
13	**Steam int 1**	6-12-30sec	Interval for injection Combi 1.
14	**Steam int 2**	3-5-17sec	Interval for injection Combi 2.
15	**Steam int 3**	1-8sec	Interval for injection Combi 3.
16	**Reheat Steam int**	4-8-18sec	Interval for injection Reheat.
17	**Proving Steam int**	12-20-32sec	Interval for injection Proving.
18	**Proving Steam pulse**	.6-1.0-2.0sec	Pulse duration for injection Proving.
19	**Temp. Unit**	Cels. - Fahr.	Temperature unit, Celcius or Fahrenheit.
20	**Oven type**	BP, CP, KP, BPE, CPE, KPE	Oven type.
21	**Oven size**	1.06-2.14	Oven size.
22	**Mechanical**	vc1, vc2	Oven generation (VC2 after Oct. 07).
23	**Pass-through**	NO, YES	Oven with two doors.
24	**Two fans**	NO, YES	Is oven with two fans (1.20 and new 1.16).
25	**Custom mode**	None, BKI, EURO, CC i Menu	Special function for customers. CombiClean selectable under recipe. Notice for fat separating ovens, special recipe icons.
26	**Recipes**	20/4, 200/10	Maximum number of recipes and steps.
27	**Fan freq. Inv**	NO, YES	Is fan with frequency inverter.
28	**Fan freq. Volt.**	5, 10	Control voltage for frequency inverter, 5 or 10V. Only 10V is used.
29	**dT/C&H**	NO, YES	Delta-T and Cook & Hold selectable.
30	**Core temp 1**	NO, YES	Core temperature 1 selectable.
31	**Core temp 2**	NO, YES	Core temperature 2 selectable.
32	**Pre heat max C/F**	250/482, 300/572	Maximum preheat temperature (250C or 300C).
33	**CombiNet**	NO, YES	CombiNet is permission to recipe editing by web & offline via USB key.
34	**ClimaOptima**	NO, YES	Is oven with ClimaOptima (automatic moisture regulating).
35	**CombiClean**	No, Yes, Wash	Is oven with CombiClean or CombiWash (automatic wash system).
36	**CC Level**	NO, YES	Monitoring of content of detergent container.
37	**Energy Count**	NO, YES	Energy count in kwh
38	**Drain cooling**	NO, YES	Drain cooling with water nozzle. (Condensation).
39	**HACCP logging**	NO, YES	Logging of recipe runs.
40	**Update server**	None, Local, BKI, Laptop PC	Select source for SW update through web.
41	**Demo mode**	NO, YES	Setting for use at exhibitions (no heat and with temperature simulation).
42	**Oven temp offset C/F**	-10/-18-0/0-10/18	Adjustment of oven temperature sensor.
43	**Core 1 temp offset C/F**	-10/-18-0/0-10/18	Adjustment of core temperature sensor 1.
44	**Core 2 temp offset C/F**	-10/-18-0/0-10/18	Adjustment of core temperature sensor 2.
45	**Enable FAN alarm**	NO, YES	Activate fan alarm (Er 14, 15).
46	**Restart after PF**	Never, 10-30-60min	Restart after power failure. Select max time for oven to restart
47	**Descale**	NO, YES	Descale program for steam generator (KPE).
48	**Lime saturation factor**	18->dH, 8-18 dH, 0-8 dH	Scale diagnosis, monitoring of scale in generator. Select water quality.
49	**Stepless Fan speed**	NO, YES	"Stepless" fan speed, 20-100% in increments of 10%.
	1-3 USER	**1-19 SUPER USER**	**1-49 SERVICE ENGINEER**

NOTES:

BKI LIMITED WARRANTY

PO Box 80400 Simpsonville, SC 29680-0400 USA
(864) 963-3471 ♦ Toll Free: (800) 927-6887 ♦ Fax: (864) 963-5316

WHAT IS COVERED This warranty covers defects in material and workmanship under normal use, and applies only to the original purchaser providing that:

- The equipment has not been accidentally or intentionally damaged, altered or misused;
- The equipment is properly installed, adjusted, operated and maintained in accordance with National and local codes. and in accordance with the installation instruction provided with the product;
- The serial number rating plate affixed to the equipment has not been defaced or removed.

WHO IS COVERED This warranty is extended to the original purchaser and applies only to equipment purchased for use in the U.S.A.

COVERAGE PERIOD Convection Ovens: COB Models: One (1) Year limited parts and labor; COM Models: Two (2) Year limited parts and labor; CO1 Models: Two (2) Year limited parts and labor; (5) Year limited door warranty.
Warranty period begins the date of dealer invoice to customer or ninety (90) days after shipment date from BKI - whichever comes first.

WARRANTY COVERAGE This warranty covers on-site labor, parts and reasonable travel time and travel expenses of the authorized service representative up to (100) miles. round trip, and (2) hours travel time.

EXCEPTIONS The extended door warranty years 3 through 5 is a parts only warranty and does not include labor, travel, milage or any other charges.

EXCLUSIONS

- Negligence or acts of God,
- Thermostat calibrations after (30) days from equipment installation date,
- Air and Gas adjustments,
- Light bulbs,
- Glass doors and door adjustments.
- Fuses,
- Adjustments to burner flames and cleaning of pilot burners,
- Tightening of screws or fasteners.
- Failures caused by erratic voltages or gas supplies,
- Unauthorized repair by anyone other than a BKI Factory Authorized Service Center,
- Damage in shipment,
- Alteration, misuse or improper installation,
- Thermostats and safety valves with broken capillary tubes.
- Freight - other than normal UPS charges,
- Ordinary wear and tear.

INSTALLATION Leveling. as well as proper installation and check out of all new equipment - per appropriate installation and use materials - is the responsibility of the dealer or installer, not the manufacturer.

REPLACEMENT PARTS BKI genuine Factory OEM parts receive a (90) day materials warranty effective from the date of installation by a BKI Factory Authorized Service Center.

This Warranty is in lieu of all other warranties, expressed or implied, and all other obligations or liabilities on the manufacturers part. BKI shall in no event be liable for any special, indirect or consequential damages, or in any event for damages in excess of the purchase price of the unit. The repair or replacement of proven defective parts shall constitute a fulfillment of all obligations under the terms of this warranty.

Form #U4177A-BKI 7/07