



DEPRAG PL7 Integrated Light Source LCD 3d Printer User Manual

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DEPRAG PL7 Integrated Light Source LCD 3d Printer



Product Information

The PL7 is a dental digital and intelligent 3D printer designed by DEPRAG. It is an integrated LCD light curing 3D printer that combines high-precision technology and materials. The printer utilizes both DLP 3D printer technology and LCD 3D printer technology to provide advantages in dental ultra-wide 3D printing. It is known for its performance as an LCD light curing 3D printer, making it the top choice in the market.

Applications

- **Fixed Restoration**

- Temporary Crown
- Inlay
- Veneer
- Temporary Crown Bridge

- **Implants**

- Tooth-supported Surgical Guide
- Mucosa-supported Surgical Guide
- Bone-supported Surgical Guide
- Temporary Denture

- **Orthodontics**

- Record keeping dental model
- Water-washed orthodontic dental model

**Features:**

- Up to 95% light uniformity, eliminating the need for frequent light source changes
- Integral LCD light source with longer service life and increased printing accuracy and efficiency
- ACF-3D Nano-release Technology for smoother and tighter mold production
- Double linear guide rail + roller screw for uniform distribution of light intensity and stable production
- 8.9 inch B&W LCD Screen with high resolution and faster printing speed
- 8x Anti-aliasing + Sub-pixel Compensation Algorithm for smoother surface quality and stable printing accuracy
- Built-in air purification system for a comfortable working environment

Accessories:

The PL7 comes with the DEPRAG 3D BOX, a self-developed slicing software that is simple, convenient to operate, and easy to use.

Product Usage Instructions

1. Oral Scan: Perform an oral scan of the patient's dental structure using appropriate scanning equipment.
2. Treatment Plan Design: Use dental software to design the treatment plan based on the oral scan data.
3. Printing: Load the design file into the PL7 3D printer and start the printing process. Ensure that the printer is properly calibrated and the necessary materials are loaded.
4. Cleaning and Curing: After the printing is complete, remove the printed object from the printer and clean it using appropriate cleaning methods. Cure the object using a suitable curing method to ensure its durability.

5. Delivery: Deliver the printed object to the intended recipient or use it for further dental procedures as required.

By using the PL7 and its perfect partners, you can save time costs, material costs, and labor costs while achieving practical, efficient, and ideal digital and intelligent solutions for your dental 3D printing needs.

Digital& Intelligent 3D Printing Solutions

PL7 is DEPRAG focus on dental digital& intelligence needs to create a new integrated LCD light curing 3D printer, the equipment design using high-precision technology and materials, both DLP 3D printer technology and LCD 3D printer technology advantages, can meet the needs of dental ultra-wide 3D printing, is the first choice for the performance of LCD light curing 3D printer.



Oral Scan



Treatment Plan Design



Printing



Cleaning and Curing



Delivery

Saving time costs, material costs, labor costs, PL7 and its perfect partners will provide you with a practical, efficient and ideal digital & intelligent solution for your dental 3D printing.



Up to 95% light uniformity, no need for frequent light source changes

The Integral LCD light source solves the problem of poor light uniformity of traditional matrix LCD light sources, the PL7 offering up to 95% light uniformity thus PL7 has more accurate printing results. In addition, the technology increases the life of the light source significantly, eliminating the need for frequent light source replacement.

Integral light source

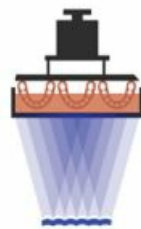
- Longer service life
- Advantages of both LCD and DLP

- High performance cost ratio



Conventional LCD matrix light sources

- Poor light uniformity
- Frequent light source changes
- Lower printing accuracy and efficiency



For accurate and efficient printing

ACF-3D Nano-release Technology

Innovative ACF-3D Nano-release technology which greatly reduces the resistance when draft the mold, Improve the print speed and the accuracy. Its surface is smoother and tighter, which can better resist the influence of tensile force, and meet the needs of dental personalized high-precision production.



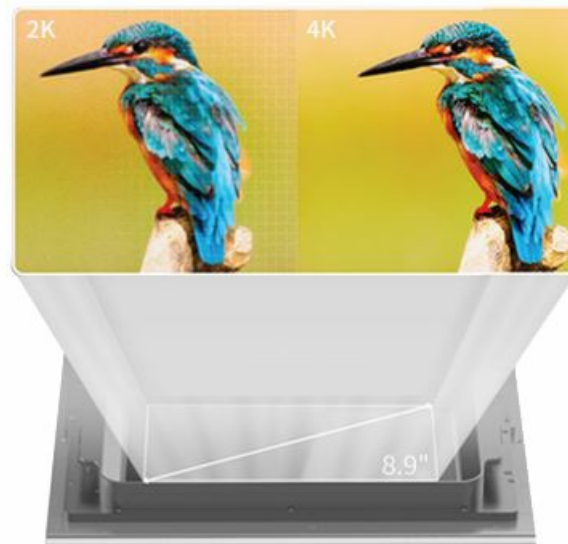
Double linear guide rail + roller screw

Light strength is controlled by layer after layer, plus fine-tune the image with pixel-by-pixel compensation by the compensation picture, result in uniform distribution of light intensity on the projection surface, thus ensuring the stable and efficient production of large-scale terminal mold products .



8.9 inch B&W LCD Screen

Large-size and new black and white monochrome imaging display technology, 4K HD resolution, higher light transmittance than ordinary color LCD screen, higher service life, faster printing speed.



8x Anti-aliasing + Sub-pixel Compensation Algorithm

The self-developed sub-pixel compensation algorithm can make the mold have a smoother surface quality and have a more stable printing accuracy than the traditional LCD algorithm.



A more comfortable working environment

PL7 is equipped with a new built-in air purification system which can purifies odors produced by unformed resin consumables during the printing process, ensure the safety of work, and provide a comfortable working

environment.



DEPRAG 3D BOX

Self-developed slicing software DEPRAG 3D BOX is simple and convenient to operate, easy to use.



Light Curing & Cleaning Integrated Machine

The innovative design of DEPRAG's light curing and cleaning integrated machine, realizes the streamlined upgrade of cleaning and secondary curing steps, which is more convenient and quicker, and saves you a variety of hidden costs.



Resin Consumables



After forming tasteless, smooth surface
The hardness is better than most resin material in the market, not easy to deform easy to store.

Release Film

The ACF release film has a relatively ideal service life and can be replaced within 5 minutes.

Product Parameter

PL7	
Compatible Resin	405nm wavelength photosensitive resin, compatible with third-party resins
Printing Size	192*120*100mm
Resolution	3840*2400pixels
Touch Screen	5 inch color screen
Anti-Aliasing	8x Anti-Aliasing
Z axis type	Double linear guide + ball screw
printing speed	1-4S/layer, 60mm/h
Print layer thickness	0.025mm-0.1mm
XY axis accuracy	50μm
Rated power	250W
Equipment Size	432*292*456mm
Equipment weight	19KG



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Documents / Resources



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 PL7 Integrated Light Source LCD 3d Printer, PL7, Integrated Light Source LCD 3d Printer, Light Source LCD 3d Printer, Source LCD 3d Printer, LCD 3d Printer, 3d Printer, Printer

References

- [DEPRAG – Professional Dental Equipment Factory](#)