

Duradent®

Instructions for Use (IFU)

UV Light Curing Unit

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Product Name:

UV Light Curing Unit for 3D Print Models (Model: Duradent DP-UVLC20405-001)

Intended Use:

Duradent UV Light Curing Unit (Model: Duradent DP-UVLC20405-001) is designed for post-curing 3D printed models made from UV-sensitive resins. It delivers consistent and even exposure to ultraviolet (UV) light, ensuring thorough curing for enhanced strength and detail refinement of printed models.

Target Users:

This device is intended for professional use by dental technicians, 3D printing professionals, and others who work with UV resin-based 3D models.

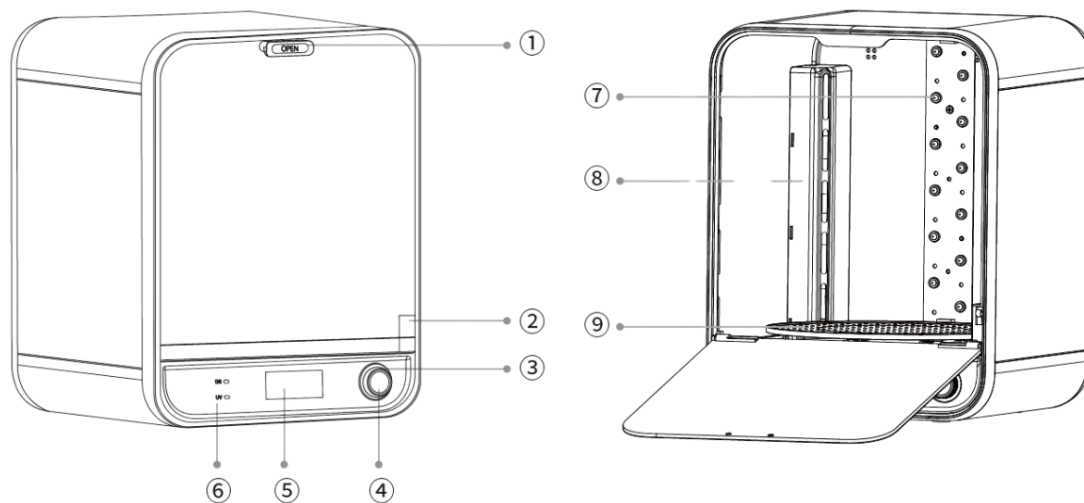
1. Components of the UV Light Curing Unit

The package includes the following components:

- 1 x UV Light Curing Unit (Model: Duradent DP-UVLC20405-001)
- 1 x Power Adapter (EU plug)
- 1 x User Manual

Please verify that all components are included before use. Contact the manufacturer if any items are missing or damaged.

2. Parts Description



- Door Handle (1)
- Safety Switch (2)
- LED Aperture (3)
- Rotary Switch (4)
- Digital Display (5)
- Mode Indicator (6)
- UV Light (7)
- Air Duct (8)
- Turntable (9)

3. Safety Precautions

Before using the UV Light Curing Unit, please read and follow these safety instructions:

1. Electrical Safety:

- Ensure that the unit is connected to a grounded electrical outlet.
- Always use the provided power adapter. Using non-original power supplies may result in damage that is not covered by the warranty.
- Do not operate the unit if the power cord or plug is damaged. Disconnect the power before cleaning or servicing.

2. UV Exposure Safety:

- UV light can be harmful to skin and eyes. Do not look directly into the light while it is in operation.
- Ensure that the curing chamber is properly closed during operation to prevent UV light leakage.

3. General Safety:

- Ensure the curing chamber is placed on a stable and level surface during use.
- Do not use the curing oven near water or in damp environments.
- The unit is designed for curing 3D printed models only. Do not use it for other purposes.

4. Device Setup and Installation

1. Placement:

- Place the UV Light Curing Unit on a flat, stable surface near a grounded power outlet.
- Ensure that the area is well-ventilated, dry, and free from excessive dust or moisture.

2. Power Connection:

- Plug the provided power adapter into the DC input port located at the back of the curing oven.
- Plug the adapter into a suitable electrical outlet (AC 100V~240V 50Hz/60Hz).

3. Turntable Installation:

- Place the removable turntable inside the curing chamber to facilitate even curing of models. Ensure it is securely placed on the rollers.
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5. Operation Instructions

Step 1: Preparing the 3D Printed Model

- Ensure the model has been fully printed and cleaned of any uncured resin residue.
- Dry the model using compressed air or natural drying methods. For optimal results, take advantage of the oven's **Rapid Air Drying** feature, which can reduce drying time by up to 60%.

Step 2: Placing the Model in the Curing Chamber

- Place the model on the turntable inside the curing chamber.
- Ensure the model fits within the curing space.

Step 3: Setting Wind Speed and Curing Time

- Select the desired wind speed for the air drying process (low, medium, or high) depending on the material and size of the model. The adjustable wind speeds ensure that different materials and project needs are met.
- Set the curing time based on the model's size and resin type. Refer to your resin manufacturer's guidelines for optimal curing time.

Step 4: Starting the Curing Process

- Close the chamber door to ensure proper UV light containment.
- Press the "Start" button to initiate the curing process. The unit will automatically rotate the model on the turntable to provide **360° curing** with **20 UV lamps** (4 at the top, 4 at the bottom, and 12 along the sides).
- Monitor the curing process through the transparent door if necessary. Ensure proper ventilation during operation.

Step 5: End of the Cycle

- Once the curing process is complete, the unit will automatically stop.
- Open the door and carefully remove the cured model from the turntable.
- If additional curing is required, repeat the process until the desired curing result is achieved.

6. Post-Use Maintenance

1. Cleaning the Chamber:

- After each use, allow the chamber to cool before cleaning.
- The turntable is removable for easy cleaning. Clean the turntable and interior surfaces with a soft, damp cloth. Avoid using abrasive cleaners.

2. Power Disconnection:

- Unplug the power adapter from the outlet and disconnect the DC input from the unit if not in use for extended periods.

3. Storage:

- Store the UV Light Curing Unit in a dry, well-ventilated area.
 - Ensure the unit is covered to protect it from dust and debris when not in use.
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7. Troubleshooting

Problem	Possible Cause	Solution
Unit does not turn on	Power adapter not connected or faulty	Check the connection and ensure the adapter is plugged in correctly
Incomplete curing	Model too large or improper curing settings	Ensure the model fits within the specified curing space and adjust curing time accordingly
Turntable not rotating	Turntable improperly placed or overloaded	Ensure the turntable is properly seated on the rollers and the model weight does not exceed 2kg
Excessive noise during operation	Loose components or fan issue	Ensure all parts are properly installed and contact support if necessary

For further assistance, please contact Customer Support.

8. Warranty and Service

The UV Light Curing Unit comes with a **1-year warranty** from the date of purchase. The warranty covers defects in materials and workmanship under normal use. Damage caused by improper use, use of non-original power supplies, or failure to follow these instructions is not covered under the warranty.

For warranty claims or service inquiries, please contact us at info@erkdigital.com.tr.

9. Disposal Instructions

At the end of its life, dispose of the UV Light Curing Unit in accordance with local electronic waste disposal regulations. Do not dispose of household waste.

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