

LC-3DPRINT BOX

Light Polymerisation unit (Post-curing oven)



Leading manufacturer of dental materials for 3D printing

Instruction For Use

LC-3DPrint Box

The following instruction is for professionals who want to use the NextDent™ LC-3DPrint Box as a light polymerisation unit (post-curing oven)

LC-3DPrint Box is used to dry and polymerize 3D printing objects which need an additional drying and polymerising process. This unit is equipped with 12 pcs of 18W lights in order to dry and fully polymerize the 3D printed objects.





STOP: READ ME FIRST. DO THIS AT INSTALLATION.

Check And Change Your Voltage If Needed

The LC-3D Print Box comes with a pre-set voltage from the factory that may require changing to align with your country specific voltage rating.



Note: No damage will occur to your unit if plugged into a different voltage than how the unit is configured.

For proper heater and light output, it is required to select the correct voltage. This is a one-time setting done at initial setup of your LC-3D Print Box.

Follow these instructions on how to change the pre-set voltage to your country specific voltage. Please see the Voltage Chart below to identify your country specific voltage.



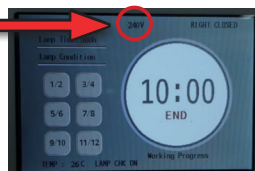
Note: If your country is not listed, choose the correct voltage from the pulldown list on the print box (see voltage list below).

Country	Voltage
US	120V
Germany	230V
Italy	230V
Spain	230V
UK	230V
Ukraine	230V
France	230V
UAE	220V / 230V
Taiwan	110V
Russia	220V / 230V
Czech Republic	230V

Country	Voltage
Australia	230V
New Zealand	230V
S. Korea	220V
Canada	120V
China	220V
Mexico	120V / 127V
Chile	220V
Turkey	220V / 230V
Portugal	230V
Morocco	220V / 127V
India	230V

Voltage Selection on Print Box

100V
110V/115V
120V/127V
220V
230V
240V



After print box is turned on, the pre-set voltage appears at lower right corner of welcome screen. It will also display on the main screen in the upper right corner.



If the voltage needs to be changed, Please follow these steps to adjust the voltage setting.

1.

Access the engineering mode display screen by pressing the Arrow “Up” and “Down” button together and hold for 3~4 seconds.
3.

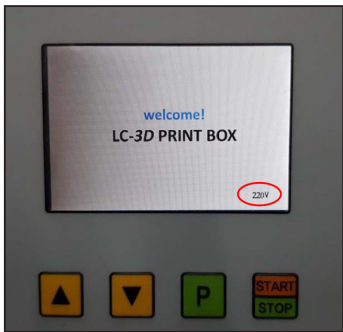
To save the voltage, turn off the LC-3D Print box using the power switch on right side of the print box.



2.

In engineering mode (*voltage appears in the top, middle of screen*), change voltage by pressing the 'P' button. Please wait until you see that the voltage has changed. Continue to press the “P” button until your country specific voltage rating appears.
4.

Once saved, the newly set voltage should appear on the Welcome screen when the unit is turned back on. This particular unit has been changed to 220V.



Specifications

Type of unit:	Light Polymerisation unit (Post-curing oven)
Model name:	LC-3DPrint Box
Rated Voltage:	AC110-240V 50/60Hz
Power Consumption:	Max. 264W
Fuse:	AC250V T5.0A
Dimension:	W410 x D440 X H380
Weight:	22Kg

General cautions

- Read this manual before use.
- This machine should be used by professionals only.
- The built-in safety mechanism should not be removed or modified.
- Do not allow unauthorized persons to repair the machine.
- Do not use this machine for any other kind of material than NextDent™ 3D printing Materials.

Package content

- NextDent™ LC-3DPrint Box
- AC Power cable (250V,10/16A)
- 6 pcs of UV18W lamps-71 colour
- 6 pcs of UV18W lamps-78 colour
- Metal plate with glass insert
- Instruction for use
- Electric diagram
- Declaration of conformity
- Warranty conditions

Transportation / preparing the site of machine

- For units weighing more than 18kg (units weight: 22kg), transportation unit like a pallet truck is needed and at least two persons are needed for transportation and installation.
- The surface should be flat and free of dust.
- Make sure there is enough space on all sides.
- Make sure that there is enough space between fan and wall.
- This unit is for indoor use only.

Environmental conditions

- Temperature and Humidity: 5~40°C / 80%
- Indoor use only

Steps for installation

- Please read instructions for use .
- Specifically read general caution including safety information.
- Connect all the lamps (12pcs) to all lamp sockets which are placed in the cover and the chamber.
- The recommended position of the supplied lamps (6pcs of 18W lamps-71color and 6pcs of 18W lamps-78color) is as shown in picture on the right.
- Please make sure of rated voltage and power supply (110-240V 50/60Hz). Only the supplied power cable can be used.
- Connect the power cable with connector plug to the power socket.

Safety warning label and symbol information & Safety information



- Do not touch live electric parts.
- Turn off power source and disconnect power cable before installing or servicing the machine.
- Turn off the machine when not in use.
- Do not use worn and damaged cables.
- Use only well maintained equipment.



- Keep away from children.
- Always turn off the machine before cleaning.
- Do not open the cover when machine is in use.
- Do not cover the fan at the back.
- Only use the machine with Figure 4™, Fab-Pro™, and NextDent™ 3D printing materials.
- Wear UV protective glasses.



- Do not touch the cover during operation, this cover warms up.
- Wear protective gloves.
- The longest program is for 30 min. the temperature inside the working chamber can go up to 80°C.



- Protective earth.



- Wear UV protective glasses.



- Caution! UV light hazard. Avoid eye and skin exposure. Wear proper eye and skin protection.



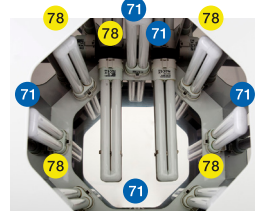
- Wear protective gloves.



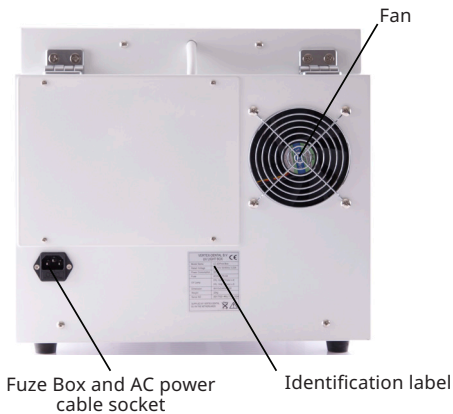
- Be aware of the potential dangers of lifting heavy loads. Ignoring this can lead to injuries.



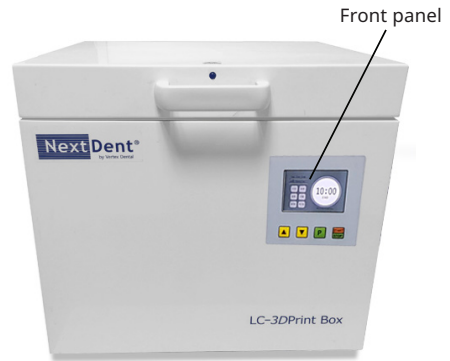
- This device may only be lifted and moved to its final destination for installation by two people.



Rear



Front



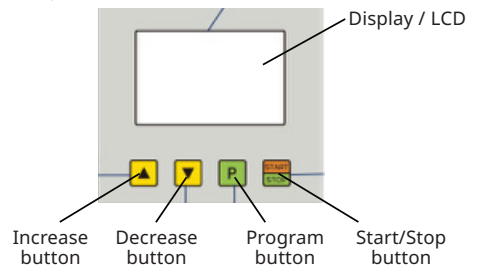
Fan

- The machine is equipped with a fan to cool down the inside and maintain a proper working temperature inside the machine.
- Fan operates when the machine is in use and cooling is needed.
- If the fan does not work the temperature will raise and ERROR1 will appear in the display. (see error message)

Fuse Box and AC power cable socket

FUSE AC50V T5.0A

Front panel



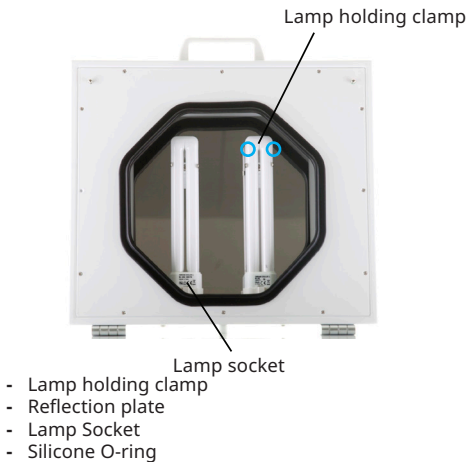
Side



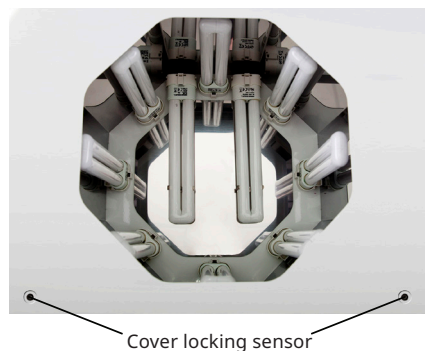
Description of function key

- START** Start/Stop button
Start / Stop button for starting and stopping operation.
- STOP**
- ▲** Increasing button
Button for increasing the operation time.
- ▼** Decreasing button
Button for decreasing the operation time
- P** Program button
Program button for choosing the pre-set programs.
(pre-set programs are: 10, 20 and 30 min)

Cover Inside



Chamber inside



- Cover Locking Sensor: sensor for opening and closing. The machine does not work when opened.
- Lamp holding clamp
- Reflection plate
- Lamp Socket

Metal plate with glass insert



Plate has two handles

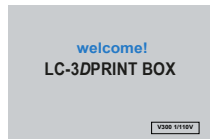
Operation

- Please put the bottom plate with glass insert inside the chamber and put a printed and cleaned object on the glass.
- Then operate the machine according to the following program operations and the instructions for use of the material used for printing the part.



Starting mode

Press the power switch (green button) on the right side of the machine.

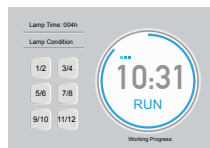


When switching on the machine, the version information will appear in the display.



After 5 seconds, the last operation time will appear on the display.

Operation Mode



When the last operation time has appeared on the display, the user can choose a preset time by holding the program button. Or the user can increase or decrease the operation time by pressing the increase or decrease button.



Start the machine by pressing the start/stop button. The time will count down and the dots will be blinking. (By pressing the start/stop button, the operation time will be memorized automatically).

Stop the machine by pressing the start/stop button again.

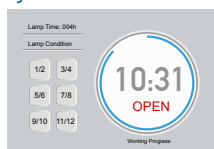
After operation time, the message "End" will be displayed automatically. At the same time, the machine beeps 9 times.

Maintenance

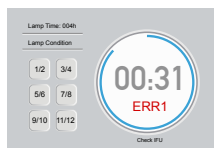
General instructions

- Repair or maintenance of the machine, must be carried out by qualified persons only.
- Any repair or maintenance must be carried out with official replacement parts supplied from the manufacturer/distributor.
- Before cleaning, please remove the power plug from the power supply.
- For cleaning, please use a soft cloth with mild cleaning agent.
- Operation of this machine must be done according to this instructions for use.

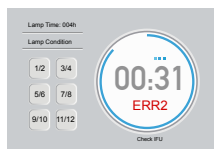
Error message by automatic self-checking system.



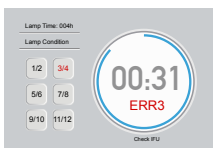
The message "OPEN" will appear on the display when a user opens the cover during operation. At the same time, the machine beeps three times.



ERROR 1: In case the temperature around ballast reaches over 60°C, the machine stops automatically and Err1 will appear on the display.



ERROR 2: When there is a problem with the temperature sensors, the machine stops automatically and Err2 will appear on the display. (contact distributor)



ERROR 3: If there is a defective lamp, numbers belonging to the defective lamp or lamps will change to red on the display. ERR3 & Check IFU message will also appear on the display. When operation time elapses, change the indicated lamps. Always replace both indicated lamps, to insure constant

UV output. This error will also occur if the voltage is not set to match the country supplied voltage.

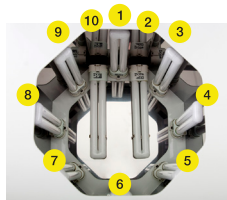


Please note that electrical/electronic units must be disposed off separately. Do not dispose with household waste. The black bar on the "garbage bin" symbol indicates that the unit was put into circulation after August 13, 2005. Please note that the unit is subject to regulation 2002/96/EC (WEEE) and applicable following national laws and must be disposed off accordingly. Please contact your dealer if the unit needs to be disposed of.

If error continues after replacing the lamps, the ballast must be replaced by a qualified person.

Lamp 1/2 = Ballast 1
Lamp 5/6 = Ballast 3
Lamp 9/10 = Ballast 5

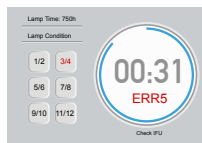
Lamp 3/4 = Ballast 2
Lamp 7/8 = Ballast 4
Lamp 11/12 = Ballast 6



71 Color Lamp: **1, 3, 5, 7, 9, 11**

78 Color Lamp: **2, 4, 6, 8, 10, 12**

Always change 2 lamps 71/78 together



ERROR 5: will appear if the the UV Lamps have burned for 750 hours. (Lamp time). Between the 740 and 750 hours burned the change all lamps message will appear in the display. Indicating that all lamps must be replaced before reaching 750h.

When the 750h burning time of the lamps is reached the machine will stop and beep, showing ERR5 The change all lamps message will appear. Replace all lamps with new ones according to the schedule above.

After changing the lamps reset the timer by pressing the decreasing button for 5 seconds.



The lamp time will now read 000h. Machine will be ready for use.

When replacing the lamps, always disconnect the power cable, or switch off the machine to prevent burns. Let the lamps cool down for several minutes before replacing them.

For more information, please contact:

Warranty Hotline from the Americas

+1 888.598.1438

+1 803.326.3930

Weekdays during normal business hours or by email at
Support-US@3DSystems.com

Warranty Hotline from Europe, Africa, and Middle East (EMEA)

+44 1442.279.839

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Weekdays during normal business hours or by email at
Support-EMEA@3DSystems.com.

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