

User Manual B



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For further information on the functions and user interface of the oven, see Service & Installation Manual.

Dear customer,

Congratulations on the purchase of your new HOUNÖ oven.
You are now the owner of one of the leading ovens on the market.

All HOUNÖ products are subjected to intensive product development, which ensures that the products always offer the latest technology and the most up-to-date and energy-saving methods of preparation. Moreover, the HOUNÖ products are entirely up-to-date with the latest developments/technology in terms of

- ERGONOMICS AND SAFETY
- SIMPLE AND LOGICAL OPERATION
- ELEGANT AND FUNCTIONAL DESIGN
- RELIABILITY AND SERVICE

To ensure that our customers get an optimum and reliable product, all HOUNÖ units are passed through an extensive test programme in which all functions are subjected to a continuous and extreme load.

Before you start using the oven and its many automatic functions, we recommend that you study the manual thoroughly so as to ensure optimum cooking results. By going through the manual, you will obtain a better understanding of the advanced technology and feel safer while using the oven in your daily work.

Furthermore, we call your attention to the wide variety of optional extras:

- Handshower
- Core temperature probe
- Additional cassette rack, trolley for rack, wall bracket
- Extraction hood and extraction hood with condenser
- Visit www.houno.com for further information on our wide range of additional equipment

Terms of warranty

The oven cabinet and the technical parts of your new HOUNÖ oven are covered by a 12-month factory warranty. However, the heating elements are guaranteed for 24 months and the exterior door glass for 10 years. The period of warranty takes effect from the date of installation.

The warranty does not include....

We especially draw your attention to the fact that the factory warranty does not cover glass parts such as interior door glass, halogen lamps and sealings. Furthermore, the factory warranty does not apply in the case of

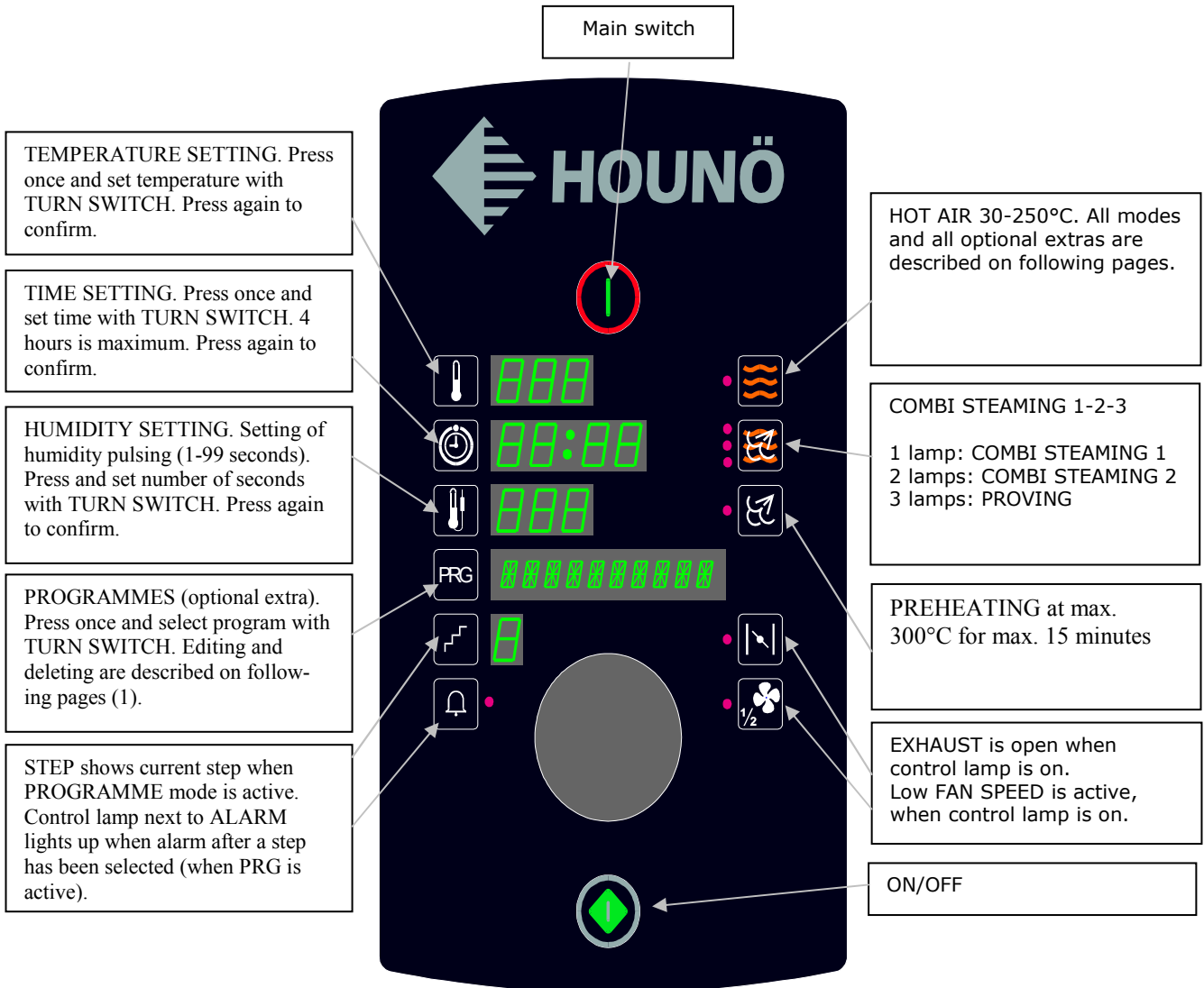
1. defects that are due to the fact that installation has not been carried out in accordance with the HOUNÖ Installation & Service Manual at present in force (electricity, water/drain, exhaust).
2. defects and interruptions of operation that are the result of the oven not being handled/operated as specified in the user's manual.

If you utilise all the technological facilities of this oven, you are guaranteed perfect results with only a minimum of resources.

Enjoy your new HOUNÖ oven.

Yours sincerely,
HOUNÖ A/S

Operation panel



Turn handle twice to the right to open door.

- (1) If the oven does not incorporate CombiWash, the manually operated cleaning system can be activated by pressing the PRG key and turning the turn switch until *Cleaning* appears in the display.

Settings

Setting of temperature

Press TEMPERATURE key once and set temperature with turn switch.
Confirm by pressing TEMPERATURE key again.

Setting of time

Press TIME key.

Time flashes.

Choose desired time (hours and minutes) with turn switch.

If switch is turned all the way down to 0, "-:--" (continuous operation) appears in the display.

Max. time setting is 4 hours.

Confirm by pressing TIME key again.

Setting of core temperature (optional extra)

Press CORE TEMPERATURE key.

If the display is off, the core temperature appears as 75°C.

Set core temperature between 30 and 99°C with turn switch.

Core temperature is deactivated by turning switch past 30.

When core temperature is chosen, time changes to "-:--" .

Confirm by pressing CORE TEMPERATURE key again.

The core temperature probe has several measuring points from the tip of the sensor and upwards.

The computer calculates an average temperature thus ensuring that the core temperature is 100% correct.

If the probe is inserted incorrectly, the advanced technology notifies you at once.

The probe is inserted vertically in the thickest part of the product.

When preparing products of very different sizes, you get a uniform quality by inserting the sensor in the smallest product and then moving it to a larger product when the core temperature alarm sounds.

Programmes

10 Programmes that can hold 3 process steps each. It is possible to write 10 characters and entering alarm after steps 1 and 2.

Press PRG and turn the switch. The first five Programmes are preset at the factory (P0 – P4).

Start the program by pressing the ON/OFF key.

To leave PROGRAM, turn the switch beyond "P O".

To delete an entire programme, press core temperature key and alarm key simultaneously for 2 seconds.

When the keys or the turn switch is idle for 20 seconds, the oven returns to manual operation.

Entering and changing text

To enter or change text, press PRG for 3 seconds.

The first digit or the relevant letter/"_" flashes alternately. Change the flashing character with the turn switch. You can choose between all the letters of the alphabet and the digits 0 – 9.

The space sign is next to the letter A.

Move on to the next digit by pressing PRG briefly.

Store text by pressing PRG until "SAVED" appears in the display.

To leave text editing without storing, press ALARM. The original text reappears.

To delete the entire text, press PRG and ALARM simultaneously for 2 seconds. When a key or the turn switch is idle for 20 seconds, the oven returns to *select program*.

Entering and changing data in steps

By pressing STEP when PROGRAM is active, the step display is turned on and shows "1". The data of the first step can now be entered.

To move on to the next step (1-3) and read and change settings, press STEP again. Choose and change temperature, time, core temperature, exhaust and fan as in manual operation.

Stop between steps: To turn the alarm between steps on and off, press ALARM. If the control lamp is on, the program ends with the current step and a beep is heard. The oven does not proceed to the next step until the oven door is opened and closed or you press ALARM.

To store a change made in the step mode, press PRG for 2 seconds.

Leave STEP by choosing another program with the turn switch.

Be careful not to use the turn switch when a value flashes. If you turn the switch while you are working in STEPS, the computer switches to the next programme and all changes are lost.

Delete current step by pressing STEP and ALARM simultaneously for 2 seconds.

When the programme has started, you can still change time, temperature, core temperature and the settings of fan and exhaust. These changes will then only be active in the current run. Note that the display shows the total time remaining after start and that it will show the time remaining in the current step when you press TIME.

Description of Functions

Hot air

30-250°C

The hot air operating mode can be used for roasting, grilling, baking and gratinating. We recommend that you keep the exhaust open when roasting products at very high temperatures. It is possible to roast breaded products such as breaded fish and breaded pork chops. For maximum effect, use enameled cast iron trays / silicone-coated baking sheets and one of the special browning fats available in the shops.

Preheating

251-300°C

By setting the temperature higher than 250°C, you change to the preheating mode and PREHEAT is shown instead of HOT AIR. With this function, you preheat the empty oven. The time can be set to max. 15 minutes, and continuous operation (-:--) is not possible. The preheating mode has been changed so that the countdown does not start until the desired temperature has been reached. This is to ensure that the oven is always in the same condition when the oven is loaded, no matter the starting temperature.

IT IS RECOMMENDED TO ALWAYS PREHEAT THE OVEN BEFORE USE.

Baking bread with combi steaming 1-2-3

COMBI STEAMING 2 can be used for the proving/rising of bread. Set the temperature at approx. 30°C for large loaves and max. 37°C for small loaves. Set the fan at low speed. Recommended preparation time for large loaves is 20 – 40 min., for small loaves 15 – 30 min. We may recommend COMBI STEAMING 1 for large loaves of 600 – 800 g that have been proved first. The result is a thicker crust and, therefore, the bread is much easier to slice up. Keeping-qualities are good.

At the moment, there are no empirical results pertaining to the use of combi steam for bake-off products.

Combi steaming 1-2

30-250°C

If steam is added to the meat during roasting, the pores of the meat close quickly, which prevents the juice from leaving the meat.

When using long-time roasting at 80 – 130°C, adding humidity helps reduce shrinkage.

At temperatures higher than 165°C, the crust of the meat becomes as nice and brown as had HOT AIR been used.

Proving

30-40°C

Proving is the rising of bread by the addition of humidity at temperatures between 30 and 40°C. This temperature provides the optimum environment for the yeast to develop.

Manual humidity pulsing

When you press the key for STEAMING in the HOT AIR mode, you add humidity to the oven chamber. Humidity is added for as long as the key is held down.

Setting of humidity pulsing

Set the humidity pulsing before starting the hot air mode. Press the symbol for humidity pulsing and set the number of seconds with the turn switch. Confirm by pressing the symbol again. Recommended settings are 10 – 20 sec. for croissants/large loaves, and 3 – 10 sec. for small loaves. For large loaves made from scratch (600 – 800 g), the recommended interval is

60 – 99 sec. Adding humidity keeps the surface moist during the baking process so that it can be stretched without splitting. Humidity also gives the finished product a shiny surface.

Manual humidity pulsing

In HOT AIR, humidity pulsing is active as long as you press the key.

Exhaust

The exhaust is usually closed in all operating modes. When the control lamp is on, the exhaust is open. It is recommended that you open the exhaust at the end of the baking process to achieve a crispy crust.

Fan speed

Set the FAN speed by pressing the fan key and turn the switch.

A fan speed between 20 and 50% is recommended for the baking of puff pastry, Danish pastry, cakes and small products as well as in the Delta-T and Cook-and-Hold modes. You may add 1 – 2 minutes' preparation time for each ½ hour when low fan speed is used.

Fan speeds below 50% cannot be used at temperatures above 200°C.

Fan speeds between 50 and 100% are recommended if you want a particularly juicy end product and accept a longer cooking time.

Hours, date and setting of timer

Shows the exact time and date when the oven is off. For setting of clock and timer, see USER MENU below.

Fully automatic cleaning system, CombiWash (cannot be retrofitted, should be ordered together with oven)

The cleaning system should be used every day. You choose between levels 1, 2, 3 and 4 and possibly additional detergent, depending on how soiled the oven chamber is. The last thing you do before turning off the light in the evening is activating CombiWash. When CombiWash is finished, the computer automatically switches to an energy-saving standby function.

Follow these steps to start CombiWash:

- Cool down the oven chamber to 60°C.
- Remove strainer from the bottom of the oven chamber.
- Insert wash arm where the strainer was removed and at the top. Fit strainer on the lower part of the wash arm (this is important, as, after use, the strainer must be put back in place, otherwise the oven cannot operate as usual).
- Check the level of detergent and rinse aid.
- Press PRG and turn switch to the right until *CombiWash* appears in the display.
- Press STEP to choose cleaning level: 0 is 2 minutes' rinsing with water – 1 is light cleaning and 4 is very thorough cleaning. Press ALARM for additional detergent.
- Close oven door and press ON.

Semi-automatic cleaning

This cleaning function can also be used on ovens with CombiWash. Simply deactivate CombiWash in the user menu.

- Cool down oven chamber to 60°C.
- Press PRG and *cleaning* appears in the display. Press ON.
- Press ON
- When the alarm sounds (after 10 minutes) and *add soap* appears in the display, open oven door and spray detergent into oven chamber. Close oven door and the programme continues.
- When the programme is over, *rinse oven* appears in the display (after another 10 minutes). Rinse oven chamber.

If the oven is very soiled, activate combi steaming 2 at 80°C for 30 minutes before starting cleaning programme.

Programmes / Recipes			
Programme/recipe	Mode	Temp./time/misc.	Remarks
0 Danish pastry, bake-off, 60-96 g, prebaked	1) Hot air / preheating Alarm 2) Hot air 3) Hot air	220 / 2 180 / 6 / 10 sec. humidity 180 / 5	
1 Danish pastry, bake-off, 85-100 g, preproved	1) Hot air / preheating Alarm 2) Hot air	210 / 2 180 / 18 / low fan speed / exhaust open	
2 White bread, bake-off, 600 g, preproved	1) Hot air / preheating Alarm 2) Hot air 3) Hot air	230 / 2 170 / 20 / 20 sec. humidity 170 / 6 / exhaust open	
3 Rye bread, prebaked, bake-off, 1100 g	1) Hot air / preheating Alarm 2) Hot air	180 / 2 160 / 25 / 10 sec. humidity	
4 Pastry bar, bake-off, preproved	1) Hot air / preheating Alarm 2) Hot air	200 / 2 165 / 17 / low fan speed / exhaust open	
5-9 Vacant			

How to achieve perfect baking and roasting results

A HOUNÖ oven gives you optimum possibilities of achieving good baking/roasting results. Below are a few pieces of advice on baking and roasting in your HOUNÖ oven.

If your baking/roasting results leave something to be desired, if, for instance, "uneven" baking/roasting occurs, follow these recommendations:-

Preheating

It is important always to preheat the oven. The first time you heat the oven after it has been turned off for more than 4 hours, it must be preheated at **250-300°C for 10 - 15 minutes**.

It is also important that the products to be cooked all have the same temperature when they are placed in the oven. When baking frozen products, the oven should be preheated for an extra long period of time and it might be a good idea to leave the products at room temperature for 5 - 10 minutes before they are placed in the oven.

Tip

Each time you cook a full oven load during the day, preheat the oven for 5 minutes at 250°C.

Fan speed

It is recommended always to use **high fan speed**. High fan speed ensures the best and most even distribution of heat in the oven. Only in the case of light products, or if the oven is only half full, is the occasional use of low fan speed recommended.

Loading the oven

1. It is recommended that canteens and baking sheets are placed in the rack as follows: the first one in the middle, the second one above the first one, the third one below the first one, the fourth one above the second one, etc.
2. The products on the sheets should all have the same height. A loaf next to a cake may result in uneven baking. **Different types of product should be placed on different sheets/containers.**

The sheets/containers should not be overloaded, the air must be able to circulate freely around the products.

Baking of bread dough and frozen bread

Baking makes large demands on a convection oven because the products are widely different. Bread dough products and some preproved bake-off products should first be proved in a proving cabinet. Most preproved products should be taken directly from the freezer. The temperature of bread dough products when they are placed in the oven is approx. 30°C, while the temperature of prebaked products is often -10°C.

Obviously, frozen products have a considerable effect on the temperature in the oven chamber. It is therefore important that the oven is preheated to a temperature that is considerably higher than the working temperature. For full oven loads of frozen products, we recommend that the oven is preheated to a temperature which is 50% higher than the desired production temperature (if possible) for 5 – 10 min.

If low fan speed is used, baking times should be increased by at least 1 min.

The following are general recommended settings:

Preproved Danish pastry

Take directly from freezer and bake in a preheated oven. Bake for 18 min. at 165 – 190°C with the exhaust open.

Preproved bread / classic bake-off

Defrost for at least 2 – 3 hours covered in plastic or in a plastic bag, or in a refrigerator overnight. Should rise two or three times its size and be baked in a preheated oven for 18 – 28 min. at 165 – 190°C with the exhaust open. If the oven chamber is only half full or less than half full, use 50% fan speed.

Ordinary bread dough

Should rise two or three times its size in a proving cabinet or at room temperature covered with plastic. Optimum temperature is 30 – 37°C, or prove in a refrigerator (3-5°C) for 12 – 24 hours. The lower the temperature, the longer the proving time. If the dough is "soft/moist", the products may rise too much.

Prebaked rolls

Take directly from freezer and bake in a preheated oven for 11 min. at 175-190° with the exhaust open.

Prebaked white bread

Defrost for at least 3 – 6 hours covered with plastic or in a plastic bag, or in a refrigerator overnight, and bake in a preheated oven for 11 min. at 175-190°C with the exhaust open.

Prebaked rye bread

Defrost for at least 12 hours covered with plastic or in a plastic bag, or in a refrigerator overnight, and bake in a preheated oven for 25 – 30 min. at 155 – 165°C with the exhaust open.

Contact your bake-off supplier for specific instructions.

User menu

To enter the user menu, press ALARM for 5 seconds while you are in the manual mode.

The display briefly shows "USER MENU". The core temperature display shows "b" and the **number** of the value to be set (see below).

You leave the user menu by turning the turn switch beyond "0".

1	Store pre-setting	Time and temperature can be changed in HOT AIR, COMBI STEAMING and STEAMING and saved by pressing ALARM. The alarm control lamp flashes when data are ready to be saved. The desired changes should be made before entering the USER MENU.
2	Timer	Press STEP to change the various settings of the timer. 1) DATE. The date flashes in the temperature display. To set the date, turn switch. 0 means daily start. 2) HOUR. Set the hour. 3) MINUTE. Set the minute. 4) MODE. Choose a mode by pressing one of the four mode keys. 5) TEMPERATURE. Set the oven temperature. 6) TIME (duration of program) 0:00 - 4:00. Press ALARM to activate timer (ON appears in the temperature display and control lamp is on). Deactivate by pressing ALARM. The oven can now be turned off with the main switch or it can be left on standby. The oven starts automatically but only in the manual mode.
3	Volume low	Press STEP and adjust the volume of the alarm during operation from 0 to 9.
4	Volume high	Press STEP and adjust the volume of the alarm at the end of a program/mode from 1 to 9.
5	Sound frequency	Press STEP and adjust from 1 to 9.
6	Interior light	Press STEP: 0 = continuously on / 5 = off after 5 min. / 1 (B model) = continuously on but off when door open / 6 = off after 5 min. but off while door open.
7	Current temperature	0 = desired temperature / 1 = current temperature. Adjust by pressing STEP.
8	Extraction	Applicable only if oven has condensing extraction hood. 0 = extraction hood running independently of oven / 1 = extraction hood stops 10 minutes after oven has stopped.
9	Time graphics	Shown in text display during operation. Change by pressing STEP. 0 = Display shows mode chosen 1 = Display alternately shows mode chosen and time remaining.
10	Minutes	Minutes are shown in temperature display. Change by pressing temperature key and turning switch. Store by pressing temperature key again.
11	Hour	Hour is shown in temperature display. See 10.
12	Day	Day of the month, 1-31. Day of the week, 1 - 7, in time display. See 10.
13	Month	Month. See 10.
14	Year	The year 2007 is indicated by "7". See 10.
15	CombiWash	For ovens with the automatic cleaning system, CombiWash: If problems occur with respect to some of the CombiWash error messages, the program can be deactivated. 0 is shown in step display. Then activate the semiautomatic cleaning program by pressing START (no wash arm required) and follow the instructions in the display.

16	Regenerating/reheating	Setting of humidity pulsing. Press temperature key and turn switch to change setting. The value indicates the number of seconds between each injection into the oven chamber. If the value is increased, less humidity is added to the oven chamber, if the value is reduced, more humidity is added (factory setting is every 8 seconds).
17	Injection interval 1	Combi steaming 1: See 16 (factory setting is every 12 seconds)
18	Injection interval 2	Combi steaming 2: See 16 (factory setting is every 5 seconds)
19	Save all	Press ALARM to make a backup of all settings in all modes and Programmes.
20	Retrieve all	Press ALARM to retrieve all settings saved in all modes and Programmes.
21	Retrieve original menu	Press ALARM and retrieve all Programmes preset by the manufacturer. In step display, choose which program (0 - 4) to retrieve and press ALARM.
22	Interval screen	Interval of seconds before interval screen becomes active. 0 = 0 sec. / 1 = 10 sec. / 2 = 30 sec. / 3 = 60 sec./ 4 = 180 sec. / 5 = 600 sec. Change by pressing STEP.
23	Language	Change by pressing STEP (1 - 4).
24	SW update	Updating of software. Special memory key required. Contact your local distributor.

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 behind 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).

Oven chamber

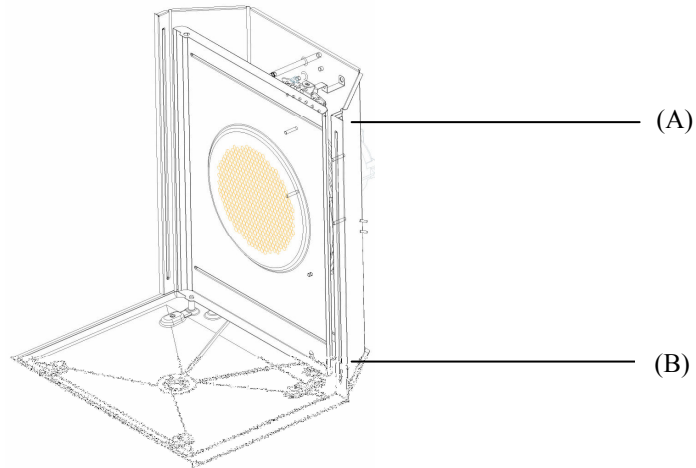
Use CombiWash, level 1-4, with or without additional detergent (note that CombiWash should be ordered as optional extra together with the oven as it cannot be retrofitted) or the semi-automatic cleaning program (see *Description of modes*), or do as follows:

- A.** Always clean in a cold oven or cool the oven chamber down to below 60°C.
- B.** Let the oven run in COMBI STEAMING 2 at 60°C for 15 minutes.
- C.** 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 strong irritation should it come into contact with your skin.
- D.** Let the detergent work for 10 minutes.
- E.** Let the oven run in COMBI STEAMING 2 at 80°C for 15 minutes.
- F.** Rinse the oven chamber with water (using a soft brush or the handshower (optional extra)).
- G.** 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 behind filter housing

For thorough cleaning of the oven chamber, move the filter housing so that it becomes possible to clean round the fan and heating elements.

Loosen the 2 screws (A) and (B) on the filter housing, turn the filter housing and clean behind it. The filter housing can be dismantled entirely by lifting it upwards till it is clear of the pin at the bottom and then tipping it.

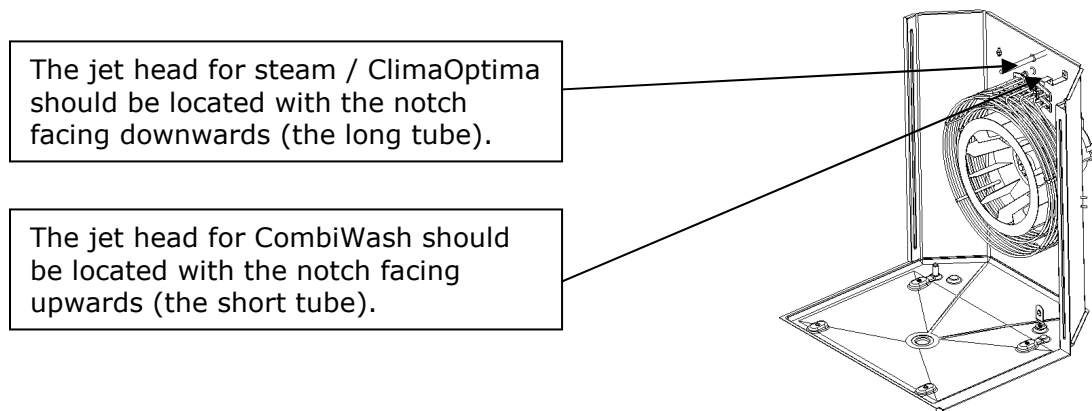


Cleaning of jet heads

The jet head should be dismantled and cleaned regularly according to how often the combi steaming and ClimaOptima modes are used. The easiest way to clean the jet head is to let it soak in scale remover according to requirement. All ovens are supplied with an additional jet head.

If the oven is equipped with the automatic cleaning system, CombiWash, there will be two jet heads. The other jet head will be located to the right of or above the first one. This jet head should also be checked/cleaned regularly.

Please note the position of the jet heads:



The jet head for steam / ClimaOptima should be located with the notch facing downwards (the long tube).

The jet head for CombiWash should be located with the notch facing upwards (the short tube).

Exterior cleaning

Wash the oven cabinet on the outside with soapy water and dry with a soft and damp cloth.

After drying, apply HOUNÖ STEEL OIL (follow directions on the packaging). The steel oil is available from your oven supplier (0.5 litre: part No. 045650 – 5 litres: part No. 045654) and is only for external use.

Note! The exterior of the oven must never be flushed with a water hose or high-pressure cleaner as this may damage the electronic components.

Filter

Under the front panel is a filter that should be cleaned on a weekly basis – either manually or automatically.

Remember to fit the filter again after cleaning to prevent dirt, soil, etc. from entering the oven.

Visit www.houno.com

At our website www.houno.com, you will find a great deal of information about HOUNÖ and our extensive range of Visual Cooking combi ovens.

www.houno.com provides you:

- Product information on HOUNÖ's combi ovens, customised oven solutions and our wide range of accessories.
- Technical information on combi ovens.
- Visual Cooking user DVD - how to program your Visual Cooking oven.
- Hands-on operating on a combi oven by means of interactive software.
- Delicious recipes which are easy to prepare.
- Latest news from HOUNÖ.
- User manuals
- Intranet with spare parts catalogue, dimensional sketches, wiring diagrams, service bulletins, installation manuals, etc.

To access our Intranet, you need a password. Please contact HOUNÖ: houno@houno.com for more information.



Meeting your needs - worldwide

With more than 30 years' experience in the manufacture of innovative oven solutions, HOUNÖ is one of the world's leading manufacturers of combi ovens and bake-off ovens. As oven specialist, we meet your needs for efficiency, flexibility and reliability.

Through the years, HOUNÖ has grown from a small Danish company into a leading manufacturer of combi ovens worldwide. Today, Visual Cooking is supplied to selective customers all over the world through an extensive network of sales and service partners.

As part of the US based group of companies, the Middleby Corporation, which with its more than 1,500 employees is one of the market leaders in the commercial cooking equipment industry, HOUNÖ has 17 sister companies and a subsidiary in Sweden.

HOUNÖ's top motivated staff is behind Visual Cooking. With the widest range of combi ovens in the industry, we are able to create customised solutions that suit your needs exactly.

Visit www.houno.com and be inspired!

HOUNÖ A/S

Alsvej 1
DK 8900 Randers
Denmark
Tel. +45 87 11 47 11
Fax +45 87 11 47 10
houno@houno.com
www.houno.com

