

B9 Model Cure XL

LED Light Curing Machine



Instructions for Use



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Dear Customer,

Thank you for choosing the B9 Model Cure XL.

A lot of research & developments have gone into the manufacturing of this product. We sincerely hope that it will give you many years of trouble-free use. Please read and understand all the instructions before using this equipment.

Save these instructions for use for your reference.

The instructions for use are subject to change without further notice.



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1. Symbols Used

1.1 In these instructions for use



Warning

Indicates a potentially hazardous situation that could result in serious injury or death.



Caution

Indicates a potentially hazardous situation that may result in minor/moderate injury or damage of property.

1.2 On the product / packaging

SN	Serial number	REF	Catalogue number
	Manufacturer	~~ <u></u>	Date of manufacture
10°C -40°C	Temperature limits	[]i	Consult the Instructions for use
95%	Storage humidity range	-106kPa 50kPa	Atmospheric pressure for storage
CE	CE marking	Ť	Store in a dry place
4	Danger Electricity		Hot Surface

2. Safety Information

2.1 Installation and connection



- Please install the product at least 5 cm away from the wall. In addition, do not place any objects above the product. Please keep the product away from any heating appliances. Overheating the product may cause fire and/or electrocution.
- Do not block the ventilators on the left, right, and back side of the product. Blockage may cause fire and/or breakdown because of rises in the inner temperature of the product.
- Keep the product at a location away from water.
- Keep the product at a location without excess humidity and temperature.
- Do not keep the product at a location for chemicals or a location where gas is released.
- Do not keep the product at a sloping location. Do not shake or impact the product.
- Use only AC100-240 V power-supply voltage. Using the wrong voltage input may cause fire and/or electrocution.
- Do not place heavy objects on the power cord. Damage to the cord may cause fire and/or electrocution.
- Do not disassemble this product. Unauthorized disassembly of this product may cause electrocution and/or breakdown.
- Do not damage, bend, twist or pull the power cord. Doing so may cause fire and/or electrocution.
- Ensure earthing of terminal outlet and power socket. Electricity leak in the main unit might cause electric shock and/or fire.
- Pay attention to the frequency of the power supply/power voltage and allowable current value (or consumed power.)

2.2 Operation



- This product should be operated by qualified people only.
- If the product is in an unnormal state, such as emitting smoke and/or making irregular noise, please switch off the power switch immediately.
 Pull out the plug and contact the distributor.
- If water leaks inside the product, switch off the power switch immediately. Pull out the plug and contact the distributor. Continuing to operate this product may cause fire and/ or electrocution.
- Never touch the power plug with wet hands to avoid electric shock.
- Never handle any liquid or metal power in the curing chamber to avoid electric shock or fire caused by internal circuit failure.
- Do not disassemble this product. Unauthorized disassembly of this product may cause electrocution and/or breakdown.

Caution

- Do not look inside the product during operation.
- Do not push the Start-Stop button while the door is opened.
- Do not operate the product when the door is opened, as it may cause damage to your eyes.

2.3 Maintenance



- If this product is dropped, broken or damaged, switch off the power switch. Then pull out the plug and contact the distributor. Continuing to operate the product may cause fire and/or electrocution.
- Be sure to pull out the plug when maintaining the product.
- When moving the product, please switch off the power switch and pull out the plug.
- When pulling out the plug, do not pull out the power cord.
- When checking, wiping or replacing fuses, always turn off and unplug the unit. Leave the unit off for at least 10 minutes to ensure that the unit has cooled off completely.



- Remember to have regular inspections of the equipment and parts.
- If the product will not be used for a long time, please pull out the plug for safety.

3. Product Information

Save time

Fast-curing High-power LED, broadband LED, save fabricating time.

Save money

Stable and high power LED with constant current circuit, avoid the cost and hastle of replacing UV fluorescent light tube.

Multiple functions

Users can set up the curing details easily to gain process efficiencies by Intensity Duty-Cycle Timer (IDT) settings.

· Post-curing for 3D printing

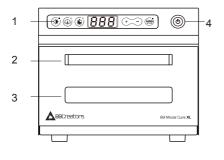
High-power Ultra Violet A (UVA) LEDs is included, which results in a quick and uniform curing cycle.

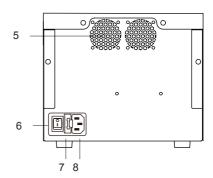
3.1 Indications for use

This product is a light curing machine for laboratory and professional use only.

4. Package And Part Name

4.1 Part name

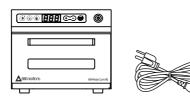




- 1 Operation Panel
- 2 Handle
- 3 Door
- 4 Power Button

- 5 Cooling fan
- 6 Power Switch
- 7 Fuse
- 8 Outlet

4.2 Components





Description	Quantity
B9 Model Cure XL	1
Power cord	1
Instructions for use	1

5. Functions

5.1 Instruction for touch panel



- 1 Adjust the light intensity from Level 1 to Level 16.
- 1 Adjust the duty cycle (See chapter 5.2) from Level 1 to Level 10 (consistent brightness)
- 2 Display: Indicate numerical value and remaining seconds.
- +: Increase the level of intensity, duty cycle and working time. Hold and press the button to fast-forward.
- : Decrease the level of intensity, duty cycle and working time. Hold and press the button to rewind.
- $\frac{START}{STOP}$: Start and stop curing

5.2 IDT (Intensity Duty-Cycle Timer) settings

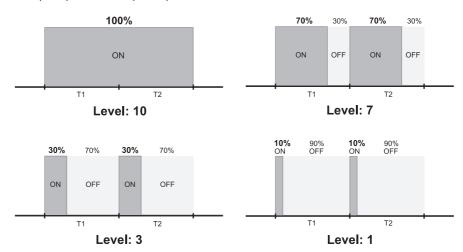
• Intensity Setting

Depending on the strength, thickness, and shape of the material, operator can set the light intensity from Level 1(lowest) to Level 16(strongest). Intensity range: 7018 –112295 mW/cm² when LED current at 43.8-700mA.

Suggestion: When curing flat and/or thin material, lower the intensity level with longer timer to optimize the overall strength of the material.

Quality Cycle

Duty cycle is the ratio between pulse duration and the period (the picture below shows the difference between each cycle). Depending on the shrinking rate of the material, operator can set the duty cycle from level1 (10%) to level 10 (100%).



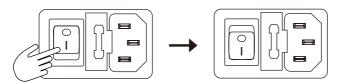
Suggestion: When curing small and/or thin material, lower the duty cycle level to reduce the shrinkage and deformation rate.

Curing Time

Set the time between 5 seconds – 9:55 minutes with 5-second intervals, and set the time between 10 minutes – 30 minutes with 1-minute intervals.

5.3 Basic Operation

1. Turn on the Power Switch.



- 2. Press to power on.
- 3. Press 🖫 🚯 🐞 to set up IDT.
- 4. Press START to cure.

5.3.1 Pause curing during the operation



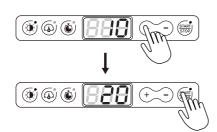
Press $\frac{START}{STOP}$ to pause curing.

The $\frac{\text{START}}{\text{STOP}}$ button will start flashing when paused.



Note, curing will be paused once the door is opened. The $\frac{\text{START}}{\text{STOP}}$ button will start flashing as well.

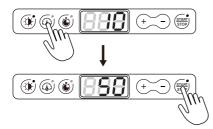
5.3.2 Increase/decrease curing time when pausing curing



Press + to increase or press - to decrease curing time.

After adjusting the curing time, press $\frac{\text{START}}{\text{STOP}}$ to restart.

5.3.3 Reset IDT when pausing curing



Press the buttons to reset IDT setting.

After resetting, press $\frac{\text{START}}{\text{STOP}}$ to restart it

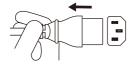
5.3.4 Memory mode

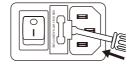
- 1. Make sure the power is on
- 2. Press 🏠 🚯 🐞 to set up the terms of curing.
- 3. Hold and press the button **(a)** . After hearing 2 beeps, the system will memorize the IDT setting and save it as the new default.

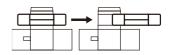
6. Troubleshooting

Trouble	Possible Cause	Measures
Time display does not light up even if the power switch is turned on.	Blowout of fuse.	Replace with new fuse. Contact our customer service if the problem persists.
LED does not light up even if the START is pressed.	Door is not closed correctly.	Ensure the door is closed properly.
Er1	Overheat	Immediately turn off the unit. Contact our customer service and mention the error number on the display.

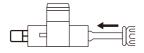
6.1 Instructions for fuse replacement

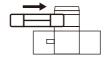






- Before replacing the fuse, turn off the power switch and pull out the plug.
- 2 Use flat head screw driver to unclench the cover shown above.
- 3 Take the fuse out.







- 4 Take out spare fuse at the bottom.
- 5 Change the fuse.
- Put the fuse cover back.

^{*} Please replace the fuse if the panel indicator does not work. Be sure to pull the power cord before replacement. After replacement, if there's still a problem with the panel indicator, please contact customer service for repair.

7. Maintenance And Cleaning

- Remember to have regular inspections of the equipment and parts.
- In case of malfunction, do not attempt to repair the product by yourself.
 Contact customer service for repair.
- Before maintenance, switch off the power swtich and pull out the plug.

7.1 Cleaning inner chamber

- 1- When the inner chamber gets dirty, clean it with soft cloth with alcohol or cleaner.
- 2- If resin adheres to any part of the curing chamber, please remove it prior to next curing.

7.2 Cleaning outer case

- 1- Do not use organic solvent including benzene and thinner to clean.
- 2- Gently wipe the unit with a soft cloth with alcohol or cleaner.

8. Product Specification

Type of Information	Specifications
Device name	LED Light Curing Machine
Model name	B9 Model Cure XL
Power input	AC 100-240 V / 50-60 Hz
Power consumption	70 W
Fuse	2 A
Quantity of LEDs	25
Wavelength of LEDs	375~470 nm
Curing time	5 seconds - 30 minutes
Dimensions	L200 x W220 x H160 mm (max)
Weight	3 Kg
Operating environment	Indoor use only. Ambient temperature: Relative humidity: 30% Atmospheric pressure: 0.5-atm -1.0-atm -1.0-atm -1.0-bepa
Storage and transport environment	Ambient temperature: Relative humidity: 10°C 10°C 50°F 104°F Atmospheric pressure: 0.5-atm 50kPa

9. Warranty

B9Creations, LLC. warrants the product to be free of manufacturing defects for a period of one year from the date of purchase; this is deemed as the date of the invoice. In the case the machine malfunctions under normal use, contact B9Creations for the return process. Repairs must be only carried out by B9Creations. If repairs or disassembly during warranty period are not carried out by B9Creations, warranty will expire immediately. The following are expressly excluded from the warranty:

- Damage and/or failure of the equipment caused by falling and/or jolting during transportation after purchase and/or during the normal use.
- Damage and/or failure of the equipment caused by natural disasters, such as earthquakes, floods, lightning, pollution, incorrect electrical voltage and voltage spikes.
- 3. Any attempts to change or re-model the product will invalidate the warranty.

10. Declaration Of Conformity

Manufacture	Made inTaiwan
Safety	IEC / EN 61010-1 3rd : 2010
EMC	EN 61326-1:2013

11. Document History

Edition	Date	Comments	
А	2020-05-21	Released	
В	2020-08-31	Update the "Power Switch"	
Б	2020-06-31	icon	