

# 3D Printer DIO PROBO

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## User Guide

Maximizing the clinic operational excellence



# 3D Printer **DIO PROBO**

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## User Guide



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## GREETINGS

Thank you for purchasing 3D Printer DIO PROBO.

DIO offers Total Digital Solution for various digital treatments.

With 3D Printer DIO PROBO, you can output high-quality prosthesis quickly with DLP method to increase productivity and efficiency.

This manual is designed to help you operate your printer.

 Caution: Please familiarize yourself with this manual before operating DIO 3D Printer.

# 1. General Information

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Applications

Workflow

CAMbridge Software



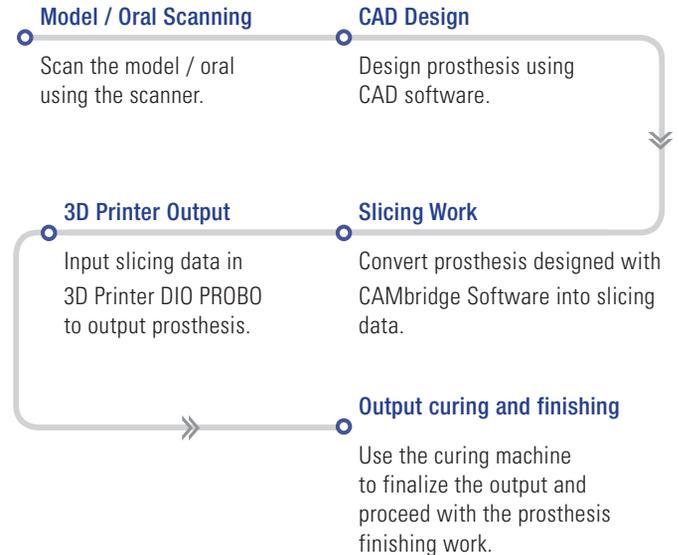
## Applications

3D Printer DIO PROBO can be used for following applications.

- Dental Models
- Ortho Models
- Temporary Crown & Bridge
- Surgical Guides
- Casting Patterns
- Complete Dentures

## Workflow

3D Printer DIO PROBO is designed to streamline the work to improve the quality and productivity of the prosthesis. Intuitive and user-friendly programs help you get things done quickly.



## **CAMbridge Software**

Slicing Software CAMbridge optimizes the use of 3D Printer DIO PROBO maximizes production efficiency through automated functions that enable optimal placement and support creation with simple operation.

## 2. Before use

Unpacking and Installation

Product Specifications

Box Contents

3D Printer  
**PROBO**



**DIO**

## Unpacking and Installation

The DIO PROBO box contains all the accessories to use printer. It is also specially packaged for the purpose of protecting the printer and accessories during transportation.

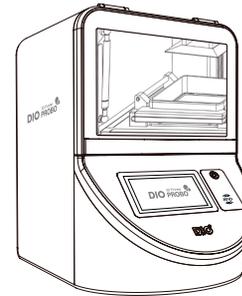
⚠ Caution: When opening the box, please check if there are any accessories that are not included and check with your supplier for accessories not included.

## Product Specifications

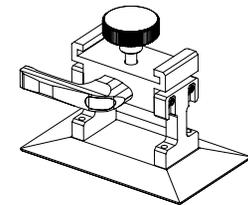
Dimension	350 x 550 x 330 mm
Build Size	124.8 x 70.2 x 70 mm
Light Modulator	DLP (FHD: 1920 x 1080 Pixels)
Light Source	UV LED (405 nm)
Data Connection	LAN or Wifi
Material Confirm	RFID
Resolution(axis)	XY 65 $\mu$ m / Z 100 $\mu$ m
Weight	30 kg

## Box Contents

### Basic Packing



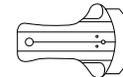
① DIO PROBO



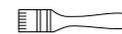
② Build Plate



③ Vat



④ Scraper



⑤ Brush



⑥ Funnel



⑦ Tray



⑧ Cutting nipper



⑨ Silicone Spatula



⑩ Power cable & external adapter

# 3. Installation

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DIO PROBO Installation

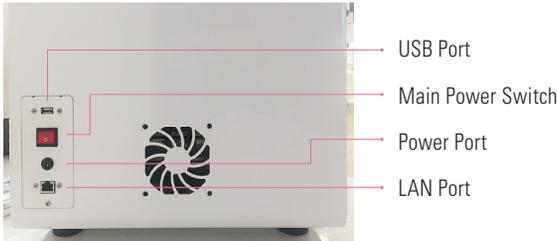
Precautions

3D Printer  
**DIO PROBO**



# DIO PROBO Installation

## Product Connection Guide



### ① Connet the power cable.



### ② Turn on the power switch on the back of the 3D Printer.



# Precautions

## General precautions

Only qualified persons should use machine.

## Installation precautions

- Install the machine in a place unexposed to water, high air pressure, high temperature, high humidity, dust, salt, ions, and other environmental factors.
- Take care to protect your 3D printer from external hazards. (e.g. sloped surface, vibrating surface, etc.)
- Do not install the machine in a chemical storage area, or any place where there are gas emissions.
- Take special care regarding power frequency, voltage, and allowable current (or power consumption).

## Precautions before using the machine

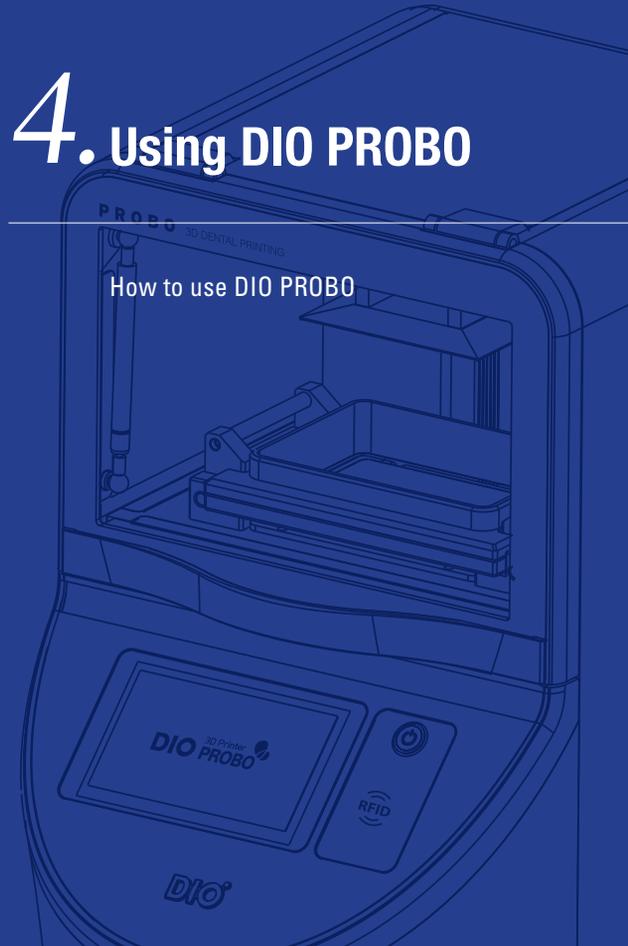
- Do not shock or vibrate the machine during use.
- Do not turn the printer off while using 3D Printer.
- If there is smoke or a strange smell, immediately turn off the power switch, disconnect the power cord, and contact the manufacturer.
- Remove the power cord from the machine if not in use for an extended time.
- All repairs should be done by the manufacturer or a DIO approved repair center. Users should not disassemble their 3D printer. Doing so will void the warranty.
- Do not modify this machine for any reason.

## Precautions when using

- When you print out the object, you may get a distinctive smell from the resin, Please install it in the well-ventilated place.
- Do not use volatile objects near the 3D printer as they may cause fire or explosion.
- When moving the 3D printer, be sure to completely shut off the 3D printer, and then remove the vat and move it so that the liquid resin in the vat does not overflow or run.
- If the printer is on, do not turn off the power switch located on the back of the printer. This forced termination shortens the life of the printer engine and can cause mechanical failure.
- If foreign objects such as water or other liquids, metal chips, or other conductive material are flowed in the 3D printer, it may adversely affect the 3D printer, such as mechanical malfunction. In addition, since there is a risk of electric shock, do not operate with wet hands, but wear nitrile gloves and use the 3D printer.
- If the 3D printer power cable is pulled or stepped on a rough surface and it is damaged, a spark or voltage malfunction may occur. In addition, if a lot of current flows through a wire or an outlet, there is a risk of fire due to overheating.
- If you disassemble or modify the 3D printer artificially, the warranty benefits will be voided and you will be held liable for the problems caused by the product.
- If you have any inquiries regarding technical support or warranty, please contact to DIO corporation.

# 4. Using DIO PROBO

How to use DIO PROBO



## How to use DIO PROBO

### ① Turn on the power switch



- > Press the **'Power'** button on the right side of the equipment.
- > Wait for the next screen after loading screen appears.

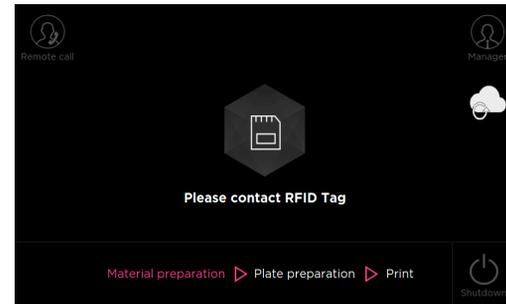


Loading screen

### ② Material recognition

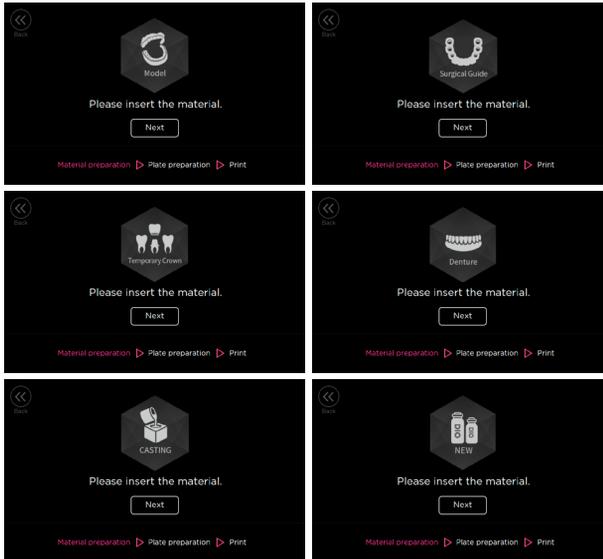


- > Touch the material container lid to the **'RFID'** mark.
- > After recognizing the type of material, wait for the next screen.



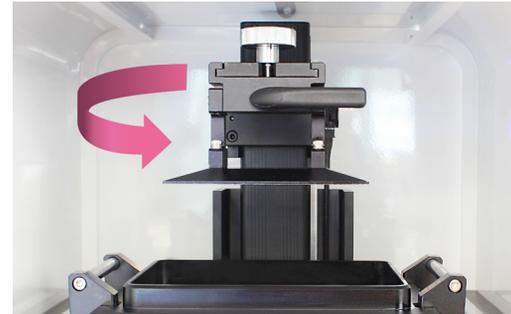
Material recognition screen

### ③ Material input

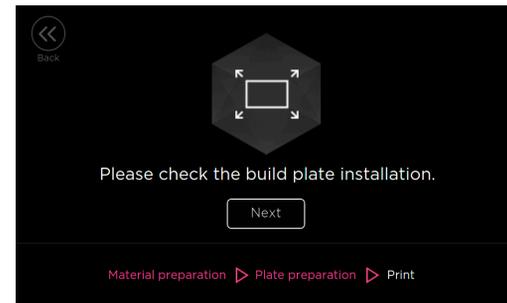


- > Put the recognized material into **the vat**.
- > **'OK' button** and proceed to the next step.

### ④ Fastening build plate

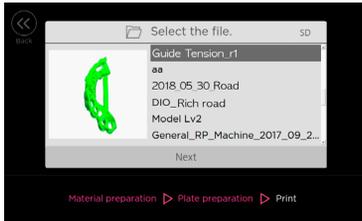


- > Align the build plate with the groove and **push it all the way in**.
- > Make sure that the build plate is pushed all the way, and fix **the silver bolt by turning clockwise**.
- > Confirm the fastening of the build plate, press the **'OK' button** on the screen, and proceed to the next step.

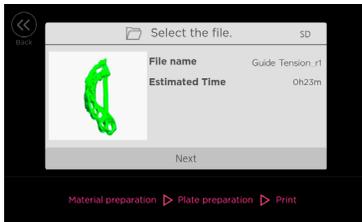


Build plate preparation screen

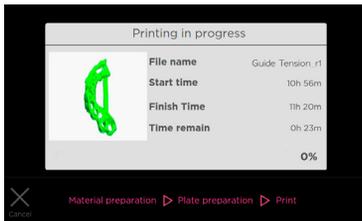
### ⑤ Select output file



> Select the file you want to output and press the 'OK' button.

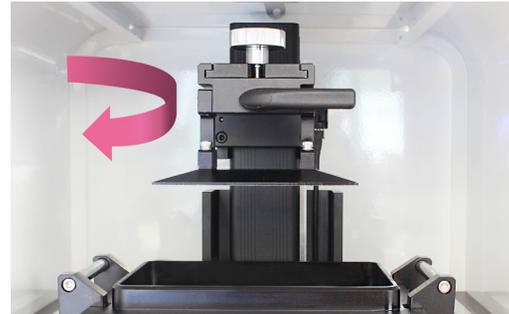


> Check the output file name and output time and click 'OK' button.



> The output starts and you can see the progress of the output.

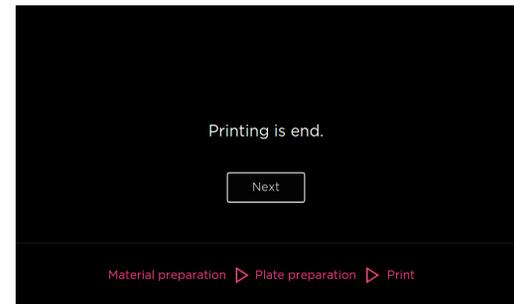
### ⑥ Disjoint build plate



> When the output is completed, press the 'OK' button.

> Turn the bolt of the build plate **counter clockwise** to dismantle the build plate.

> Process post-processing of output.

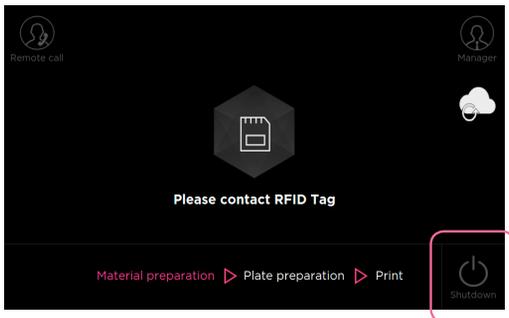


Output completion screen

## ⑦ Terminate Equipment



> Press the **'Shut down'** button on the bottom right.



Shutdown button

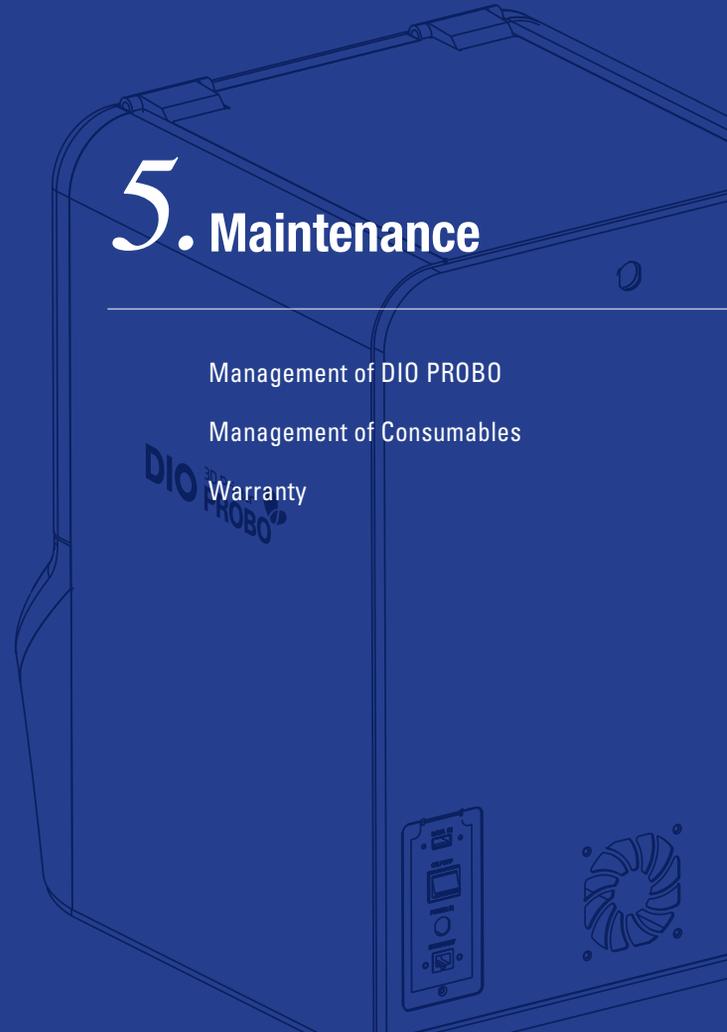
# 5. Maintenance

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Management of DIO PROBO

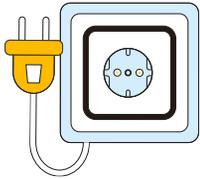
Management of Consumables

Warranty  
DIO PROBO

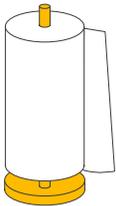


## Management of DIO PROBO

It is important to maintain well in order to use the printer for a long time. In this regard, we will guide you through how to manage 3D printers and consumables.



- If you do not use the printer for a long period of time, you can store the printer in a shady place after removing the power cable from the printer.



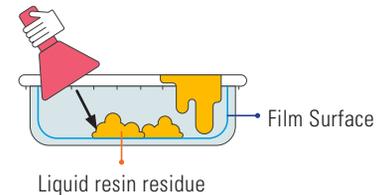
- If the resin falls or flows into the printer, wipe the industrial wiper with alcohol.

## Management of consumables

Consumables related to the printer include a vat, liquid resin, and basic components.

### Vat management

- If you want to remove the used liquid resin and use another liquid resin, you should completely remove the liquid resin remaining in the existing vat and wipe the remaining liquid resin completely using an industrial wiper.
- If you use a tissue other than an industrial wiper to wipe the liquid resin, dust will get into the vat and affect the output. Mixing with water or other types of liquid resins can adversely affect print quality.

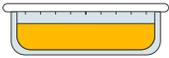


- **In case there is a residue on the vat**
  - The rubber spatula included in the basic components can be used to remove debris.
  - When removing the residue using a rubber spatula, be careful not to damage the film surface of the vat.

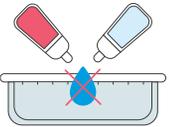
## Liquid resin management



- Liquid resin is vulnerable to sunlight or various light. Always keep it in a shady place where it is not exposed to light, so it can be used for a long time.



- Liquid resin remaining in the vat is stored in a plastic container using a funnel.



- Please do not mix with other types of liquid resin.

## Liquid resin waste treatment guide

### Liquid resin waste

- It should be handled by the waste disposal company.

### Output cleaning wastewater

- If there is a purification unit in the building, it may be disposed in a drainage port, but if there is no purification unit, it must be entrusted to the waste company.

## Warranty

For the warranty to be valid for a(1) year from the date of sale. This warranty does not cover consumable products such as and defected products arising from customer's mistakes, incautious treatment of product.

Please call to DIO coporation when you have any inquiries on technical support.





**DIO** 3D Printer  
**PROBO**  
[www.dionavi.com](http://www.dionavi.com)