

ESTUFA DE DESECACIÓN - INCUBACIÓN OVENS AND INCUBATORS ÉTUVES DE DESSÈCHEMENT - CULTURE



SERIES - SERIES - SÉRIES 631,632, 636



Este manual es parte inseparable del aparato por lo que debe estar disponible a todos los usuarios del equipo. Le recomendamos leer atentamente el presente manual y seguir rigurosamente los procedimientos de uso para obtener las máximas prestaciones y una mayor duración del mismo.

This manual should be available for all users of these equipments. To get the best results and a higher duration of this equipment it is advisable to read carefully this manual and follow the processes of use.

Ce manuel est une partie indissociable de l'appareil et doit être mis à la disposition de tous les utilisateurs de l'équipement. Nous vous recommandons de lire attentivement ce manuel et de suivre scrupuleusement les procédures d'utilisation afin d'obtenir des performances maximales et une plus longue durée de vie de l'appareil.

Thank you for choosing this equipment. We sincerely wish that you enjoy your Nahita oven. We highly recommend looking after this equipment according to what is stated in this manual.

Nahita develops its products according to the CE marking regulations as well as emphasizing the ergonomics and security for its user.

The correct using of the equipment and its good quality will permit you to enjoy this equipment for years.

The improper use of the equipment can cause accidents and electric discharges, circuit breakers, fires, damages, etc. Please read the point of Maintenance, where we expose the security notes.

TO GET THE BEST RESULTS AND A HIGHER DURATION OF THE EQUIPMENT IT IS ADVISABLE TO READ THOROUGHLY THIS MANUAL BEFORE OPERATING WITH THE EQUIPMENT.

Please bear in mind the following:

- This manual is inseparable from the Nahita ovens and incubators, so it should be available for all the users of these equipments.
- Follow all required applicable laws about safety and health (electrical security devices, inflammable, toxic and/or pathological products, etc.).
- You should carefully handle the oven or incubator avoiding sudden movements, knocks, free fall of heavy / sharp objects on it. Avoid spilling liquids inside the equipment.
- Never dismantle the different pieces of the oven or incubator to repair it yourself, since it could produce a defective use of the whole equipment and a loss of the product warranty, as well as injuries on people that handle the oven or incubator.
- To prevent fire or electric discharges avoid dry or dusty environments. In case it may happen unplug the equipment immediately.
- If you have any doubt about setting up, installation or functioning do not hesitate in contacting your wholesaler. You can also tell us any doubts or suggestions you have by contacting Nahita Technical Assistance Department by email to asistencia@auxilab.es.
- This equipment is protected under the Warranties and consumer goods regulation (10/2003).
- Overhaul is not covered by the equipment's warranty.
- Operations made by non-qualified staff will automatically produce a loss of the warranty.
- Neither fuses nor accessories (including their loss), are covered by the product's warranty. The warranty neither covers piece's deterioration due to the course of time.
- Please make sure you keep the invoice, either for having the right to claim or asking for warranty coverage. In case you must send the equipment to Nahita Technical Assistance Department you should enclose the original invoice or a copy as guarantee.
- Manufacturer reserves the right to modify or improve the manual or equipment.



ATTENTION!! IF EQUIPMENTS ARE NOT PROPERLY CLEAN AND DISINFECTED THEY WOULD NOT BE ALLOWED TO REPAIR BY OUR TECHNICAL SERVICE.

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1. USES OF THE APPARATUS

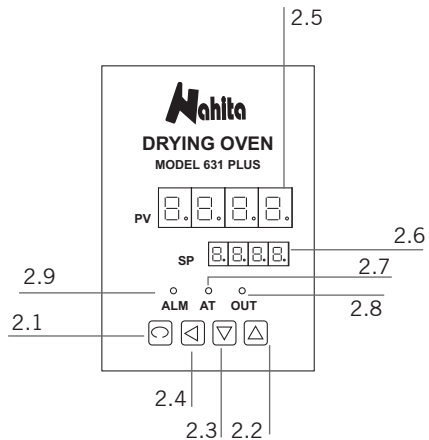
Nahita ovens and incubators are very useful in research, hospital or industrial laboratories for drying samples, disinfection of material and maintenance of cell and microorganisms cultures.

Made of furnace-painted steel, they present a easy-to-clean stainless steel inner chamber. To control sample evolution they are provided with a double glass window.

2. DESCRIPTION

Control panel

- 2.1 Button Func
- 2.2 Button ▲: parameter value increase
- 2.3 Button ▼: parameter value decrease
- 2.4 Button ◀: go to the next digit
- 2.5 PV display
- 2.6 SP display
- 2.7 AT indicator (out of use)
- 2.8 OUT indicator: resistance working
- 2.9 ALM indicator: alarm

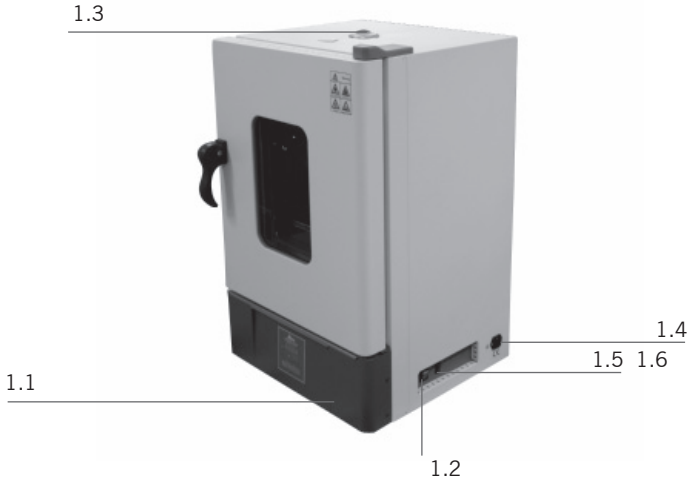


Parts of the equipment

- 1.1 Control panel
- 1.2 On/off switch
- 1.3 Ventilation grilles The air outlet is the chimney located at the top
- 1.4 Socket
- 1.5 Ventilation switch in the 632 Plus Series, except for the 230L JBD010 in which the venti-

lation is continuous.

- 1.6 On the Series 631 Plus there is a button to select one of two heating speeds; In speed 1, a voltage of 110V enters the resistance, while in speed 2, 220V enters (except in the stove ref. JBD009).



3. TECHNICAL SPECIFICATIONS

Series 631 Plus - Natural convection drying ovens

Code	JBD009	JBD001	JBD002	JBD003	JBD004
Capacity	18L	30 L	45 L	65 L	125 L
Temp. range	80-300°C				
Resolution	1 °C (configurable a 0.1°C) *				
Homogeneity	± 1.0 °C				
Consumption	0.6 Kw	0.9 Kw	1.0 Kw	1.5 Kw	2.3 Kw
Dimensions (cm)					
External	44x38x55	46x51x69	50x55x73	55x55x84	64x68x91
Internal	26x26x26	31x31x31	35x35x35	40x36x45	50x45x55
Weight	20 Kg	39 Kg	42 Kg	53 Kg	58 Kg
Fuse	5A	10A	10A	15 A	20A
Power	220 V, 50 Hz ± 10%				

* consultar

Series 632 Plus - Forced air drying ovens

Code	JBD005	JBD006	JBD007	JBD008	JBD010
Capacity	30 L	45 L	65 L	125 L	230 L
Temp. range	80-250 °C			10-300 °C	
Resolution	1 °C (configurable to 0.1°C) *				
Temp. fluctuation	± 1.0 °C				
Homogeneity	2%				
Consumo	0.9 Kw	1.0 Kw	1.5 Kw	2.3 Kw	3.0 Kw
Dimensions (cm)					
External	46x51x69	50x55x73	55x55x84	64x68x91	73x68x122
Internal	31x31x31	35x35x35	40x36x45	50x45x55	60x50x75
Weight	39 Kg	42 Kg	53 Kg	58 Kg	92 Kg
Fuse	10A	10A	15A	20A	20A
Power	220 V, 50 Hz ± 10%				

* *consultar***Series 636 - Incubators**

Code	JBB005	JBN001	JBB002	JBB003	JBB004
Capacity	18 L	30 L	45 L	65 L	125 L
Temp. range	RT / 80 °C				
Resolución	1 °C (configurable to 0.1°C) *				
Temp. fluctuation	± 1.0 °C				
Homogeneity	2%				
Consumption	0.3 Kw	0.3 Kw	0.3 Kw	0.4 Kw	0.5 Kw
Dimensions (cm)					
External	44x38x55	46x51x69	50x55x73	55x55x84	64x68x91
Internal	26x26x26	31x31x31	35x35x35	40x36x45	50x45x55
Weight	20 Kg	39 Kg	42 Kg	53 Kg	58 Kg
Fuse	5 A	5 A	5 A	10 A	10 A
Power	220 V, 50 Hz ± 10%				

* *consult***4. INSTALLATION / SETTING UP****Preliminary inspection**

- Unwrap the equipment, take off the involving plastic and take off the polyspan protection in which it comes fitted.
- Take off all the protective items and, without connecting the equipment to the net, make sure that it does not present any damage because of the shipment. In case the equipment presents any damage tell it immediately to your transport agent or dealer so that they can make the claims in the correct time limit.

We will only accept the equipment return within 15 days after delivery provided it comes in its original wrapping.

Please check that all the accessories are enclosed with the equipment:

- 2 trays and 4 guides already placed.
- Shuko wire
- User's manual
- 1 spare fuse, amps depending on capacity.

Installation

Before using this instrument, it is convenient for you to familiarize with its components and essentials.

PLEASE READ THOROUGHLY THE INSTRUCTIONS BEFORE CONNECTING AND OPERATING WITH THIS EQUIPMENT.

- Put the equipment on top of a horizontal, plane and stable table making a free space around so as the ventilation grilles are completely free of obstructions.
- Do not put the equipment near any warm supply (burners, blowlamps...), nor expose it directly to the sun, etc. Avoid the presence of flammable or toxic products in the working area.
- Place the trays supplied with the equipment at the desired height.
- The equipment is supplied with a Schuko standard wire. Please insert the wire that feeds the AC electric current in the base of current 220 V, 50 Hz $\pm 10\%$ provided with earth wire and the other end to the equipment connector (1.4). The tension should be 220 V, 50 Hz $\pm 10\%$.

Neither the manufacturer nor the distributor will assume any responsibility for the damages produced to the equipment during its installation or damages to persons suffered by the improper use of the electric connection. The tension should be 220 V, 50 Hz $\pm 10\%$.

Operating mode

Note: Before the first use or if it has been moved to other location, do not turn the incubator on until 2 hours have passed. .

- Press the on/off switch (1.2).
- The PV display will show the real temperature inside the equipment, while the SP display will show the previously selected temperature.

Working temperature adjustment

The maximum working temperature is 300 °C for ovens (series 631 plus and 632 plus) and 80 °C for incubators (series 636 plus). Proceed as follows to select the working temperature:

- Press Func (2.1). "Sp" will be shown on PV display, indicating that the temperature value can be adjusted.
- Use the buttons ▲ (2.2) and ▼ (2.3) to select the desired temperature value (shown on SP display). Use the button ◀ (2.4) to go from one digit to the next.
- Press Func (2.1) twice. The heating resistance will start working until reaching the selected temperature; the real temperature inside the equipment will be shown on PV display, while the SP display will show the selected temperature.

Note: adjust the opening of the ventilation grilles (1.3), to adequate it to your needs.

- If an alarm sounds continuously during operation, it means that the real temperature exceeds the

selected temperature in 10 °C for ovens (series 631 Plus and 632 Plus) or in 5 °C for incubators (series 636 Plus).

- Let the equipment cool down and set it again.

Working time adjustment


By default, whenever turning the equipment on the working time is off, so the equipment will operate until turning it off by pressing on/off switch (1.2). To work during concrete periods of time proceed as follows:

- Wait until the equipment reaches the selected working temperature and press Func (2.1) twice. "Sr" will be shown on PV display indicating that the working time can be adjusted.
- Use the buttons ▲ (2.2) and ▼ (2.3) to select the working time within a range 1-9999 min (shown on SP display). Use the button ◀ (2.4) to go from one digit to the next.
- Press Func (2.1); the counting down will begin and the SP display will show the remaining working time.
- Once the selected time has passed, an alarm will sound and STOP will be displayed on SP display. Press during 2-3 seconds ◀ (2.4) to silence the alarm.
- Press again the button during 2-3 seconds ◀ (2.4) to start the previous programmed.

Note: If a new working time has to be programmed, as soon as you start again press Func (2.1); then select the new working time.

Note: The button ◀ (2.4) allow you to stop the program at any time but just when you have been program a specific time of work. When you work in continuous form you can stop the program with the STOP/START button.

Auto-adjustment

 Important: Make the auto-adjust before to introduce the sample in the equipment:

- Program the temperature of work and press ▲ while 5 seconds.
- The LED "AT" will be illuminate while start the auto-adjust.
- The auto-adjust will be finish while the LED switch off.
- It will be advisable to repeat this process 2-3 times, the precision will be better than before.
- After the auto-adjust, the equipment will work perfectly.

After operation do not forget to turn the equipment off by pressing the on/off switch (1.2).

Configuration of parameter SC

If you detect temperature variations in the equipment between a calibrated and trusted external temperature probe, check the internal parameter SC to adjust temperature. Follow these instructions:

- Keep pressed "FUNC" key until 'LOCY' command appears at the upper display.
- Press again "FUNC" key until SC command is displayed.
- Set value to '0000' (its value by default must be 0000).
- Press "FUNC" key to save this new value, return to 'LOCY' command, keep pressed "FUNC" key and returns to general display.

*If the set temperature is high without the equipment having heated up, it is possible that this parameter has been modified inadvertently. In this case, the SC parameter must be set to the FACTORY value, SC=0.0.

Thin adjustment of inner parameter SC

To adjust real temperature (measured with an external thermometer) and temperature displayed by the equipment, it is possible to make a thin adjustment through parameter SC:

- Keep pressed "FUNC" key until 'LOCY' command appears at the upper display.
- Press again "FUNC" key until SC command is displayed.
- Select from tenths of degree, the difference between real and displayed temperature with + or – value depending on necessary.
- To save this value it is only necessary to go out this parameter setting by pressing "FUNC" key, return to 'LOCY' command, keep pressed "FUNC" key and return to general display.

Security

- The equipment must be used by previously qualified staff that knows how to operate it thanks to the user manual.
- Put the equipment on top of a horizontal, plane and stable table making a free space around so as the ventilation grilles are completely free of obstructions.
- Follow all required applicable laws about safety and health (electrical security devices, inflammable, toxic and/or pathological products, etc.).
- Do not put the equipment near any warm supply (burners, blowlamps...), nor expose it directly to the sun, etc. Avoid the presence of flammable or toxic products in the working area.
- During operation dangerous materials such as flammable or pathological substances must be out of the working area.
- When you are not using the equipment for a long period of time please make sure it is unplugged from the net in order to avoid possible accidents.
- It is essential to have the equipment switched off and unplugged from the net before cleaning, checking components or replacing any piece (e.g. replacement of a fuse).
- Never try to repair the equipment by yourself, since you will lose the warranty and may provoke damages to the general operating system or the electrical installation, as well as injuries to the people that usually handle the equipment (burns, hurts...).
- Try not to spill any liquid on the control panel, though it is properly insulated. In case you have any doubts do please immediately unplug the equipment (see Maintenance).
- Made under the European regulations for electrical security, electromagnetic compatibility and security on machines.

5. MAINTENANCE AND CLEANING

To get the best results and a higher duration of the equipment it is essential to follow the processes of use.

Note: All the processes of use mentioned below will not have any value unless you keep a continued and careful maintenance.

- Please follow the processes of use of this manual.
- This manual should be available for all users of this equipment.
- Always use original components and supplies. Other devices can be similar but they can damage the equipment.
- Process with caution to avoid the damage of the cables or other components.
- The equipment is supplied with a standard Schuko wire. It has to be plugged to an earth connection and the socket should be handy and ready to unplug the equipment in case of emergency.
- Never try to repair the equipment by yourself, since you will lose the warranty and may provoke damages to the general operating system or the electrical installation, as well as injuries to the people

that usually handle the equipment (burns, hurts...) or damages in nearby equipments.

■ In the event of breakdown please contact your distributor to overhaul through Nahita Technical Assistance Department.

Cleaning

- Never use scourers or substances that can grate for cleaning metallic parts such as stainless steel, aluminium, coatings, etc. as they damage the incubator and produce an early ageing of the equipment.
- Use a fluff-free cloth dampened with soaped water that does not contain abrasives.



ATTENTION!! IF EQUIPMENTS ARE NOT PROPERLY CLEAN AND DISINFECTED THEY WOULD NOT BE ALLOWED TO REPAIR BY OUR TECHNICAL SERVICE.

6. ACCESSORIES

REFERENCES FOR ALL STOVE SERIES PRIOR TO 03/2023

- Code JBG008: tray with guides for stove 30 L
- Code JBG009: tray with guides for stove 45 L
- Code JGB010: tray with guides for stove 65 L
- Code JBG011: tray with guides for stove 125 L

REFERENCIAS PARA TODAS LAS SERIES DE ESTUFAS POSTERIORES AL 03/2023

- Code JBG014: tray with guides for stove 30L
- Code JBG015: tray with guides for stove 45L
- Code JBG016: tray with guides for stove 65L
- Code JBG017: tray with guides for stove 125L
- Code JBG018: tray with guides for stove 230L



Instructions on environment protection

At the end of its life cycle, please, do not dispose of this equipment by throwing it in the usual garbage; hand it over a collection point for the recycling of electrical and electronic appliances. It does not contain dangerous or toxic products for humans but a non adequate disposal would damage the environment.

The materials are recyclable as mentioned in its marking. By recycling material or by other forms of re-utilization of old appliances, you are making an important contribution to protect our environment.

Please inquire at the community administration for the authorized disposal location.

7. INTERNAL PARAMETERS

To access the parameters and with the stove on, keep the FUNC key pressed until "LOCY" is displayed.

Enter password 8000 and FUNC key to confirm access INTERNAL PARAMETERS

P=20 I=100 D=20 R=20	These are parameters that are modified automatically at the time of auto-tuning. If you want to modify them, please contact the distributor to find out the correct way.
ALI=010.0	Over temperature alarm, factory preset at 10.0°C
ER=0001----- MODO CONTABILIZACIÓN DE TIEMPO	Change the way time starts counting. ER = 0001 – Time starts when you confirm the ST ER = 0000 – Time starts when the stove reaches temperature.
DP=0000	Mode with or without decimals, the factory default value is 0000 (without decimals), to change it to decimals the value must be 0001
PT=0020	Ratio of heating and disconnection seconds per minute. The user does not have to modify it..
SPL	Lower temperature limit. The user does not have to modify it.
SPH	Upper temperature limit defined depending on model. The user does not have to modify it.