



HOUNÖ

SERVICE MANUAL – English

Combislim CPE Models

Software Version 1_5_2 07/2017

CAUTION: Read these instructions before servicing the oven

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INTRODUCTION

Dear customer,

Thank you for choosing a CombiSlim oven from HOUNÖ.

This manual contains the information you need to service and maintain your oven. We recommend that you read the manual and familiarize yourself with the service settings and functions of the oven. This will ensure optimal cooking results and safety.

Please make the manual available to all who service and maintain the oven and retain it for future reference.

The latest version of the manual can be downloaded from www.houno.com.

Note that this document is subject to change without notice.



IMPORTANT

WARNING: Improper installation, adjustment, alternation, service or maintenance can cause property damage, injury or death. Read the installation, operation and maintenance instructions thoroughly before installing or servicing this equipment. The information contained in this manual is important for the proper installation, use, and maintenance of this oven. Adherence to these procedures and instructions will result in satisfactory baking and cooking results and long, trouble free service. Please read this manual carefully and retain it for future reference.

ERRORS: Descriptive, typographic or pictorial errors are subject to correction. Specifications are subject to change without notice.

UTILITY CONNECTIONS

THE SERVICE INSTRUCTIONS CONTAINED HEREIN ARE FOR THE USE OF QUALIFIED INSTALLATION AND SERVICE PERSONNEL ONLY. INSTALLATION OR SERVICE BY OTHER THAN QUALIFIED PERSONNEL MAY RESULT IN DAMAGE TO THE OVEN AND/OR INJURY TO THE OPERATOR.

Qualified service/installation personnel are individuals, a firm, a corporation, or a company which either in person or through a representative are engaged in, and responsible for:

- the service/installation or replacement of gas piping and the connection, installation, repair or servicing of equipment.
- the installation, repair or service of electrical wiring from the electric meter, main control box or service outlet to the electric appliance.
- Qualified installation/service personnel must be experienced in such work, familiar with all precautions required, and have complied with all requirements of state or local authorities having jurisdiction.



STANDARDS AND CODES

U.S. and Canadian installations

The installation must conform with local codes, or in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/NFPA 54, or the Natural Gas and Propane Installation/service Code, CSA B149.1, as applicable.

Installation/service must conform with local codes, or in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70-Latest Edition and/or Canadian National Electric Code C22.1 as applicable.

Appliance is to be installed with backflow prevention in accordance with applicable federal, province and local codes.

Australia and general export installations

Installation must conform with Local and National installation standards. Local installation codes and/or requirements may vary. If you have any questions regarding the proper installation, service, repair and/or operation of your HOUNÖ oven, please contact your local distributor. If you do not have a local distributor, please call the HOUNÖ Oven Company at +45 87 11 47 11.



IMPORTANT SAFETY INFORMATION

The following icons are used throughout this manual to draw special attention to safety related information.



The service personnel should observe and/or act according to the information in order to obtain the best possible function of the oven.



The service personnel must observe and/or act according to the information in order to avoid any personal injury or damage to the oven.



The service personnel must observe and/or act according to the information in order to avoid any fatal injury. The symbol indicates a hazard arising from dangerous voltage.

SAFETY INSTRUCTIONS

Ready for use

When the oven is correctly installed, read this manual carefully before the oven comes into service.

This manual should be kept handy to persons using the oven.

Always place trays filled with hot liquid in the bottom runners of the oven chamber to avoid spilling the hot liquid on yourself when you take the tray out of the oven chamber.

Some areas on the outside of the oven may get as hot as 60°C or more, therefore, you should only touch the front of the oven.

Do not open the oven during the automatic cleaning process.

Do not store flammable materials around or under the unit.

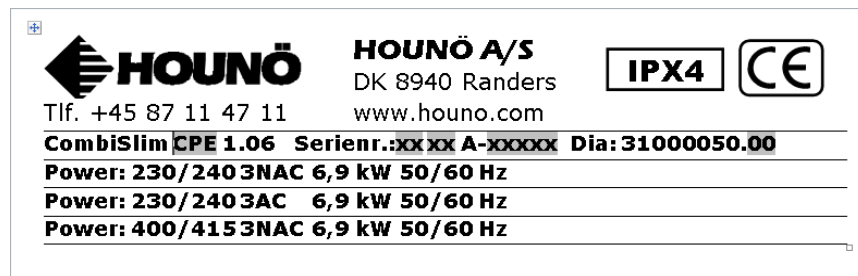
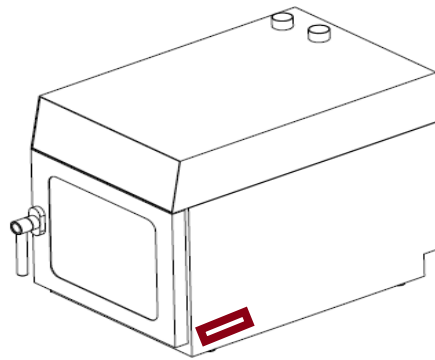


Failure to comply with the above instructions may increase the risk of fire!

LOCATING THE SERIAL NUMBER OF THE OVEN

When you order parts or request service for your CombiSlim oven, you need the oven's Serial Number,

You can find the Serial Number and Type information on the right-hand corner post of the oven as shown in the illustration.



The serial number plate contains vital information about the oven.

- Production year and months.
- Model type and size.
- Voltage, power, phases and frequency.
- Power consumption.
- Wiring diagram number.
- Water inlet max/min pressure.
- Ipx grating.

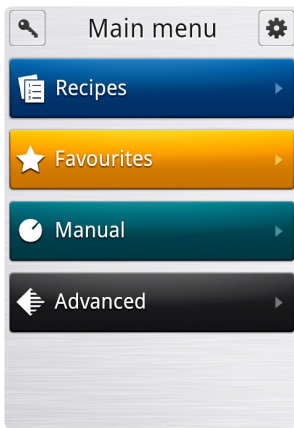
USING THE SMARTTOUCH® DISPLAY

The SmartTouch display provides a friendly and easy way for you to operate and interact with the CombiSlim oven. You simply use the pads of your fingertips to perform the operations.

Basic Operations

- To select an item, touch the button.
- To scroll through a list, drag your finger up or down.
- To return to the previous display push the arrow button ◀ in the upper left corner.
- To change cooking function while the oven is operating, push the down arrow button ▼ in the upper right corner.
- To save current settings and move on to the next step, push the right arrow button ▶ in the upper right corner.

SETTINGS MENU

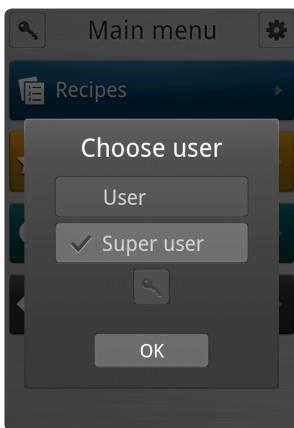


Before you can start the maintenance process or change settings, you have to open the Settings Menu.

- On the Main Menu, touch the gear wheel icon  to enter the Settings Menu.



Role	Access rights
User	Access to the User menu
SuperUser	Access to the User and SuperUser menus
Technician	Access to User, SuperUser, and Technician menus

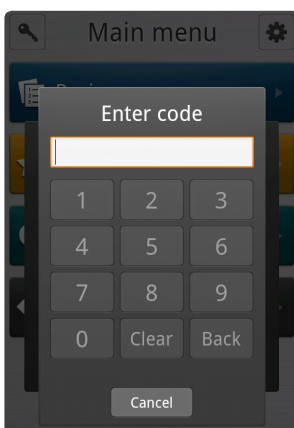
The settings you have access to depend on the role you have been assigned.



SuperUser Code



If start-up permission is set to User, you have to enter the SuperUser code to gain access to the SuperUser menu.

- On the **Main Menu**, touch the key icon .
- On the **Choose menu**, touch the key icon , and then enter the code. The code is **876412**.



Technician Code

If start-up permission is set to User or SuperUser, you have to enter the Technician code to gain access to the Technician menu.

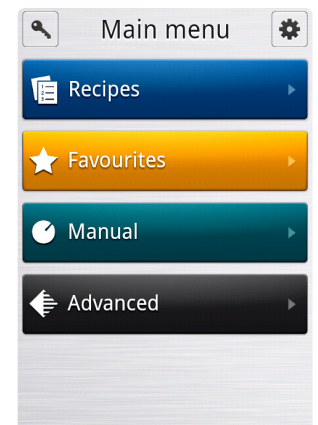
- On the **Main Menu**, touch the key icon .
- On the **Choose menu**, touch the key icon , and then enter the code. The code is **576021**.

Note The computer has been thoroughly tested by the manufacturer prior to delivery, and the settings have been carefully reviewed. You should therefore only allow qualified personnel to make changes to the settings. Contact your supplier for more information.

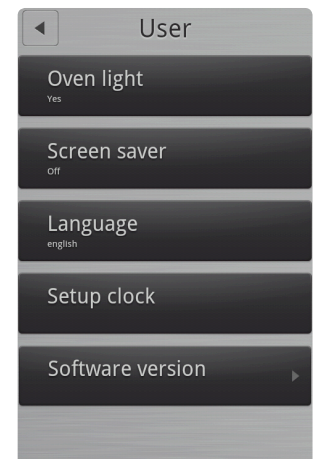
Menu tree

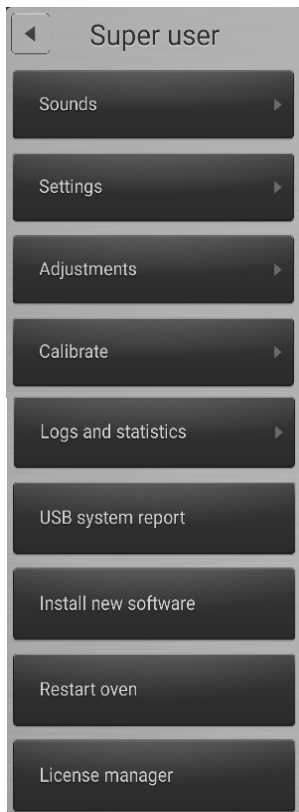
- Main menu
- User menu
- SuperUser menu
- Technician menu

Main menu
Recipes
Favourites
Manual
Advanced



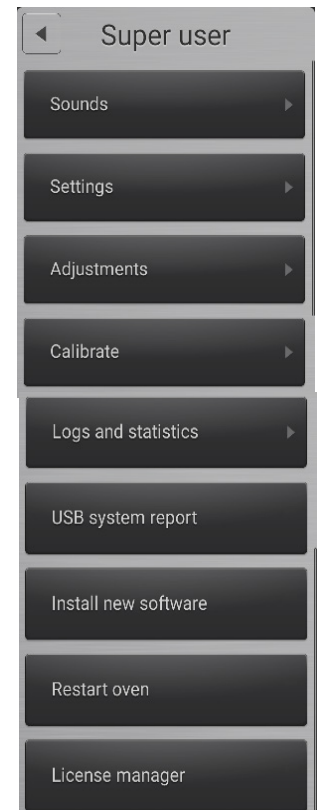
USER MENU	SUB LEVEL MENU	PARAMETER
Oven light		continuous - 5min
Screen saver		1min - 1hour
Language		25 different languages
Setup clock		Set min - hour - date
Software version	x_x_xx (info only)	
Oven serial number	XX XX XXXXX (info only)	
Touch driver version	Unavailable	

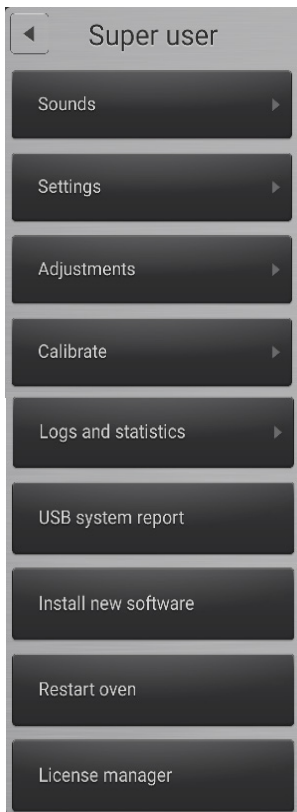




SUPER USER MENU	SUB LEVEL MENU	SUB LEVEL MENU	PARAMETER SETTINGS
Sounds	Finished Recipe notification Racktimer finish Door open Probe missing Insert product Error Timer start Preheat done Set defaults	Sound file	138 sound files
		Repeat	1-100 repetitions
		Volume	0-100%
		Repeat delay	0,5sec - 60,0 sec
		Playback rate	0,5-2,0
		Test sound	Test
		Settings	HACCP login
Menu star			Yes - No
Start picture			Yes - No
Core probe warning			Yes - No
Temp unit			Celsius - Fahrenheit
Volume system			Metric - US
Hardness unit			German degrees - PPM
Cook to perfection			Yes - No
CTP tolerance			5 - 25
CTP threshold			40 - 90%
Start up permission			User - Super user
Core temp			Yes - No
Time format			12- 24 houer
Date format			DD-MM-YYYY
Restart key			Non - Display - Both
Restart time			1 - 9 min
Restart after power failure			No restart 10-20-30 min

SUPER USER MENU	SUB LEVEL MENU	PARAMETER SETTINGS	
Adjustments	Cook and hold offset	3 - 10 degrees	
	Delta T offset	10 - 70 degrees	
	Cook and Regen pulse interval	3 - 24 sec	
	Proving pulse interval	12 - 44 sec	
	Proving pulse length		
Calibrate	Calibrate front door	Follow instructions	
	Calibrate back door	Follow instructions	
	Calibrate auto humid	Follow instructions	
Logs and statistiks	Fault Log	All triggered alarms	
	Fault statistics	Error list and counts	
	Service counter	Component on time	
	Energy meters	KW used	
	Water meters	Total liter counter	
		Trip counter	
		Hardness	
		Filter	
		Filter alerts	
		Filter changed	
	Chemicals	Level Warning	
		Container	
		Replaced	
		Level warning	
Container			
Replaced			





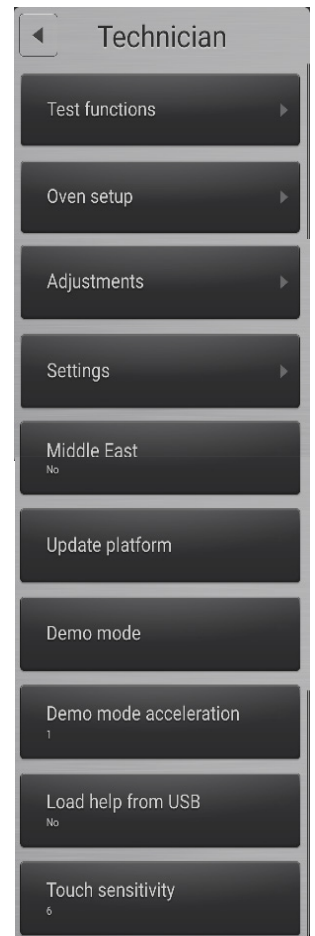
SUPER USER MENU	SUB LEVEL MENU	PARAMETER SETTINGS
USB system report		Generate system report
Install new software		Application update
Restart oven		Restart oven YES - NO
License manager	Purchase the license codes from HOUNÖ to unlock/activate special features.	Keypad
		Advanced racktimer
		QSR

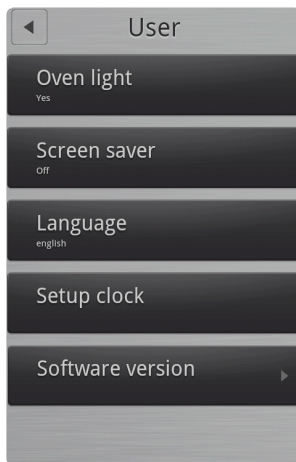
TECHNICIAN MENU	SUB LEVEL MENU	PARAMETER SETTINGS	
Test function	Oven test	Main contactor	Exhaust
		Heat	Drain
		Cooling fan	Jet
		Oven light	Fan
		Door 1 (open - closed)	
		Oven temperature (C/F°)	
		Drain temperature (C/F°)	
		Exhaust (open - closed)	
	Fan test	High left	High right
		Low Left	Low right
		Stop	Main contactor
		Output for frequency inverter (1-10V)	
	Wash	Detergent	Rinse aid
		Water	Main contactor
		Fan	Heat
		Water pressure (yes - no)	
		Oven temperature (C/F°)	
		Rinse aid (xx%)	
		Detergent (xx%)	

Technician	
Test functions	▶
Oven setup	▶
Adjustments	▶
Settings	▶
Middle East	No
Update platform	
Demo mode	
Demo mode acceleration	1
Load help from USB	No
Touch sensitivity	6

TECHNICIAN MENU	SUB LEVEL MENU	PARAMETER SETTINGS	
	Miscellaneous test	External vent	
		Core temp	C/F°
			C/F°
			C/F°
		I/O temp (C/F°)	
		CPU temp (C/F°)	
Oven setup	Oven number input	Enter serial number	
	Oem	HO - BL - LE - LA - DI - KB	
	Oven size	S2306-S1,06-S1,10	
	Wash system	None - CombiWash	
	Drain cooling	Off	
		On - when using water	
		On - All functions	
	Auto humidity	Yes - No	
	Show display	Yes - No	
Forced wash	Off - 2min - 30 Hours - 40 Hours		

TECNICIAN MENU	SUB LEVEL MENU	PARAMETER SETINGS
Adjustments	Oven temp offset	-10 +10
	Core temp offset	-10 +10
	Core temp sous vide	-10 +10
	Detergent conversion	10 - 30 ML/S
	Rinse Aid conversion	10 - 30 ML/S
Settings	Fan Speed alarm	Yes - No
	Need rinse	Yes - No
	Need steam generator rinse	Yes - No
Middle East		Yes - No
Update platform		
Demo mode		Yes - No
Demo mode acc.		1 - 5
Load help from USB		Yes - No
Touch sensitivity		1 - 8





CHANGING SETTINGS ON THE USER MENU

You change the basic settings from the User Menu.

- On the Settings Menu, touch the User button.

Setting the Oven Light

1. To set oven light, touch **Oven light**.
2. Drag your finger up or down to select **Continuous** or **5 min.**, and then touch **OK**.

We recommend the 5 min option.

Setting the Screen Saver

1. To set the screen saver, touch **Screen saver**.
2. Drag your finger up or down to select the desired setting. Select how much time elapses before the screen saver becomes active. Select **Off** if you do not want the screen saver on.
3. Touch **OK**.

Setting the Language

1. To set the language, touch **Language**.
2. Drag your finger up or down to select the desired language, and then touch **OK**.

Setting the Setup Clock

1. To set the clock, touch **Setup clock**.
2. In the **hour** and **min.** lists drag your finger up or down to select the desired time.
3. In the **day**, **month** and **year** lists drag your finger up or down to select the desired date.
4. Touch **OK**.

CHANGING SETTINGS ON THE SUPERUSER MENU

You can access the following areas on the super user display.

- Sounds (See Setting Alarm Sounds on page 21)
- Settings (See Changing Settings on page 28)
- Adjustments (See Adjustments on page 37)
- Calibrate (See Calibrating the Oven Door Sensor on page <?>)
- Logs and statistics (See Logs and Statistics on page 31)
- USB system report
- Install new software
- Restart oven
- License manager

Setting Alarm Sounds

You can have the CombiSlim oven play a sound (alarm) when certain events occur. You have a number of options when you assign a sound to an event. It is possible to adjust, among other things, the volume and the time elapsed between each reminder.

1. On the **SuperUser** display, touch **Sounds**.
2. To change a sound, touch the event that you want to assign a sound for. The following events are available:
 - Finished
 - Recipe notification
 - Racktimer finish
 - Door open
 - Probe missing
 - Insert product
 - Error
 - Timer start
 - Preheat don
 - Set defaults

1. Set the desired sound properties. For each event, you can specify the following properties.

Property	What it does
Sound Set	Used to select the desired sound set for the alarm. The default sound set is Android.
Sound File	Used to select the specific sound from the set. You can then test the sound by touching the Test Sound button.
Repeat	Used to specify for how many times the alarm should be repeated.
Start repeat delay	Used to specify the interval between the first and the second sounding of the alarm.
End repeat delay	Used to specify the interval between the second to last and the final sounding of the alarm.
End repeat delay after	Used to specify the interval between the sounding of the alarm after the first sounding of the alarm.
Start volume	Used to specify the volume at the first sounding of the alarm.
End volume	Used to specify the volume after the final sounding of the alarm.
End volume after	Used to specify how many times the sound should be repeated until it reaches the volume specified in End volume.
Start playback rate	Used to specify the playback frequency of the first sounding of the alarm. The interval ranges from 0.5 to 2.0 with intervals of 0.1.
End playback rate	Used to specify the playback frequency at the final sounding of the alarm.
End playback rate after	Used to specify the playback frequency of the alarm while it is being repeated.
Test sound	Used to test the sound specified in Sound File.

2. Follow the steps above for all events to which you want to assign a sound.

Changing Settings

The following describes the settings you can change via the SuperUser Menu.

HACCP Logging

You can specify whether you want the oven to automatically store and save HACCP (Hazard Analysis and Critical Control Points) data about the preparation process. If you enable this option, you can access information about production time and duration as well as production temperature and core temperature. The default setting is **No**.

1. On the SuperUser display, touch **Settings**, and then touch **HACCP logging**.
2. Drag your finger up or down to select **Yes** or **No**, and then touch **OK**.

Start Picture

You use Start Picture to specify which display is the first display the user sees. The default setting is **YES**, which means that the first display is the **Main Menu** display. If the setting is **no**, the first display is **Manual**.

Menu Start

You use Menu Start to specify which display is the first display the user sees. The default setting is **No**, which means that the first display is the Menu display. If the setting is **Yes**, the first display is Recipes.

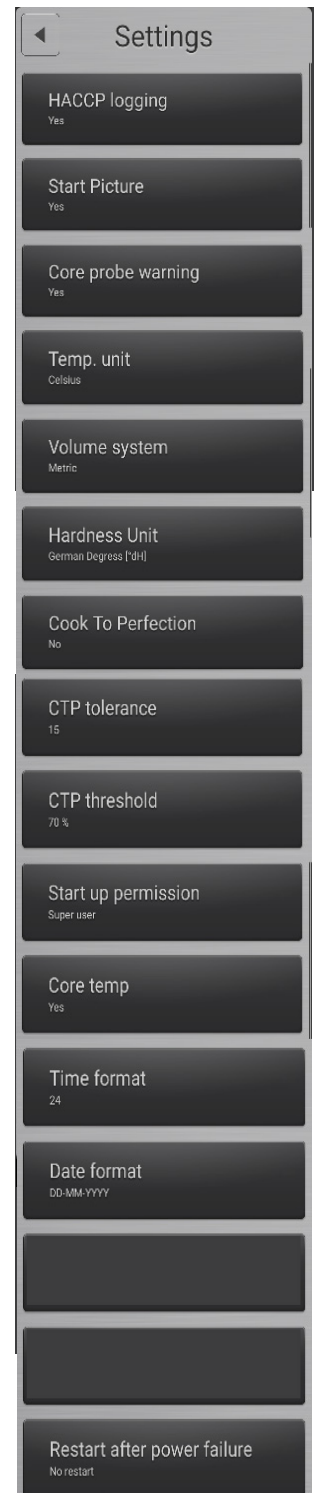
However, some users only have access to a limited number of functions and it can therefore be useful to specify that a different display is shown.

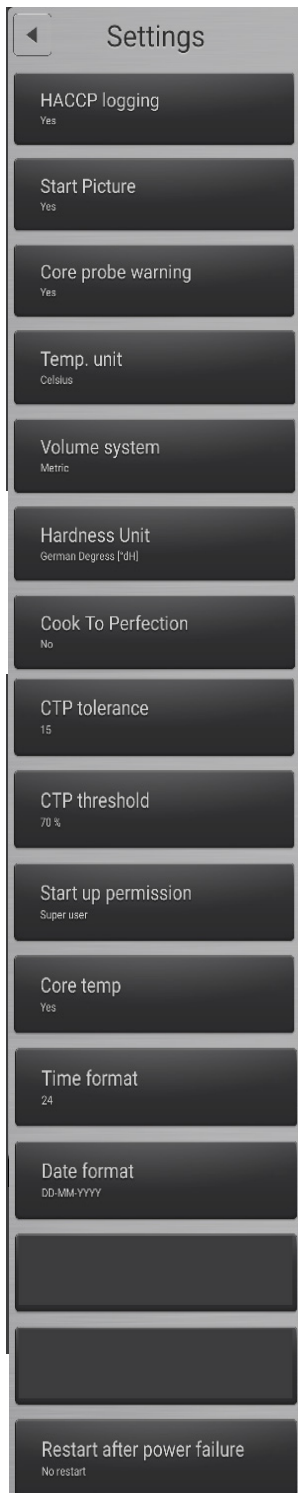
1. On the SuperUser display, touch **Settings**, and then touch **Menu Start**.
2. Select **No** for Menu as the first display, and **Yes** for Recipes as the first display.

Start Up Permission

You use Start up permission to specify whether the oven starts up in User or SuperUser mode. The default setting is **SuperUser**.

1. On the SuperUser display, touch **Settings**, and then touch **Start up permission**.
2. Drag your finger up or down to select **User** or **SuperUser**, and then touch **OK**.





Core probe warning.

Give an alarm if core probe is missing.

Temp unit.

Chuse between **Celsius** or **Fahrenheit**.

Volume system.

This parameter setup the application to **Metric** or **US**.

Hardness Unit.

This parameter set up the applicatio to **DH** or **PPM**

Cook To Perfection, CTP tolerance and CTP threshold.

Sets up a function that will correct the time for each timer in advanred racktimer. and add time, if there is a temperature drop in the oven cavity (if the door is left open for a short periode). This is to optimice the functionalety of the advanred racktimer.

Start Up Permission

You use Start up permission to specify whether the oven starts up in User or SuperUser mode. The default setting is **SuperUser**.

1. On the SuperUser display, touch **Settings**, and then touch **Start up permission**.
2. Drag your finger up or down to select **User** or **SuperUser**, and then touch **OK**.

Core Temperature

You use the Core temp. setting to specify whether the oven comes with a core temperature probe. The default setting is **Yes**.

1. On the SuperUser display, touch **Settings**, and then touch **Core temp**.
2. Drag your finger up or down to select **Yes** or **No**, and then touch **OK**.

Time Format

You use the Time format setting to specify whether you want the oven to use a 24-hour time format or a 12-hour time format. The default setting is **24**.

1. On the SuperUser display, touch **Settings**, and then touch **Time format**.
2. Drag your finger up or down to select **24** or **12**, and then touch **OK**.
3. **Core Temperature**

You use the Core temp. setting to specify whether the oven comes with a core temperature probe. The default setting is **Yes**.

1. On the SuperUser display, touch **Settings**, and then touch **Core temp**.
2. Drag your finger up or down to select **Yes** or **No**, and then touch **OK**.

Core Temperature Sous Vide

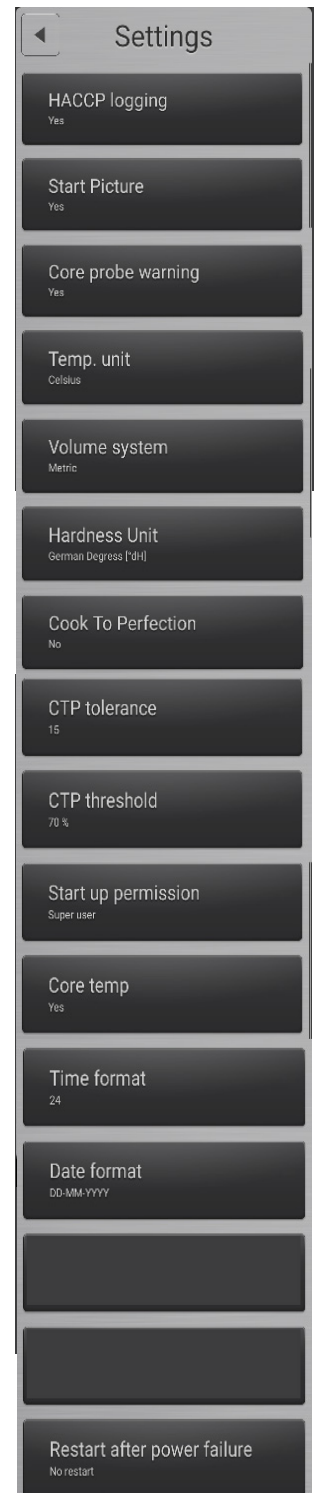
You use the Core temp sous vide setting to specify whether the oven comes with a thin probe that is used specifically for sous vide products. The default setting is **No**.

1. On the SuperUser display, touch **Settings**, and then touch **Core temp sous vide**.
2. Drag your finger up or down to select **Yes** or **No**, and then touch **OK**.

Time Format

You use the Time format setting to specify whether you want the oven to use a 24-hour time format or a 12-hour time format. The default setting is **24**.

1. On the SuperUser display, touch **Settings**, and then touch **Time format**.
2. Drag your finger up or down to select **12** or **24**, and then touch **OK**.



Date Format

You use the Date format setting to specify how you want the date displayed. The default setting is **DD-MM-YYYY**.

1. On the SuperUser display, touch **Settings**, and then touch **Date format**.
2. Drag your finger up or down to select **DD-MM-YYYY** or **MM-DD-YYYY**, and then touch OK.

Restart after power failure

This function setup the oven to continue the program in case of a power cut. If the time limit is exceeded, the oven will not finish the program.

1. No restart.
2. 10 Minutes.
3. 20 Minutes.
4. 30 Minutes.



Adjustments

Cook and Hold Offset

You use the Cook and hold offset setting to specify the difference between the core temperature and the oven chamber temperature when Cook & Hold cooking mode is used. The default setting is **5**.

1. On the SuperUser display, touch **Adjustments**, and then touch **Cook and hold offset**.
2. Drag your finger up or down to select **3**, **5** or **10** and then touch **OK**.

DeltaT Offset

You use the DeltaT offset setting to specify the difference between the core temperature and the oven chamber temperature when DeltaT cooking mode is used. The default setting is **20**.

1. On the SuperUser display, touch **Adjustments**, and then touch **DeltaT offset**.
2. Drag your finger up or down to select a setting between **10** and **70** and then touch **OK**.

Cook and Regaen pulse interval

You use the Reheat pulse interval setting to specify the interval in seconds between injections of water during the regeneration process. The injection itself lasts 1/10 of a second. The default setting is **8 seconds**.

1. On the SuperUser display, touch **Adjustments**, and then touch **Reheat pulse interval**.
2. Drag your finger up or down to select **from 4s to 24s in intervals of 2** and then touch **OK**.

Proving Pulse Interval

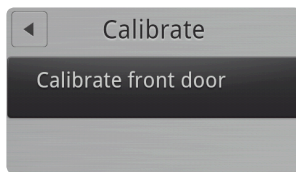
You use the Proving pulse interval setting to specify the interval in seconds between injections of water during the proving process. The injection itself lasts 1/10 of a second. The default setting is **20 seconds**.

1. On the SuperUser display, touch **Adjustments**, and then touch **Proving pulse interval**.
2. Drag your finger up or down to select from **12s to 44s in intervals of 4**, and then touch **OK**.

Proving Pulse Length

You use the Proving pulse interval setting to specify for how long each injection of water lasts during the proving process. The default setting is **1 second**.

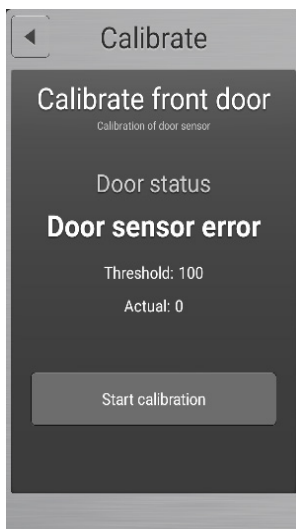
1. On the SuperUser display, touch **Adjustments**, and then touch **Proving pulse length**.
2. Drag your finger up or down to select **the preferred length: 0.6, 1.0 or 2.0 seconds, and then touch OK**.



Calibrating the Oven Door Sensor

You use the Calibrate setting to calibrate the oven door sensor. The oven door sensor has been calibrated prior to delivery, but we recommend that you calibrate the oven after the oven has been installed in its proper location and when the CPU has been replaced.

The measurement is an internal value that expresses the distance between the magnet and the sensor.



Starting the Oven Door Calibration Process

1. On the SuperUser display, touch **Calibrate front door**.
2. On the **Calibrate front door** display, you can see the status of the door.
3. Close the door so that the door status is **Closed**, and then touch **Press when door closed**.
4. Open the door so that the door is in the first step open position and then touch **Press when door open**.
5. Look at the **Threshold** and **Actual** values.
 - The **Threshold** value displays the value that marks the shift between status door open and the status door closed.
 - The **Actual** value displays the actual input from the sensor. The actual value must be greater than 10 when the door is closed.
6. Verify that a **green checkmark** is displayed next to **Press when door closed** and **Press when door open**. If the values are not acceptable, the display shows **Door sensor error**. See Troubleshooting on page 22 for more information.
7. Touch **Done** to end the calibration process.
If the door has not been calibrated, a warning is displayed asking if you want to exit anyway.

Logs and Statistics

You can use the logs and statistics to see which processes failed and when they failed.

Fault Log

The Fault log displays the latest thirty errors in a list with the most recent error on top.

On the SuperUser display, touch **Logs and statistics**, and then touch **Fault log**. The fault log is displayed.

Fault Statistics

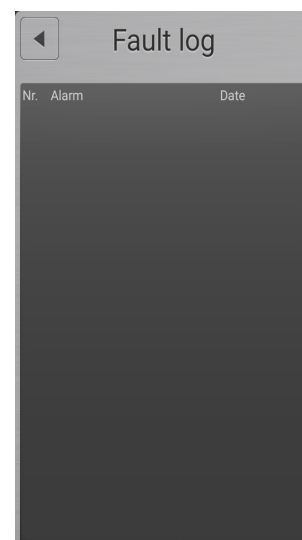
The Fault statistics list displays a list of all error codes, the number of times each error code has been displayed, and the date the error code was last displayed.

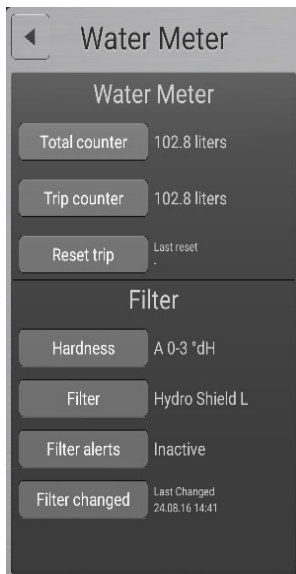
1. On the SuperUser display, touch **Logs and statistics**, and then touch **Fault statistics**. The fault statistics list is displayed.
2. To clear the fault statistics list and the fault log list, touch **Reset**, and then touch **Yes**.

Service Counters

The Service Counters list displays how often a component has been activated and for how long.

1. On the SuperUser display, touch **Logs and statistics**, and then touch **Service counters**. The service counter list is displayed.
2. To clear the service counter list, touch **Reset**, and then touch **Yes**.





Water meter

The water meter functions is used to display and setup the amount of water consumed and set up the Hydro shield filters.

1. **Total counter** displayed the amount litres consumed.
2. **Trip counter** displayed the amount of litres consumed since last reset.

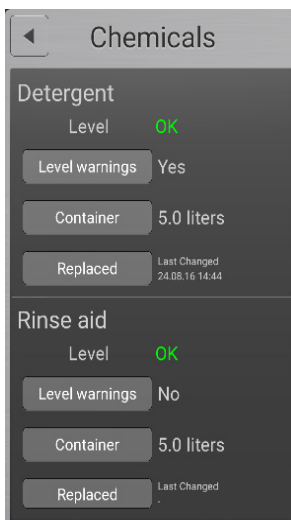
Filter

1. **Hardness** setting of the inlet water, so the CPU can calculate the capacity of the Hydro shield filter.
2. Filter alert is function that will alert the user at 80% used capacity of the filter, that the filter need to replaced in near future.
3. Filter changed reset the counter when the Hydro shield filter have ben replaced.
4. Pree when filter have ben replace to recet the water meter.

Chemicals

LEVEL WARNING:This function will monitor the amount of detergent and rinse used and and calculate the amount left in the canister after every washing cycle. This is to prevent the CPU from running the pumps without fluids, witch will damage the pumps.

If a user stats a washing cycle that demandts more rinse or detergent then there is left in the canister, the user will be notified and encouraged to replace the canister befor starting the needed washing cycle.



1. **Detergent:**
 1. Setup the level warning
 2. Setup canister size 5,0L 10,0L 3,8L(1Gallon) 18,9L(5Gallon)
 3. Reset the level monitor, when canister have ben replaced.
2. **Rinse aid:**
 1. Setup the level warning,
 2. Setup canister size 5,0L 10,0L 3,8L(1Gallon) 18,9L(5Gallon)
 3. Reset the level monitor, when canister have ben replaced.

USB System report

This function will store a datalog of events, on to a usb stick if a software problem continues causing problems after the oven has been updated to the latest version.

Log file is to be sent to Logfile@Houno.com.

This function is to be used on demand from HOUNÖ technical support and the .

Install new software

This function updates the application.

The software available on our webpage is the platform and the application and must be installed under the technicians menu (UPDATE PLATFORM)

Restart oven

This function will reboot the application.

Licence manager

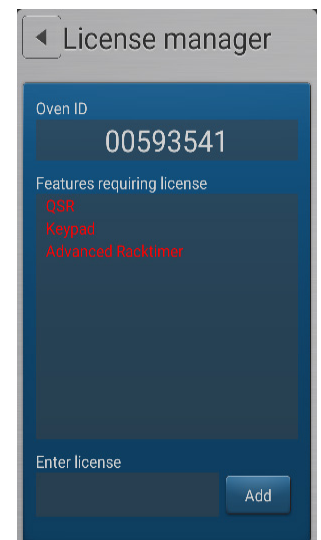
This function can unlock

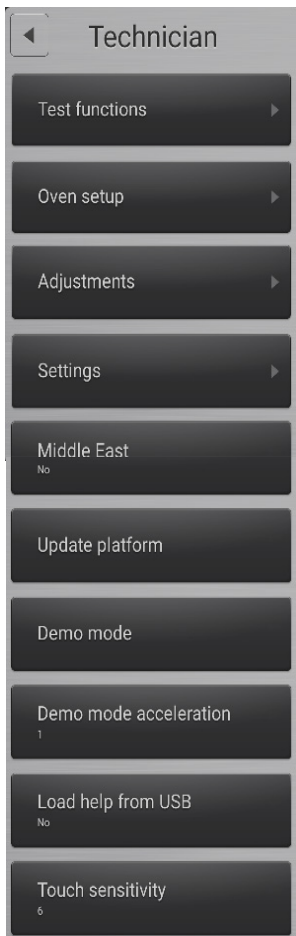
1. QSR (quick select recipe)
2. Keypad
3. Advanced Racktimer

Read more about the true functionalities in the user manual

The oven ID and the serial number must be sent to HOUNÖ with the request to unlock any of the special functions.

Customers that receive a licence code for unlocking a function will be charged a small licence code fee.





SETTINGS AND FUNCTIONS IN THE TECHNICIAN MENU

You can access the following areas on the Technician Menu.

- Test Functions (See Using the Test Functions on page 32)
- Oven setup (See Changing the Oven Set-up on page 35)
- Adjustments (See Making Temperature Adjustments on page <?>)
- Settings (See Changing Oven Settings on page <?>)
- Middle East (See Specifying Middle East Specific Settings on page <?>)
- Demo mode (See Enabling Demo mode on page <?>)

Using the Test Functions

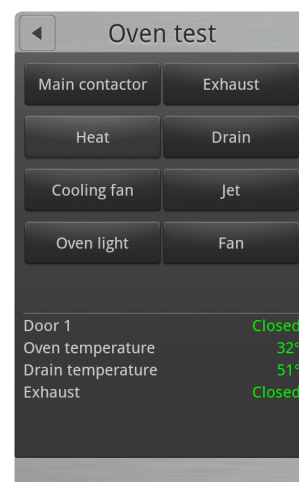
The test functions are useful for fault finding. You can test the following functions.

- Oven
- Fan
- Steam
- Wash
- Miscellaneous
- Main alarm

Testing the Oven

1. On the **Technician** display, touch **Test functions**, and then touch **Oven**.
2. Touch each button in turn to test the functions. The button turns green if the component is active.
3. At the bottom of the display the status of a number of input functions is displayed.

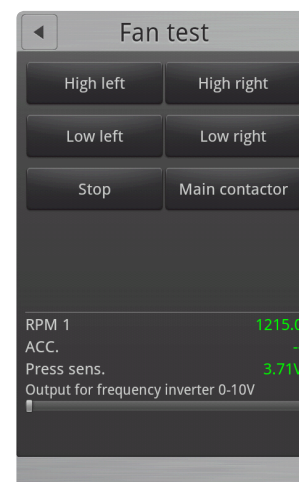
Value	Description
Door 1	Displays whether the door is open or closed. Door 2 is only displayed if the oven is a pass-through oven.
Oven temperature	Displays the current temperature in the oven chamber.
Drain temperature	Displays the current temperature in the drain.
Exhaust	Displays whether the exhaust is open or closed.

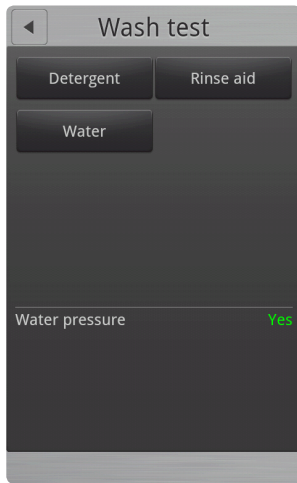


Testing the Fan

1. On the **Technician** display, touch **Test functions**, and then touch **Fan**.
2. Touch each button in turn to test the fan. The status of each function is shown at the bottom of the display. The button turns green if the component is active.

Value	Description
Output for frequency inverter 0-10V	Controls fan speed.





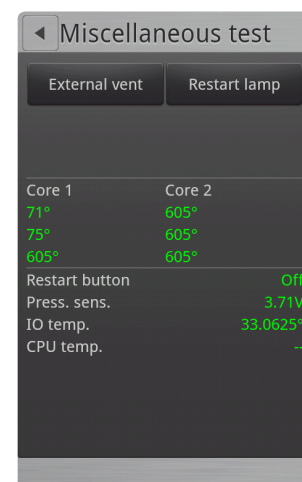
Testing the CombiWash Function

1. On the **Technician** display, touch **Test functions**, and then touch **Wash**.
2. Touch each button in turn, to determine whether the detergent and rinse aid pumps are working properly. The Water button tests whether the solenoid valve is working properly.
The water pressure must be at least 2.5 bars when using CombiWash.

Value	Description
Water pressure	Displays Yes when the water pressure is ok and No when the water pressure is low.

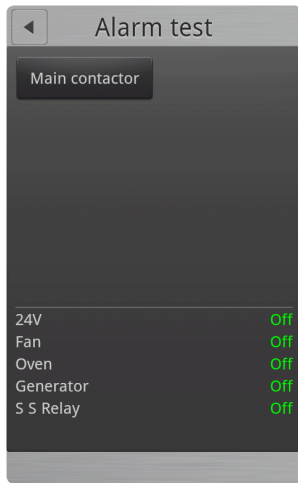
Miscellaneous test

1. On the **Technician** display, touch **Test functions**, and then touch **Miscellaneous**.
2. Touch **External vent**, to test if the external ventilation is working. The outlet is named terminal no.2. When external ventilation is activated, the outlet is active during program performance and until 10 minutes after the program has completed.
3. Touch **Restart lamp**, to test that the restart lamp is active.
4. To test the probe, place in boiling water then ice water.



Value	Description
Core 1 temperatures	Displays the temperature of each of the 3 sensors on the probe.
Restart button	Displays the status of the restart button. Should switch from Off to On when you touch the Restart button. The button is located on the backside on the oven. The button is only available on pass-through ovens.
Press. Sens.	Displays the voltage of the pressure sensor. The value is between 0 -5 volts.
IO temp.	Displays the temperature of the IO board. The temperature increases if the cooling fan is broken.
CPU temp.	Displays the temperature of the CPU board. The temperature increases if the cooling fan is broken.

Important note: External ventilation 1 and 2 only control the voltage and therefore they must be connected through an external relay with a maximum voltage of 24V.



Testing the Alarm

This function tests the thermo-switch circuit.

1. On the **Technician** display, touch **Test functions**, and then touch **Main alarm**.
2. Touch **Main contactor**. If all status values are displayed in green and the status is On, it indicates that the alarm is working properly. If a value is displayed in red and the status is Off, a fault has occurred.

Value	Description
24V	Displays whether the alarm is on or off.
Fan	Displays whether the alarm is on or off.
Oven	Displays whether the alarm is on or off.

Changing the Oven Set-up

Oven serial number Input

Enter the serial number from the Type shield on the rightside of the oven

0000-00000

OEM

This function is for the private label costumers. Default setting is HO (HOUNÖ)

Specifying the Oven Type

1. On the **Technician** display, touch **Oven setup**, and then touch **Oven type**.
2. Slide your finger up or down to select the correct oven type: **BPE**, **CPE**, and then touch **OK**. You can see the oven type on the serial plate located on the oven exterior on the bottom right side.

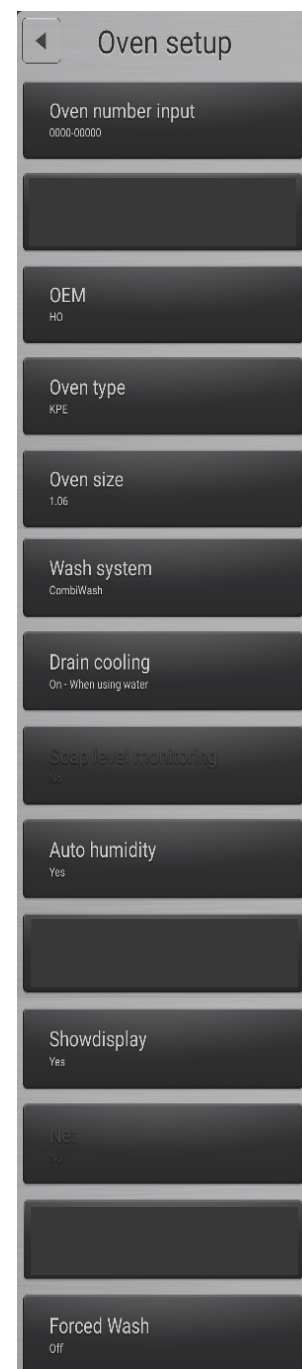
Specifying the Oven Size

1. On the **Technician** display, touch **Oven setup**, and then touch **Oven size**.
2. Slide your finger up or down to select the correct oven size S2306, S106, S1,10, and then touch **OK**. You can see the oven size on the serial plate located on the oven exterior on the bottom right side.

Setting the Wash System

1. On the **Technician** display, touch **Oven setup**, and then touch **Wash system**.
2. Slide your finger up or down to select the correct wash system, **None**, **BlueCycle** or **CombiWash**, and then touch **OK**. BlueCycle is only available on OEM ovens.

Wash system	Description
CombiWash	Automatic cleaning cycle
None	Used when the oven is cleaned manually



Drain cooling

This function set up the drain cooling mode settings.

To optimise and reduce the amount of water send in to drain for cooling.

Function	Description
1.	Off No drain cooling.
2.	On - when using water.
3.	On - All functions

Auto Humidity

1. On the Technician display, touch Oven setup, and then touch Auto humidity.
2. Slide your finger up or down to select Yes or No. Select Yes to enable ClimaOptima and No to disable auto humidity.

Showdisplay

This function switches on the output for the display on the back side of the oven if using a Pass-Through model.

Forced Wash

This function will set up the interval between forced Combiwash, an alarm will be displayed.

Available options-OFF-2 Minutes-30H-40H)

Making Temperature Adjustments

Use this function to adjust the oven or the core temperature offsets. This is useful when the temperature should correspond with the temperature of a 3rd party probe. The default setting is 0.

Adjust the Oven Temperature

1. On the **Technician** display, touch **Adjustments**.
2. Touch **Oven temp offset**.
3. Slide your finger up or down to select the preferred offset. You can adjust the temperature offset up or down by 10°C (50°F) in 1°C increments.

Adjust the Core Temperature

1. On the **Technician** display, touch **Adjustments**.
2. Touch **Core temp offset**.
3. Slide your finger up or down to select the preferred offset. You can adjust the temperature by 1-degree increments

Adjust the sous vide temperature

1. On the **Technician** display, touch **Adjustments**.
2. Touch **Core temp sous vide offset**.
3. Slide your finger up or down to select the preferred offset. You can adjust the temperature by 1-degree increments

Detergent Conversion

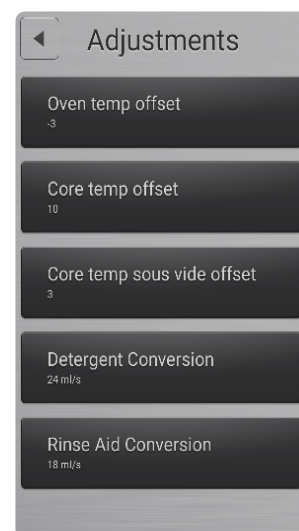
The default setting for this parameter is 24ML/S.

Do not change this parameter. The preset value fits the HOUNÖ detergent. If the value is changed the value will disable the Detergent level warning function

Rinse Aid Conversion

The default setting for this parameter is 18ML/S.

Do not change this parameter. The preset value fits the HOUNÖ rinse aid. If the value is changed the value will disable the Rinse aid level warning function.



Changing Oven Settings

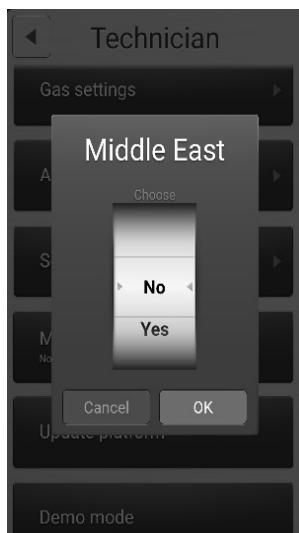
1. On the **Technician** display, touch **Settings**. You can now change the following settings.

Setting	Description
Need Rinse	Yes/No setting. This will release the oven from a flushing demand, after a waging interuption with out a flushing of the oven cavity.

Specifying Middle East Specific Settings

Enabling this setting disables all recipes containing pork.

1. On the **Technician** display, touch **Middle East**.
2. Touch **Yes**, and then touch **OK**.



Update Platform

This function will update the software version in the CPU to the latest version to optimise the functionality of the oven.

The latest Software version is available on our webpage at WWW.HOUNO.com.

1. Install the latest software version on a usb stick.
2. Insert the usb stick in the usb slot in the bottom of the front panel.
3. Go to technician menu and press **UPDATE PLATFORM**.

The oven will now fully automatic update the CPU with the latest software.

4. When the software is updated the oven will ask for permission to reload the old settings and recipes.

We strongly recommend the acceptance of this suggestion.

Enabling Demo Mode

When you want to use the oven for demonstration purposes, you should enable demo mode. When demo mode is enabled, the heating elements and the steam generator will not be switched on when the oven is running.

1. On the **Technician** display, touch **Demo Mode**.
2. Touch **Yes**, and then touch **OK**.

Demo Mode Acceleration.

This function will speed up the temperature gain in demo mode.

Setting 1-5.

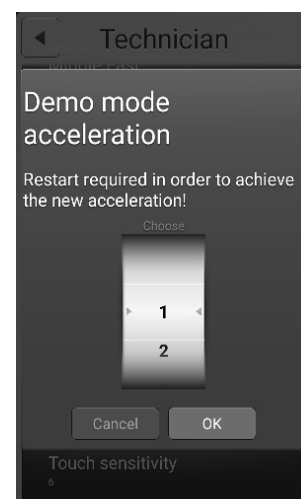
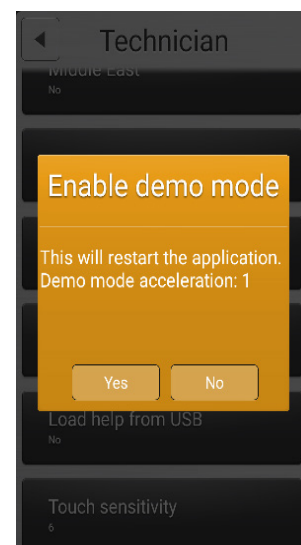
Load Help From USB

This function is currently unavailable.

Touch sensitivity

Setting 1-8 will decrease/increase the sensitivity of the display.

Do not change this parameter with out consulting HOUNÖ technical support.



CLEANING

Daily cleaning of the oven is recommended for hygienic reasons and to avoid interruptions of operation.

The design of the HOUNÖ ovens allows quick and easy cleaning. The oven chamber is made of all-welded stainless steel, which makes it splash proof. You will therefore find the easy-to-use handshower (optional extra), which is located under the front panel, very suitable for interior cleaning.

The door sealing is easy to remove, which ensures quick and efficient cleaning under and around it.

Furthermore, the flat front panel makes exterior cleaning simple and efficient.

To give the oven an extra shine, we recommend HOUNÖ steel oil which is available from your oven supplier (0.5 litre: part No. 045650 – 5 litres: part No. 045654).

Cleaning the oven chamber

Use CombiWash, level 1-4 (note that CombiWash should be ordered as optional extra together with the oven as it cannot be retrofitted) or the semi-automatic cleaning program (See Description of Functions on page 13), or do as follows:

- Always clean in a cold oven or cool the oven chamber down to below 80°C.
- Let the oven run in CombiSmart at 80°C for 15 minutes.
- Apply HOUNÖ oven detergent to the sides of the oven chamber, racks, etc. (according to requirement) using a soft brush or a spray pistol. Protect your face and hands as the detergent may cause irritation should it come into contact with your skin.
- Let the detergent work for 10 minutes.
- Let the oven run in CombiSmart at 80°C for 15 minutes.
- Rinse the oven chamber with water (using a soft brush or the handshower (optional extra)).
- If the oven is not connected to a soft-water plant, we recommend that you use HOUNÖ rinse aid and wipe the oven chamber with a dry cloth.

Cleaning the Oven Exterior

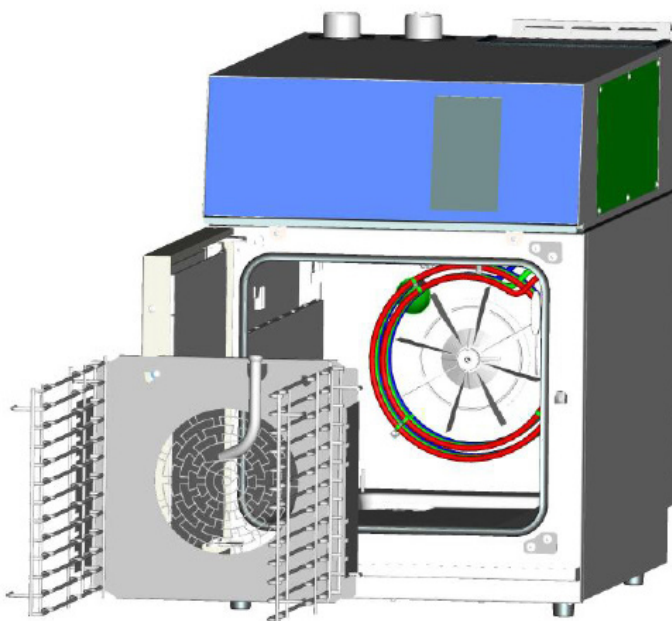
1. Use a soft, damp cloth and a liquid detergent to clean the oven cabinet on the outside,
2. Remove the door sealing to clean under and around the door,
3. Treat the surface with HOUNÖ STEEL OIL to protect it. The steel oil is available from your supplier.(0.5 litre: part No. 045650 and 5 litres: part No. 045654)

Note: do not use a water hose or high-pressure cleaner to clean the oven exterior since it may damage parts of the oven including electronic components.

Cleaning Behind the Filter Housing

You have to remove the filter housing to be able to clean around the fan and the heating elements.

1. Remove the racks.
2. Remove the baffle plates and the filter housing to gain access for cleaning.

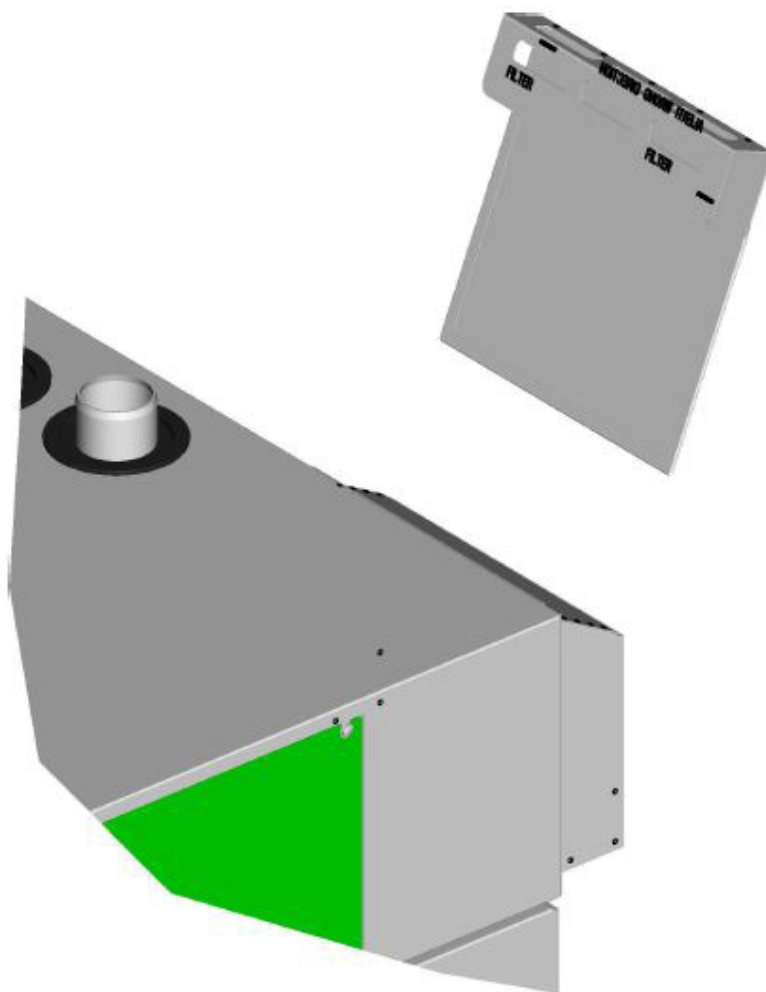


Cleaning the Air Filter

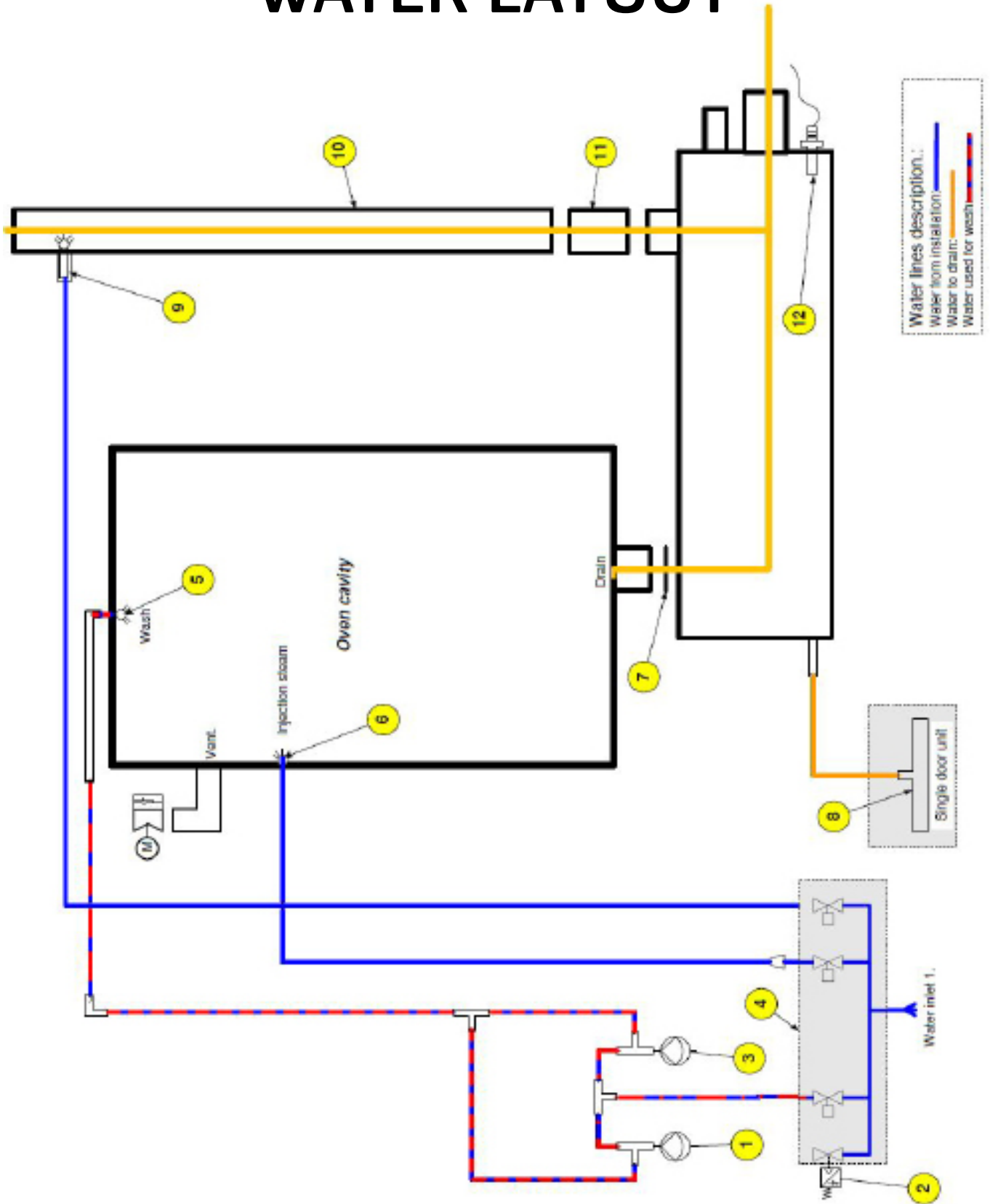
The air filter is located in the filter housing at the back of the top panel, it is removed by lifting it out of the slot where it sits.

The filter should be cleaned on a weekly basis. You can clean the filter manually or in a dishwasher.

Important: If the filter is not cleaned, the computer may overheat and the oven will fail. You must remount the filter after cleaning.



WATER LAYOUT



WATER LAYOUT

Component position and description.

Item	Description
1	Rinse-Detergent pump
2	Water pressure switch
3	Rinse-Detergent pump
4	Solenoid valve
5	Washing rotor
6	Injection steam
7	Seal between oven cavity and drain box
8	Drip tray
9	Drain cooling nozzle
10	Ø50mm drain ventilation tube
11	Rubber hose connecting the ventilation tube to the drain box.
12	Drain temperature sensor.

I/O BOARD LED

Description of LED connections on the I/O board.

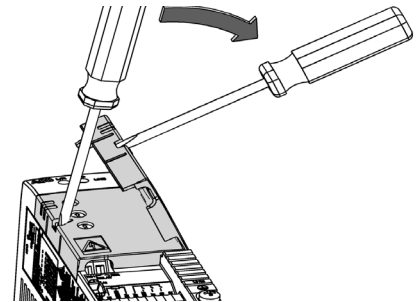


No	Colour	Volt	Plug. Pin	DESCRIPTION
7	Green	Main		Voltage to main contactor ok.
8	Green	ER5	J14 Pin 5	Voltage fan alarm switch ok
9	Green	ER4	J14 Pin 4	Voltage oven overheating switch ok.
10	Green	ER3	J14 Pin 3	Voltage from steam generator switch ok.
11	Green	Er12	J14 Pin 2	.Voltage from SSR overheating switch
12	Yellow	24V F2	J10	Fuse F2 Power supply to I/O board
13	Yellow	24V F1	J2 Pin 1,3,5	Fuse F1 is ok
14	Yellow	24V F3	J8 Pin 3,6	Fuse F3 is ok
15	Red	Reset		The I/O board is in a reset mode (flash only at start)
16	Green	12V		The internal 12V is present
17	Green	5V		The internal 5V is present
18	Green	3,3V		The internal 3,3V is present
19	Green	5V out	J1 Pin 13	External 5volt for door sensor and RPM sensor.
20	Green	12V	J1 Pin 15	External 12V for the ClimaOptima sensor
21	Green	24V	J18 pin 1 J19 Pin 1 J20 Pin 1	External 24V voltage for the gas fan interface. This option is only present on I/O board P/N 30900015
22	Green	Com		Slow flashing when I/O communicates with the CPU
23	Green	Com RX		Fast flashing when data received from CPU
24	Green	Com TX		Fast flashing when data is send to the CPU
25	Red	Test 1		Lights when communication is not working
26	Red	Test 2		Lights shortly under start

FREQUENCY INVERTER

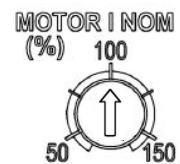
When replacing the frequency inverter.: Always check that the frequency invertor potentiometers and dip switches are set up correct.

To gain access to the potentiometer for adjustment the small transparent hatch with a small screwdriver. as shown in the drawing.



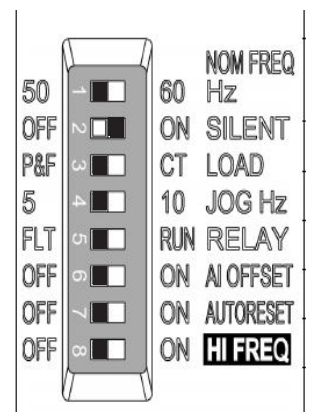
ADJUSTMENT OF THE 3 POTENTIOMETERS OF THE FREQUENCY INVERTER

Motor i nom	This potentiometer controls the current output of the frequency inverter. This potentiometer must be set to 100%
ACC/DEC	This potentiometer controls is the acceleration and deceleration of the main fan motor in seconds. The potentionmeter must be set a few degrees past 5. It is very impotent that the acceleration of the fan is 10 sec. +/-1 sec. USE TEST MENU FAN If the acceleration is to fast the invert might be switching off due to overload. To slow will result in error 14.
HI FREQ	This potentiometer controls the HZ output of the frequency inverter. This potentiometer must be set to NOM



SETTINGS OF THE DIP SWITCHES ON THE FREQUENCY INVERTER

HZ	Set to 50HZ
SILENT	Set to ON
LOAD	Set to P&F
JOG Hz	Set to 5
RELAY	Set to FLT
AI offset	Set to Off
Autoreset	Set to Off
Hi freq	Set to Off



ERROR CODES

ERROR CODE	DESCRIPTION
4	Oven too hot.
5	Fan too hot.
6	Drain too hot.
7	Oven sensor defective.
8	Core probe not connected.
10	Drain sensor defective.
16	I/O board too hot.
19	Internal error.
20	No communication.
21	Invalid recipe.
22	Program terminated.
23	Oven too hot.
28	Error in alarm.
29	Door sensor error.
34	Water pressure too low.
36	No detergent.
37	Cooldown error.
38	Detergent in oven.
39	Insufficient memory.
40	I/O board too hot.
41	Main Alarm.
44	Exhaust error.
45	Error with 24V.
71	Core probe warning.
80	Forced wash soon needed .
81	Forced wash needed.
82	Filter change soon needed.
83	Filter change needed.
84	User ignored filter change.
85	User ignored filter change.

TROUBLESHOOTING ERROR CODES

Troubleshooting procedure step by step on error codes.

If the oven displays an error code, try the solutions below before contacting HOUNÖ technical service.

After each step is carried out, be sure to test if the oven is working again.

Error Code 4

The overheating switch of the oven chamber is off because the oven chamber temperature has risen above 350°C/662°F. Press the Q1 button at the bottom of the oven to reset the switch. If the oven comes with two fan motors, there are 2 overheating switches.

Steps	Check list	Solution
1	Go to the test menu (main alarm) to see if the overheating thermo switch has tripped. Reset the switch.	
2	Test whether the fan is running and whether the solid state relay is working properly.	
3	Check the cable and the cable plugs.	
4	-	Change the overheating sensor.
5	-	Change the I/O board

Error Code 5

The fan motor is too hot (above 120°C/248°F). Let the motor cool off for about 20-30 minutes and then try turning it on again.

Steps	Check list	Solution
1	Go to the test menu (main alarm) to see which information is displayed.	
2	Check the cable and the cable plugs.	
3	Check the door sensor since 5VDC may affect the overheating circuit.	
4	Check the fan motor windings.	Change the fan motor.
5	-	Change the I/O board

Error Code 6

The drain temperature has been above 75°C/167°F for more than 5 minutes. It is normally kept below 60°C/140°F.

Steps	Check list	Solution
1	Check that the water is turned on.	
2	Check that the water supply connected to the oven is cold and not hot.	
3	Check whether the temperature sensor is broken. (Measure the real temperature and compare it to the temperature measured by the test function.)	If broken, change the sensor.
4	Clean the jet and the solenoid valve at the drain, and then check the temperature again.	Change the I/O board.

Error Code 7

The temperature sensor in the oven chamber is broken. The oven cannot be used until the error has been corrected.

Steps	Check list	Solution
1	Go to the test menu (oven) to see which temperature is displayed.	
2	Check the cable and the cable plugs and change the plug if necessary.	
3	Test the sensor using an ohmmeter, and check whether the value matches the value in the table and the current temperature.	If no, change the sensor.
4	-	Change the I/O board.

Error Code 8

The probe is broken or is not connected properly. The program cannot be used until the error has been corrected.

Steps	Check list	Solution
1	Go to the test menu (miscellaneous) to see which information is displayed.	
2	Check the cable and the cable plugs and change the plug if necessary.	
3	Test the sensor using an ohmmeter, and check whether the value matches the value in the table and the current temperature.	If no, change the sensor.
4	-	Change the I/O board.

Error Code 10

The temperature sensor in the drain is broken. The oven can still be used, but the error has to be corrected as soon as possible.

Steps	Check list	Solution
1	Go to the test menu (oven) to see which temperature is displayed.	
2	Check the cable and the cable plugs and change the plug if necessary.	
3	Test the sensor using an ohmmeter, and check whether the value matches the value in the table and the current temperature.	If no, change the sensor.
4	-	Change the I/O board.

Error Code 11

There's not enough water. The steam generator was not filled to high level water within 2 minutes.

Steps	Check list	Solution
1	Go to the test menu (steam generator) to see if the water level is correct. Adjust the water level if necessary. Check that water is turned on. The water pressure should be at least 2 bars.	
2	Test whether the solenoid valve and the level sensor are working (is 24VAC measured at the coil when the fill valve is activated?)	Clean the solenoid valve.
3	-	Change the I/O board.

Error Code 16

The IO board temperature has risen above 60°C/140°F.

Steps	Check list	Solution
1	Go to the test menu to see which information the computer displays.	
2	Check whether the ambient temperature is too high.	Move the oven if necessary, and clean the intake filter.
3	Check whether the test function temperature matches the current temperature.	Move the oven or the heat source.
5	-	Change the I/O board.

Error Code 19

An internal error occurred. The oven server process is not responding. Oven server process failed.

Steps	Check list	Solution
1	-	Restart the oven.
2	Update the software	
3	-	Change the computer.

Error Code 20

An internal error occurred. A communication failure occurred between the computer and the IO board. The IO board software is not responding. Wrong software version on the IO board.

Steps	Check list	Solution
1	Check the wire connection between the IO board and the CPU board.	Change the IO board or the CPU board if necessary.

Error Code 21

Invalid program. The program you have chosen is not supported by the oven.

Steps	Check list	Solution
1	Go to the USB key function.	Download the program combination that matches this oven type.

Error Code 22

Program interrupted. There was a power outage while the program was running. The power outage lasted for so long that the program cannot be restarted.

Steps	Check list	Solution
1	-	The oven can be set up to restart after a power outage. Contact service personnel.

Error Code 23

The oven is too hot for CombiWash to start.

Steps	Check list	Solution
1	Cool down the oven and restart CombiWash	
2	Go to the test menu to see which information the computer displays.	
3	Check that the temperature in the oven chamber matches the temperature that is displayed.	Cool down the oven and restart CombiWash.
4	Test the temperature sensor using an ohmmeter, and check whether the value matches the value in the table.	Change the sensor.
5	-	Change the computer.

Error Code 28

An invalid combination of the mains alarm has been detected. The mains alarm is not displayed correctly.

Steps	Check list	Solution
1	Go to the test menu (alarm test) to see which one of the over heat safety switches is not sending a feedback signal to the I/O board connector J14.	
2	Check the switch and cable and the cable plugs from that specific overheating sensor and the wire to J14.	Change the plug and repair the wire if necessary, and then test if the alarm have disappeared.
3	If the error persist, and the feedback signal to the I/O board is ok.	Replace the I/O board.

Error Code 29

The door sensor is not working properly. Note the oven does not stop working when the door is opened. The oven can be used.

Steps	Check list	Solution
1	Go to the test menu to see which information the computer displays.	
2	Check the cable and the cable plugs, and the test if the sensor is working.	
3	Check the magnet on the drip slide.	Change the drip slide.
4	-	If the magnet works, change the door sensor, and remember to calibrate the door afterwards.

WARNING!

**THE OVEN DOES NOT STOP WORKING WHEN THE DOOR IS OPENED.
THE OVEN CAN STILL BE USED WITH CAUTION.**

Error Code 34

The water pressure is too low. (less than 1,5 bar)

Steps	Check list	Solution
1	Pull a wire one of the water pressure switch to check if the signal changes to YES	If YES: replace the sensor.
1	Check that the water is turned on.	Clean the solenoid valve filter.
2	Check that the water pressure is at least 2.5 bars.	

Error Code 36

CombiWash was interrupted while there was still detergent in the oven chamber.

Steps	Check list	Solution
1	-	Run CombiWash step 0 before using the oven.

Error Code 37

Cooldown error. oven is too hot to run a washing program.

Steps	Check list	Solution
1	Cool down the oven and restart the washing program	-

Error Code 38

CombiWash was interrupted while there was still detergent in the oven chamber.

Steps	Check list	Solution
1	-	Run CombiWash step 0 before using the oven.

Error Code 39

There is insufficient memory to run the selected operation.

Steps	Check list	Solution
1	-	If possible, delete some HACCP files.

Error Code 40

The IO board temperature has been too high. Note that this is a warning. If the temperature continues to rise, the oven will stop and display error code 16.

Steps	Check list	Solution
2	Check that the cooling fan behind the front panel is running.	Replace cooling fan if necessary.

Error Code 41

Main Alarm. Boiler overheating safety switch was tripped, in a function mode that does not use the boiler

Steps	Check list	Solution
1	Check if the overheat safety switch have been tripped.	Reset the overheat safety switch.
2	Check the jumper on wires	

Error Code 44

Exhaust error. At every start up the CPU makes the valve run a reference round.

Steps	Check list	Solution
1	Use the technicians test menu, oven test. Test if the exhaust valve works and the switch sends a signal back to the CPU.	
2	If the motor is rotating the valve but there is no on/off signal from the switch. Bridge the two wires on the exhaust motor switch.	If exhaust signal changes in the test menu. replace the complete exhaust valve.
3	If the motor is not running, check that there is a 24V power supply for motor.	24V is present, replace the motor.
4	If there is no 24V power supply for the motor. Measure the wires from the I/O board to the connector for the valve motor.	Repair the damaged wire.
5	Measure the 24V power supply directly on the I/O.	If the 24V is missing replace the I/O board.

Error Code 45

There is no 24VAC. Main contactor output is not working.

Steps	Check list	Solution
1	Check fuse F1.	Replace fuse F1.
2	Measure the 24V on I/O board connector J1 wire pin no 1-3-5)	if not repair the wires.
2	Check the led F1 24V on the I/O board	

Error 71		
Core probe warning		
Steps	Check list	Solution
1	Go to technician test menu and check the feedback values from the three pt100 sensors in the core probe	if one is showing a different value than the rest, replace core probe.
2	Measure the wires from I/O board J1 to the connectors for the core probe	Wire is disconnected, replace or repair disconnected wire.

Error 80		
Force wash soon needed		
Steps	Check list	Solution
1	Interval: 30 h : warning after 24 h Interval: 40 h: warning after 32 h	Wash the oven. us one of the washing programs soon.

Error 81		
Force wash needed		
Steps	Check list	Solution
1	Oven has reached the forced wash limit.	Oven cannot be used again, before the oven has run one of the 1-4 washing programs.

Error 82		
Filter change soon needed.		
Steps	Check list	Solution
1	The filter capacity has soon reached its capacity limit.	Replace filter soon. before the capacity limit is reached.

Error 83

Filter change needed.

Steps	Check list	Solution
1	The filter capacity has reached its capacity limit.	Replace filter.

Error 84

User ignored filter change.

Steps	Check list	Solution
1	User has ignored to change the Hydro Shield water filter.	Change the Hydro Shield water filter.

Neglect to change the Hydro Shield water filter will jeopardize the warranty

SERVICE AND REPAIR

- All maintenance and repair should be carried out by authorized installation and service personnel only. Installation or service by other than authorized personnel may result in damage to the oven and/or injury to the operator.
- When cleaning the oven, only use cleaning detergent that matches the specifications from the factory. Do not use corrosive cleaners not intended for oven cleaning on you CombiSlim oven.

SAFETY

Please read the safety instructions carefully.

- Ensure that installation is carried out by authorized installation and service personnel only.
- Read, understand, and follow the instructions for use.
- Place trays filled with hot liquid at the bottom runners of the oven chamber and practice extreme caution when removing the tray from the oven chamber.
- Do not store petrol or other flammable vapours or liquids in the vicinity of this appliance.
- Do not touch hot surfaces. The temperature of some surfaces may exceed 60°C or more.
- Do not attempt to operate or open the oven during the automatic cleaning process.
- Use the parking brakes on the trolley wheels when the oven has been loaded to prevent trolleys from rolling on uneven floors.
- Contact authorized service personnel before you make changes to the set up of the oven. Incorrect changes may have serious effects on its reliability in service.

WARRANTY

If you have registered your CombiSlim oven on our website, it is covered by a 48-month factory warranty. The warranty covers the oven cabinet and spare parts. There is a special 10-year warranty on the exterior door glass. The warranty takes effect from the date of production.

To view the full terms of the warranty and to register, go to <http://www.houno.com/warranty/>.

HOUNÖ's general terms and conditions for 4-year warranty

The following parts warranty applies to HOUNÖ CombiSlim and Visual Cooking II SE ovens. Here in after referred to as the Unit. The warranty is subject to the conditions set forth below. The warranty covers any defect, which can be attributed to material or manufacturing defects during normal use of the Unit.

1. The warranty period runs for 48 months from the factory invoice date of the Unit.

The first 12 months is the general factory warranty.

The following 36 months covers all parts needed for covered repairs.

2. The warranty period can be postponed up to 6 months to start at the installation date. Register the oven at HOUNÖ's website www.houno.com to validate the extended parts warranty. The unit must be registered within 8 weeks from the date of installation.

3. During the warranty term, the customer shall contact his supplier of the Unit and claim warranty.

4. During the warranty term, HOUNÖ has the right to either repair or replace the defective parts or to replace the Unit.

5. The warranty period will not be extended following the performance of warranty service nor does it trigger a new warranty period.

6. HOUNÖ does not cover transport costs or risks when shipping warranty parts.

7. The warranty does not cover incorrect installation¹. This applies to defects and damage in connection with the use of soiled, aggressive water, sub-standard gas, or electricity with unsuitable voltage or current.

a. Water quality must be verified during installation and if required, appropriate filter must be applied and cartridge replaced as specified.

b. The installation checklist must be completed by an authorized service company and is mandatory to the extended warranty.

8. Furthermore, the warranty shall not apply to damage and malfunctions caused by the build-up of lime scale or calcium deposits in the Unit.

a. 'Combiwash' must be conducted regularly². Oven Cleaner and Oven Rinse must be recognized products.

9. Warranty shall be excluded by incorrect use of the Unit³.

10. The warranty does not cover normal wear and tear of the Unit.

11. The warranty shall not apply if spare parts other than original HOUNÖ spare parts are used during the warranty period.

12. The warranty shall not apply if the Unit is installed or serviced by a person who is not authorized by HOUNÖ A/S, during the warranty period.

13. Lamps, seals and interior glass are not covered by the warranty.

In so far as the relations between the parties are not governed by the general terms and conditions for warranty above, the general rules of Danish law shall apply. Any disputes arising between the parties as to this warranty shall be settled by the court in Randers, Denmark or by the Western Division of the Danish High Court (Vestre Landsret), dependent on the value of the subject matter.

¹ See the HOUNÖ Installation Manual for correct installation.

² See the HOUNÖ Installation and Service Manual for correct operation.

³ See the HOUNÖ User Manual for correct use.



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