

USER MANUAL

HD SERIES

**WARNING**

Read the instructions before using the machine.



KEEP THIS USER MANUAL FOR FUTURE USE

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We advise you to contact your supplier for the guarantee period and conditions. Further we refer to our General Terms and Conditions for Sales and Delivery that are available upon request.

The manufacturer does not accept any liability for damage or injury caused by failing to adhere to these regulations or by not observing the usual caution or care in actions, operation, maintenance or repair activities, even if not explicitly described in this manual.

As a result of constant commitment to improvement, it may happen that your unit deviates in detail from what is described in this manual. For this reason, the given instructions are only a guideline for the installation, use, maintenance and repair of the unit referred to in this manual. This manual has been composed with the utmost care. The manufacturer shall, however, not be held responsible for any mistakes in this manual nor for any consequences thereof. The user is allowed to copy this manual for own use. Further all rights are reserved and nothing in this manual may be reproduced and/or made public in any way.

Modifications:

In case of unauthorised modifications in or on the unit, every liability on the part of the manufacturer becomes null and void.



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1. INTRODUCTION

1.1 General

This manual is intended for the user of the HD (Hot Deli). The features and controls are being described, along with directions for the safest and most efficient use, in order to guarantee a long life of the unit.

All pictograms, symbols and drawings in this manual apply to the HD series.

1.2 Identification of the unit

The identification plate can be found on the outside of the machine, and contains the following data:

- Name of the supplier or the manufacturer
- Model
- Serial number
- Year of construction
- Voltage
- Frequency
- Power consumption

1.3 Pictograms and symbols

In this manual, the following pictograms and symbols are used:



WARNING

Possible physical injury or serious damage to the unit, if the instructions are not carefully followed.



WARNING

Hazardous electrical voltage.



WARNING

Danger of getting injured by hot surfaces.



Suggestions and recommendations to simplify indicated actions.



Recycling symbol.

1.4 Safety instructions



WARNING

The outside of the unit can be very hot.



WARNING

See installation instructions for grounding requirements.

1.4.1 General

The user of the unit will be fully responsible for abiding the locally prevailing safety- rules and regulations.

The unit may be operated by qualified and authorized persons only. Anyone working on or with this unit must be familiar with the contents of this manual and carefully follow all guidelines and instructions. Never change the order of the steps to be performed. The management must instruct the personnel on the basis of this manual and follow all instructions and regulations.

The pictograms, labels, instructions and warning signs attached to the unit, are part of the safety measures. They may never be covered or removed, and have to be clearly visible during the entire lifetime of the unit.

Immediately repair or replace damaged or illegible pictograms, warnings and instructions.

- To avoid short-circuiting, never clean the unit using a water hose. For cleaning instructions, see section 5.
- The unit must be cleaned regularly to ensure proper functioning and prevent fire hazard (over heating).
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Children shall not play with the appliance.
- Cleaning and user maintenance shall not be made by children without supervision.

1.4.2 Water quality

Untreated water contains scale-producing minerals which can build up on the water level sensor probe and the humidity tray. Excess lime scale build up on water level sensor probes will cause an error in the automatic water fill and the humidity tray may not fill with water.

The water-level sensor in the display case uses ions in the water to detect the water level. Do not use distilled (fully de-mineralized or de-ionized) water. This could provide a false reading to the sensors and overflow the humidity tray.

1.4.3 Outdoor use restrictions



WARNING

To avoid short-circuiting, the units may **not** be used outdoors or in a rainy or very moist environment.



1.5 Hygiene

The quality of a fresh product always depends on hygiene. Especially grilling products. With the risk of salmonella contamination – especially for chicken products – you must make sure that grilled products can never be mixed with uncooked products. Also contact between grilled products and hands or tools that have been in contact with raw chicken meat, must be avoided at all times. Hands or tools that have been in contact with raw chicken meat, must be cleaned thoroughly.

1.6 Service and technical support

The electrical schematics of your unit is included. In case of malfunctions you can contact your dealer/service agent. Make sure you have the following data available:

- Model.
- Serial number.

This data can be found on the identification plate.

1.7 Storage

If the unit will not be used temporarily, and will be stored, follow these instructions:

- Clean the unit thoroughly.
- Wrap the unit from getting dusty.
- Store the unit in a dry, non-condensing environment.

1.8 Disposal



Dispose of the machine, any components or lubricants removed from it safely in accordance with all local and national safety and environment requirements.



2. DESCRIPTION OF THE UNIT

2.1 Technical description

A combination of processes is applied to the warmers; these will be described below. The materials are made of stainless steel SS 304 and tempered glass.

Self Service and Full Serve

The regulation of the temperature of the air stream takes place through an adjustable electronic thermostat/control. Infrared emitters heat the products from above. This keeps the products at perfect quality for a maximum of 4 hours. Lighting is by halogen lights.

Humidified Full Serve

The regulation of the temperature of the air stream, individual adjustment of each infrared emitter and air humidification takes place by means of an electronic regulation such that the products retain their quality for a maximum of 4 hours. Lighting is by halogen lights.

2.2 Intended use

The display-warmer have been designed solely to keep packaged products warm and to display them. Any other use will not be regarded as intended use.

The factory settings of the unit's temperature ensure a constant core temperature of at least 65°C / 149°F for a minimum of four hours.

The manufacturer accepts no liability whatsoever for loss or injury caused by failing to strictly adhere to the safety guidelines and instructions in this manual or due to carelessness during installation, use, maintenance and repair of the unit referred to in this manual and any of its accessories.

Use the unit in perfect technical condition only.

2.3 Accessories

Your unit contains the following standard accessories:

- User manual.

For optional accessories refer to www.frijado.com.



3. INSTALLATION AND FIRST USE



All packing materials used for this unit are suited for recycling.

After unpacking, check the state of the unit. In case of damage, store the packing material, and contact the transporter within fifteen working days after receiving the goods.

3.1 Unpacking the unit

1. Remove all parts from the unit.
2. Remove the foil from all metal parts.
3. Remove all packaging materials from the unit.
4. Inspect the unit for damage.
5. Make sure that all parts that belong to the model you have ordered are present.
6. Read the manual before proceeding.

3.2 Installation and positioning



WARNING

Electric shock hazard. Grounding instructions: only connect the appliance to an alternating current provided by a grounded wall socket, with a mains voltage in accordance with the information indicated on the data plate of the appliance.

It is the consumer's responsibility to make sure the electrical installation conforms with current national and local codes and wiring regulations.

Do not use a multi plug or extension cord. Such can result in fire, electrical shock, or other personal injury.

Failure to follow these instructions can result in death or serious injury.



WARNING

Do not position the equipment at a door opening or in a ventilated or cooled area.

Place the unit flatly on a sufficiently sturdy base using a spirit level. Take the weight of the unit into account.

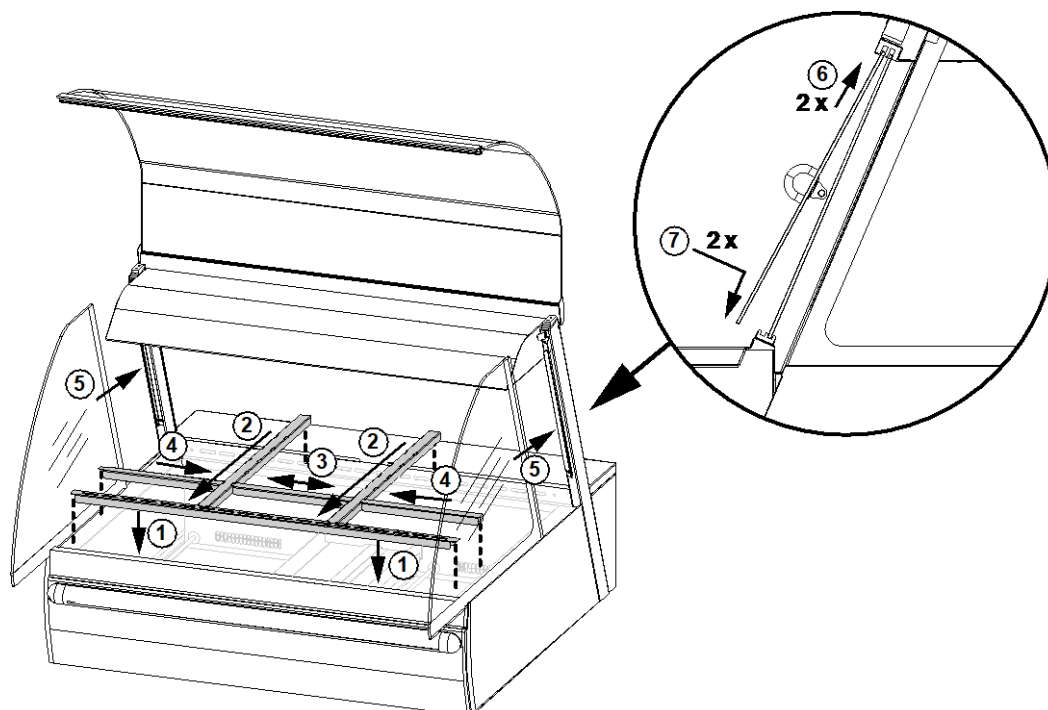
Find a suitable place for the unit. Points of interest:

- The products in the unit must be well visible.
- Keep in mind the unit's accessibility in case any maintenance and service work needs to be done.
- The user must have sufficient freedom of movement to properly operate the unit.
- The minimum free distance must be at least 50 mm (2 inch).
- Be sure that the environmental temperature is not less than 20°C (68°F) and not more than 30°C (86°F).
- During operation the glass panes will get very hot. While positioning, keep the unit out of children's reach.
- The unit has a mains plug, and must be connected to a wall socket with the proper mains voltage. The wall socket must be mounted by a certified electrician.



3.2.1 Installation - curved glass

1. Clean the inside, the removable parts and the accessories thoroughly with a cleanser and water before putting the unit into use.
2. After cleaning, wipe the unit with a cloth moistened with clean water to remove cleanser residues and then dry the entire unit.



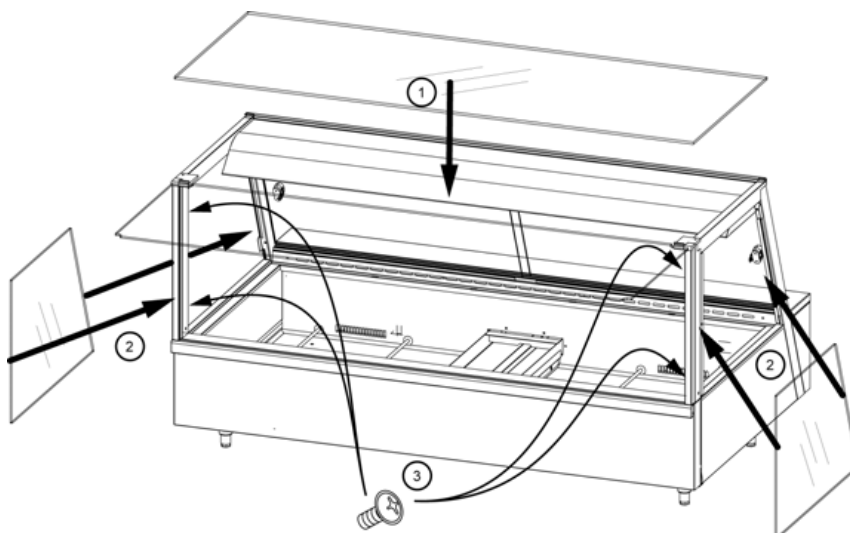
3. Place all (optional) parts and/or accessories. Follow steps 1 to 4 to place a pan frame and follow steps 5 to 7 to place the side and sliding doors.
4. Insert the plug into the socket.
5. If the unit is equipped with an optional water filling device, connect the water inlet to a ventilated connection, if not:
6. Fill the steam tray $\frac{3}{4}$ of the way using clean cold water. Use soft water by preference.

3.2.2 Installation - square glass

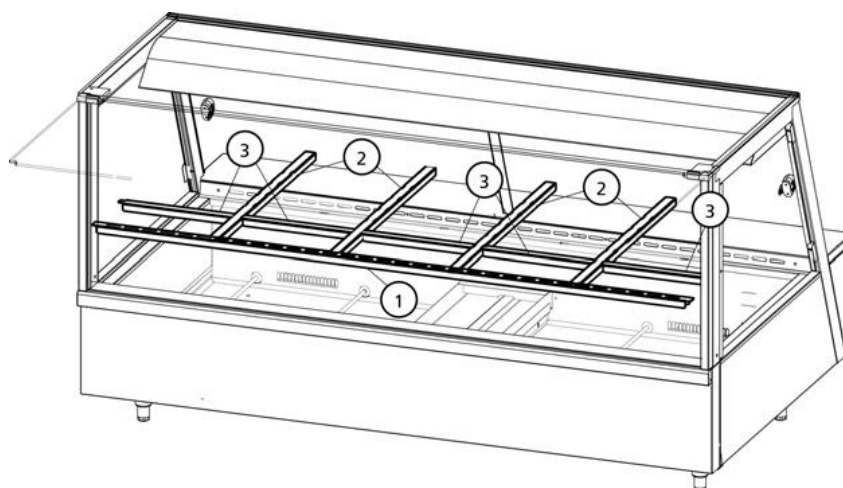

WARNING

The top window can weigh up to 25 kg. Pay attention to this weight when lifting the top window. Use appropriate tools for lifting.

1. Clean the inside, the removable parts and the accessories thoroughly with a cleanser and water before putting the unit into use.
2. After cleaning, wipe the unit with a cloth moistened with clean water to remove cleanser residues and then dry the entire unit.

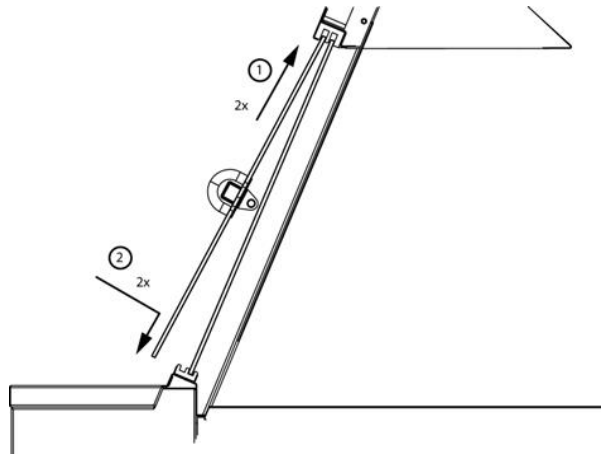


3. Place all (optional) parts and/or accessories. Start with the glass top and side glasses. Secure the side glasses with screws as indicated in the figure above.



4. Place the frame for the GN-pans in the unit. Start with the exhaust plate (1), then place the frame parts between the front and back side (2) and finish with the shortest frame parts (3). See the figure above





5. Place the slide windows in the unit as shown in the figure above.

3.3 First use

Clean the interior

- When using the unit for the first time, clean the interior thoroughly with soap suds.
- Rinse with clean water to remove soap rests.

Metal odor

To remove the metal odor that will appear at first use, the unit must be heated at the maximum temperature for at least half an hour.



4. OPERATION AND USE

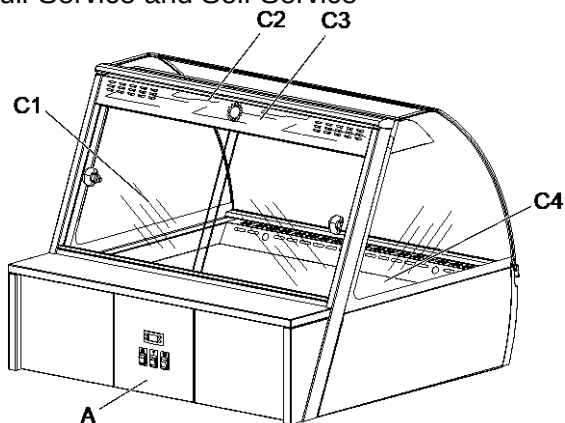


WARNING

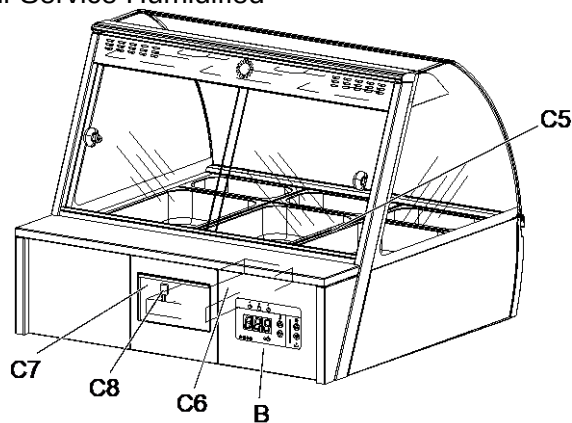
The filling point for the water tray and the lift-up cap can become hot.

4.1 Overview of the (standard) unit

Full-Service and Self Service



Full-Service Humidified



A Self Service and Full Serve control panel

B Humidified Full Serve control panel

C1 Tinted sliding doors

C2 Lighting

C3 IR emitter

C4 Flat plate

C5 Removable frame

C6 Steam tray

C7 Filler unit

C8 Water Level Sensor

4.2 Control panel

4.2.1 Self Service and Full Serve models control panel

- ⏻ Power on/off button*
- ⬆ UP-button
- ⬇ DOWN-button
- SET ⬅ SET-button

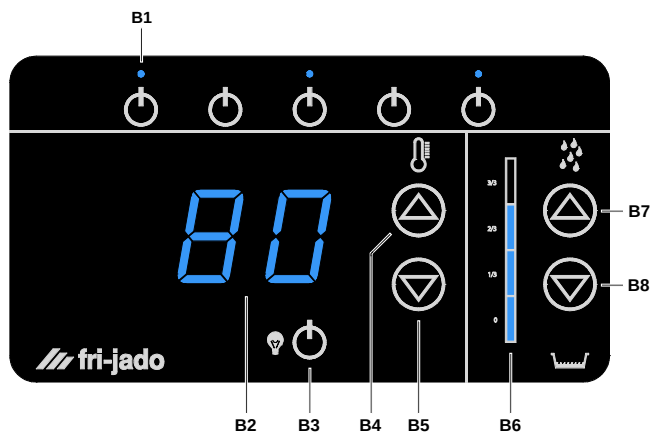


Picture for reference only.

* Switch on/off: hold for several sec.

4.2.2 Humidified Full Serve control panel

- B1 IR emitter keys
- B2 Temperature reading
- B3 Lighting key
- B4 Increase temperature
- B5 Reduce temperature
- B6 Humidification level reading
- B7 Increase humidification
- B8 Reduce humidification

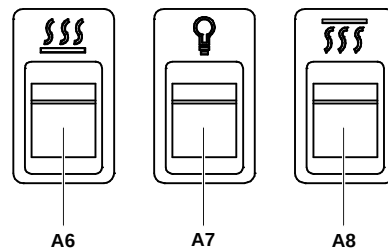


The B1 keys switch the IR emitters in the light cover individually. The sequence of the keys is the same as the sequence of the emitters seen from the operating side of the warmer.

4.3 Display-warmer in Self Service or Full Serve model

4.3.1 Switch on

- Switch on the heater with switch A6.
- Switch on the lighting with switch A7.
- Also switch on the IR emitters with switch A8 as required.



4.3.2 Switch off

- Switch off the IR emitter with switch A8.
- Switch off the lighting with switch A7.
- Switch off the heating with switch A6.

4.3.3 Check set temperature

ERC / ALFA / ID Next temperature controller

1. During operation the display of the thermostat shows the temperature in the unit.
2. Push once on the **SET**-button.
3. The set temperature will appear momentarily on the display.

IC Plus 902 temperature controller

1. Scroll through the folders with **Λ** and **∇** button until you find the folder **Pb1**, **Pb2** or **Pb3**.
2. Press **SET** to view the value measured by the corresponding probe.

4.3.4 Adjusting the SET temperature

ERC temperature controller

1. During operation the display of the thermostat shows the temperature in the unit.
2. Push once on the **SET**-button. The set temperature will appear on the display.
3. Adjust the set temperature by means of the **Λ** and the **∇** button.
4. Push once on the **SET**-button to store the new set temperature.

IC Plus 902 temperature controller

1. During operation the display of the thermostat shows the temperature in the unit.
2. Push once on the **SET**-button. The set temperature will appear on the display.
3. Push the **Λ** and **∇** button within 15 sec.
4. Adjust the set temperature by means of the **Λ** and the **∇** button.
5. Push once on the **SET**-button to store the new set temperature.

ALFA temperature controller

1. During operation the display of the thermostat shows the temperature in the unit.
2. Push once on the **SET**-button. The set temperature will appear on the display.
3. Now Push the **SET**-button again and together with the **Λ** or **∇** button.
4. Adjust the set temperature by means of the **Λ** button and the **∇** button.
5. A few seconds after releasing the keys the measured temperature is shown again.

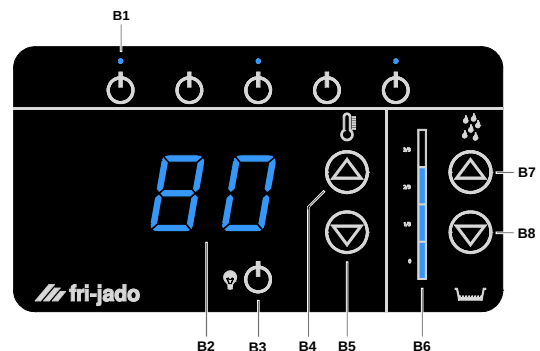
ID Next temperature controller

1. Press the down key for at least 3 seconds until the 'UnL' label appears to unlock the keypad.
2. Press and release the **SET** key to enter the 'Machine Status' menu.
3. Scroll through the folders using the **Λ** and **∇** keys until the SEt folder is displayed.
4. Press the **SET** key to display the current setpoint value.
5. Change the setpoint value with the **Λ** and **∇** keys within 15 seconds.
6. Press the **SET** or **⏻** key, or by timeout (15 seconds) to confirm the value.

4.4 Display-warmer in the Humidified Full Serve model

4.4.1 Switch on

1. Keep keys B3 and B4 pressed simultaneously for 2 seconds.
2. Switch on the lighting with key B3.
3. Switch on the required IR emitters with keys B1.



4.4.2 Switch off

Keep keys B3 and B5 pressed simultaneously for 2 seconds.

4.4.3 Check set temperature

The temperature in the warmer is shown on display B2 during use.

1. Press key B4 or B5 for a short time.

The set temperature will be shown on the display. The measured temperature in the warmer will again be shown after 10 seconds.

4.4.4 Set the temperature

1. Press key B4 or B5 for a short time. The set value will be shown on the display.
2. Wait 5 seconds; you cannot immediately change the setting.
3. Set the required temperature with keys B4 and B5.

Wait until the display again jumps to the measured temperature in the warmer. The adjustment has now been saved.

4.4.5 Topping up the steam tray



WARNING

The front filler unit can become hot.

You hear a signal as soon as the steam tray requires topping up. Humidification will be automatically switched off.

1. Press key B7 or B8 to stop the sound signal.
2. Fill the steam tray by three quarters (approx. 6.5 L / 17.1 US gal.) with hot water to prevent large temperature differences and severe steam occurring.

Humidification will be restarted automatically based on the previously set adjustment after topping up. You do not have to set it again.

4.4.6 Automatic water filling



WARNING

Don't remove the steam tray until you have stopped the unit!

The unit is also available with an option for automatic water filling. In that case, the steam tray is filled automatically.



4.4.7 Set the humidifier



Water consumption will amount to approx. 1.2 L / 3.2 US gal. per hour in relation to the maximum position.

Indication bar B6 displays the humidification degree.

- 3/3, humidification 100% switched on.
- 2/3, humidification 67% switched on.
- 1/3, humidification 33% switched on.
- 0, humidification switched off; the bottom segment of the indication bar will flash every 10 seconds.

Set the required humidification level with keys B7 and B8.

4.4.8 Set the IR emitters

Press the B1 keys for a short time to switch on or off the related IR emitter. The indication light on top of the key will light up if the emitter is switched on.

4.5 Load product



WARNING

- Only place products for which the core temperature at least amounts to 85°C / 185°F.
- Switch on all IR emitters available when using a second presentation level.
- Make sure that the packaging material is suitable for a temperature of 100°C / 212°F in connection with packaged products.

4.6 Check product temperature

Once every hour, the product temperature should be checked using a digital thermometer. Write down the measured values in a log. Always use a disinfected thermometer sensor.

4.7 Preheat

1. Allow the case to preheat 30 to 60 minutes. All doors must be closed in order for the unit to preheat properly
2. Verify that the display case is at the proper temperature.



5. CLEANING AND MAINTENANCE



WARNING

Never use a water hose for cleaning. Water can seep into the unit through the ventilation holes of the unit.



WARNING

Do not touch the halogen lamps with bare hands. Protect hot lamps from cold water.



Because of hygiene aspects and optimum condition of the unit it is of utmost importance to keep a daily cleaning pattern from first use onwards.

5.1 Maintenance schedule

Item	Action	Frequency
Interior	- Switch the unit off. - Remove the products from the equipment. - Allow the unit to cool down to approx. 50°C / 122°F. - Clean the interior with hot soapsuds or "Fri-Jado Clean". - After cleaning, dry the interior using a clean cloth. Make sure no traces of cleanser are left behind.	Daily
Exterior	- Clean the external side of the equipment by using a soft brush or sponge and a small quantity of hot water with a mild cleaning agent. - Dry the external side with a cloth.	Daily
Element space	- Switch the unit off. - Remove the products from the equipment. - Allow the unit to cool down completely. - Remove the GN pans or the flat plate in the warmer depending on the model. - Clean the space below this with a moist cloth with hot soapsuds or "Fri-Jado Clean". - After cleaning, dry the interior using a clean cloth.	Weekly
Steam tray	Remove any calcium build-up in the steam tray and on the pins of the water level sensor. Use hot water and vinegar for this.	Weekly



6. MALFUNCTIONS AND SERVICE

Before you contact your supplier/dealer in case of a malfunction, there are some items you can check yourself:

- Is the power supply working properly? Check fuses and differential switch.
- Is the temperature switch in the correct position?

Item	Malfunction	Possible action
Unit	Does not work.	• Is the plug in the outlet? • Is the power supply OK? Check the fuses and the earth leakage switch in the meter cupboard. • Are all the switches in the correct position?
Unit	The set temperature is not being reached within a half-hour.	• Close the sliding doors on the operating side. • Contact your supplier/service agency.
Unit	The temperature rises too much.	• Check the set temperature. • Switch the unit off. • Remove the plug from the outlet. • Contact your supplier/service agency.
Temperature control	Error messages E1, E2 or E29 will be shown on the display.	• Reset the equipment by switching it on and off once. • Contact your supplier/service agency.
Humidification	Does not work.	• Check whether humidification is switched on. • Remove any calcium build-up present on the sensor. • Contact your supplier/service agency.
Automatic water filling	Sound signal / steam tray empty	• Check the water inlet. • Reset the unit by switching it off and on again. • Contact your supplier/service agency.
Lamp	A lamp is faulty.	• Replace, see section 6.2
IR emitter	An IR emitter is faulty.	• Contact your supplier/service agency. • Switching the equipment off immediately is not necessary.
Mains cord	Damaged	• Replace, see section 6.1



6.1 Replacing the mains cord

**WARNING**

Hazardous electrical voltage.

If the mains cord is damaged, it must be replaced by the manufacturer, his service agent or a similarly qualified person in order to avoid hazards.

6.2 Replacing a lamp

**WARNING**

Remove the power plug from the wall socket.

**WARNING**

Do not touch the lamps with bare hands. **Use a clean cloth or paper tissues when replacing the lamp**

Remove any moisture with alcohol or methyl spirits after the lamp has cooled down

The lamps can be found in the top cover; you can reach them from below.

1. Remove the plug from the outlet.
2. Open all doors and allow the equipment to cool down for at least half an hour.
3. Replace the lamp by a similar type.



7. TECHNICAL SPECIFICATIONS



WARNING

Consult the identification plate to get the proper specifications of the unit. The electrical data may vary from country to country

European models

Model		HD 3	HD 4	HD 5	HD 7*
Dimensions					
Width	mm	1086	1419	1730	2505
Depth	mm	1058	1058	1058	1058
Height	mm	960	960	960	960
Height with base	mm	1440 [1420]	1440 [1420]	1440 [1420]	1440
Weight Self Service	kg	136	188	217	N/A
Weight Full Serve	kg	142 [158]	195 [180]	225 [197]	257
Weight Humidified Full Serve	kg	157 [173]	210 [195]	240 [212]	272
Base	kg	36.5	40.0	43.5	63.0
Voltage	V	3N~ 400/230	3N~ 400/230	3N~ 400/230	3N~ 400/230
Frequency	Hz	50/60	50/60	50/60	50/60
Max. rated current					
Self Service	A	6.3	6.3	6.3	N/A
Full Serve	A	6.3	6.3	6.3	12.6
Humidified Full Serve	A	7.3	8.6	9.9	12.6
Plug		CEE standard 16 A	CEE standard 16 A	CEE standard 16 A	CEE standard 16 A
Cable length approx.	m	2.40	2.40	2.40	2.40
Sound pressure	dB(A)	< 70	< 70	< 70	< 70
Water connection (Automatic water level adjustment)	inch	¾	¾	¾	¾
Self Service display (flat section)					
Length	mm	964 mm	1,298 mm	1,630 mm	N/A
Width	mm	608 mm	608 mm	608 mm	N/A
Depth	mm	60 mm	60 mm	60 mm	N/A
Full Serve and Full Serve Humidified display (max. division)		3x 1/3 GN 3x 1/1 GN	4x 1/3 GN 4x 1/1 GN	5x 1/3 GN 5x 1/1 GN	7x 1/3 GN 7x 1/1 GN

The specific HD-Square data is within [brackets].



American Models

Model		HD 3	HD 4	HD 5	HD 7*
Dimensions					
Width	inch	42 $\frac{3}{4}$	55 $\frac{3}{4}$	68 $\frac{1}{4}$	98 $\frac{1}{2}$
Depth	inch	41 $\frac{3}{4}$	41 $\frac{3}{4}$	41 $\frac{3}{4}$	41 $\frac{3}{4}$
Height	inch	37 $\frac{3}{4}$	37 $\frac{3}{4}$	37 $\frac{3}{4}$	37 $\frac{3}{4}$
Height with base	inch	57 [56]	57 [56]	57 [56]	57
Weight Self Service	lbs	300	414	478	N/A
Weight Full Serve	lbs	313 [348]	430 [397]	496 [434]	567
Weight Humidified Full Serve	lbs	346 [382]	463 [430]	529 [467]	600
Base	lbs	80	88	96	139
Voltage	V	208	208	208	208
Frequency	Hz	50/60	50/60	50/60	50/60
Max. rated current					
Self Service	A	11.6	11.6	11.6	N/A
Full Serve	A	11.6	11.6	11.6	22.3
Humidified Full Serve	A	12.2	13.3	14.4	22.3
Plug NEMA		15-20P	15-20P	15-20P	15-30P
Cable length approx.	inch	95	95	95	95
Sound pressure	dB(A)	< 70	< 70	< 70	< 70
Water connection (Automatic water level adjustment)	inch	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$
Self Service display (flat section)					
Length	inch	38	51	64	N/A
Width	inch	24	24	24	N/A
Depth	inch	2.4	2.4	2.4	N/A
Full Serve and Full Serve Humidified display (max. division)		3x 1/3 GN 3x 1/1 GN	4x 1/3 GN 4x 1/1 GN	5x 1/3 GN 5x 1/1 GN	7x 1/3 GN 7x 1/1 GN

The specific HD-Square data is within [brackets].



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