

# 3D Printer User Manual

V1.2

#### Dear Consumers.

Thank you for choosing our products. For the best experience, please read the instructions before operating the Printer. Our teams are always ready to render you the best services. Please contact us via the phone number or e-mail address provided at the end when you encounter any problem with the Printer.

For a better experience in using our product, you can also access how to use the printer in the following ways:

View the accompanied instructions and videos in the U disk.

Visit our official website www.creality.com to find relevant software/hardware information, contact details and operation and maintenance instructions.

#### Firmware/Software Downloads and Upgrades

The Printer already supports the following slicing software, and further functions are on the development roadmap.

🚯 Download the firmware and HALOT BOX slicing software at: https://www.creality.com

Download the CHITUBOX slicing software at: https://www.chitubox.com

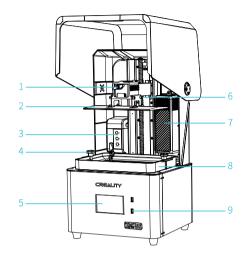
#### **NOTES**

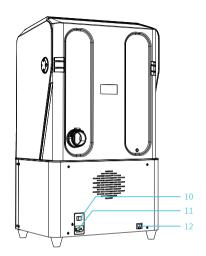
- 1 Do not use the printer any way other than described to avoid personal injury or property damage.
- 2 Do not place the printer near any heat source or flammable or explosive objects. We suggest placing it in a well-ventilated, low-dust environment.
- On not expose the printer to violent vibration or any unstable environment, as this may cause poor print quality.
- 4 Please use recommended resin in case damage to machine.
- 5 Do not use any other power cable except the one supplied. Always use a grounded three-prong power outlet.
- 6 Please do not open the plastic cover during usage, otherwise the printing will be interrupted.
- 🧑 Do not wear cotton gloves when operating the printer. Such cloths may become tangled in the printers moving parts leading to burns, possible bodily injury, or printer damage.
- Please wait after the print is finished, please wear gloves to take out the print tools.
- © Clean the printer frequently. Always turn the power off when cleaning, and wipe with a dry cloth to remove dust, adhered printing plastics or any other material off the frame, guide rails, or wheels. Use glass cleaner or isopropyl alcohol to clean the print surface.
- (no Children under 10 years should not use the printer without supervision.
- 1 Tips Do not plug or unplug the power cord when power on.
- Users should comply with the laws and regulations of the corresponding countries and regions where the equipment is located (used), abide by professional ethics, pay attention to safety obligations, and strictly prohibit the use of our products or equipment for any illegal purposes. Creality will not be responsible for any violators' legal liability under any.

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## 1. Product appearance





- 1 Thumb screw
- 2 Forming platform
- 3 Feed system
- 4 Hexalobular socket screw

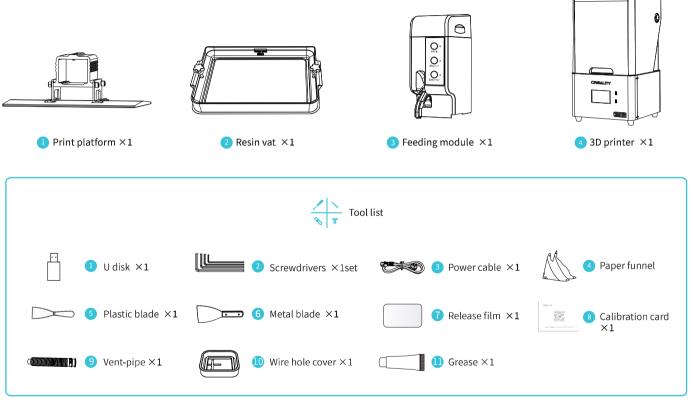
- 5 Touch screen
- 6 Leveling screw
- 7 Air filter
- 8 Resin vat

- 9 USB port
- 10 Power switch
- 11 Power port
- 12 RJ45 interface

## 2. Equipment parameters

Basic Parameters		
Model Name	HALOT-MAGE PRO	
Build Size	228*128*230mm (length*width * height)	
Screen resolution	7680*4320	
Pixel size	0.0297mm	
Print Speed	70mm/h (0.05mm layer thickness)	
Layer Thickness	0.05-0.15mm	
Print screen	10.3" print screen	
Light Source Type	3rd generation LCD integral light source	
Rated Voltage	100-240V∼,50/60Hz	
Rated Power	150W	
Operating temperature	15-35°C	
Machine Size	333*270*608mm	
Package Size	420*350*675mm	
Net Weight	13.1kg	
Gross Weight	15.8kg	
Print Method	USB Disk,Creality Cloud App, Creality Cloud Online, WiFi Print	
Machine Language	中文(简/繁)/ English/ Español/ Deutsche/ Français/ Русский/ Português/ Italiano/ Türk/Nederlands/Polskie/日本語/한국어	
Slicing Software Operation System	Window 7 and above 64-bit operating systems and Mac systems	
Compatible Resin	Resins with wavelength of 405nm, such as high-speed resins, normal rigid resins, standard resins, elastic resins, high hardness, high-toughness resins, dental cast resins.	

## 3. Packing list



Tips: the above accessories are for reference only lease refer to the physical accessories!

#### 4. Information about the interface





System interface

Cleaning WIFI Print Settings

Update Details Other Settings

Cleaning: click to clean the chute;

WLAN: click to set WALN;

Print Settings: click to set the print parameters, Z-axis movement, machine control, print mode, purge system, feed system and so on; Update: click to upgrade the firmware version (local & online upgrade); Details: click to bundle with Creality Cloud and view information about the device; Other Settings: click to set language and locale settings, custom skins, restore factory settings, time-lapse photography settings, device maintenance settings and other functional settings.

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## 5. Device Check

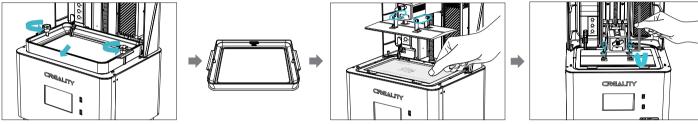


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Note: Check that the light source is working properly.

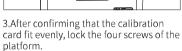
The current interface is for reference only. Due to the continuous upgrading of functions, it shall be subject to the latest software/firmware UI published on the official website.

### 6. Leveling Guide



1. Raise the platform, loosen rubber screws on the left and right sides of the resin vat, and take out the resin vat.

2. Loose the four screws on the connecting plate on molding platform plate, attach calibration card on the printing screen, press Settings → Print Settings→ Z axis movement → Leveling, Check whether the platform fits evenly with the paper by referring to the steps on Page 7.



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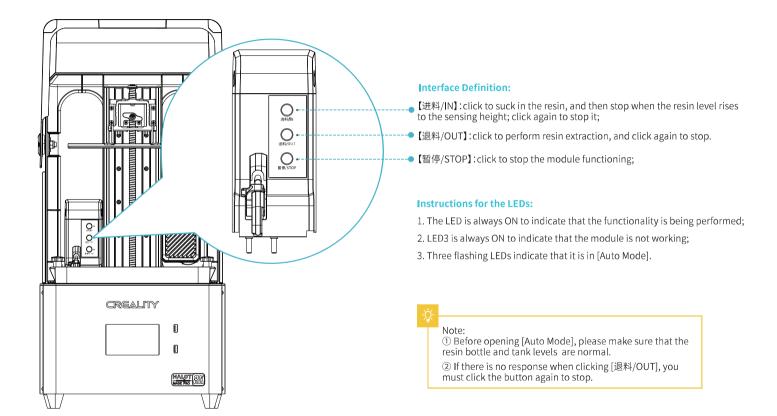
Note: The platform has been leveled at the factory. If it needs leveling due to transportation or other reasons, please follow the steps below to adjust the printing platform.

## 6. Leveling Guide





#### 7. Guidance on the use of the feed system/module



#### 7. Guidance on the use of the feed system/module

**Instructions for use:** Intelligent control is possible by clicking on the Halot OS function module.











[Auto Mode]: By selecting this mode, you can sense the resin level for feeding in real time during the printing process, and you can set the feeding delay time to suit your preference; you can also set the retreat function after printing is done;



[Feed in]: click on this mode to perform the same function as 【进料/IN】.



[Feed out]: click on this mode to perform the same function as 【退料/OUT】.



### 8. Guidance on the use of the purification system/module











The current interface is for reference only. Due to the continuous upgrading of functions, it shall be subject to the latest software/firmware UI published on the official website.



Click to SWITCH mode, and the timed purification in [Auto] mode is based on the working state of the device, according to the set time;

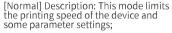


The working status of the purification module is controlled by switching in the [Manual] mode.

#### 9. Guidance on the use of Dynax mode (high-speed mode)









[Dynax] Description: In this mode, the upper limit of the device's printing speed is increased and some parameter settings are unlocked.

#### Description of Dynax Mode:

- 1. [Buffer Layer] Parameter description: to limit the speed of the device within this setting and to prevent resin splashing:
- 2. When the mode is not unlocked, the slice file is executed only in the maximum value of the normal mode using the high-speed parameter;

  3. The [Normal Mode] is the default for new devices and device resets.
- 4. [Dynax+] Mode: When this mode is turned on, the printing speed will be pushed to the maximum. But the surface of the printed model may not be as delicate as in other modes.



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HALOT BOX

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Feed System

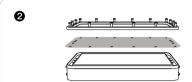
Note: There are some requirements for Dynax mode to be operated by the user. Please contact the official customer service if you have any questions during use.



#### 10. Release Film (FEP) Replacement



Recycle the resin in the resin vat back into the original bottle, then clean up. (Note: Please make sure there are no residue matter left inside the Vat)



Remove all the screws at the bottom of the resin vat, take out the fixing plate and the release film. (Note: The fixing plate and the vat bottom need to be cleaned)

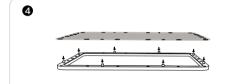




Size: 286\*198mm



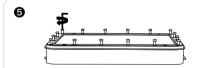
Gently remove the protective film on the front and back of the release film.



Align the release film positioning holes with the fixing plate positioning posts.

## **THK**

Thickness: 0.3mm



Press into the bottom of the vat, and tighten the screws diagonally across from each other one at a time. (Note: Make sure there are no debris between the fixing plate and release film)



Make sure the release film is flat and tight after installation. (Note: If not flat or loose, please check whether the screws are locked or the release film is abnormal)

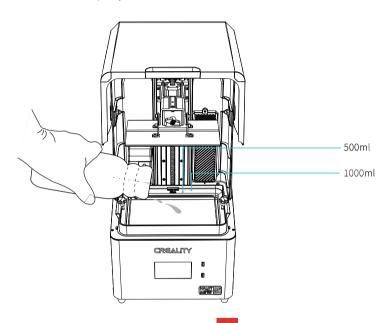


Light Transmittance 92%

- **Tips:** ① The diagram is a reference for the film change procedure, please refer to the physical product; if there are excess edges after installation of the release film, you will need to cut them off.
  - ② It is recommended to replace the release film when it has been used for more than 200 hours.

#### 11. Resin in

Pour the UV photosensitive resin into the resin vat. The slot capacity is 500ml/1000ml.





Tips: How to change resin?

Take out the resin vat slowly, pour out the remaining resin into the container, clean the resin vat, pour in new resin, and then install the resin vat to the machine.



#### Caution:

- ① Resin may cause skin irritation or an allergic skin reaction.

  Please wear gloves before use to avoid direct contact with the skin.
  ② Do not exceed the maximum capacity scale of the tray when pouring in filaments to prevent them from overflowing during the printing process

### 12. USB Disk Printing

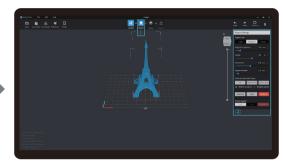
#### 1. Slicer



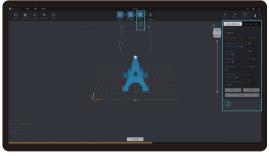




1. Open the slicer software of HALOT BOX, click "Open" on the top left of the screen and add model file;



2. If the model needs to add support, click the upper left icon ① to set corresponding parameters ②



3. Click icon ①→Setting slice printing parameters②→Click



4. wait for slice to be finished  $\rightarrow$  Select "Local Printing" to save the sliced file.



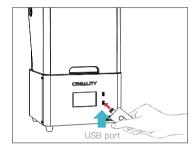
Note: The published UI of slicing software shall prevail for the interfaces of HALOT BOX, and CHITUBOX.

### 12. USB Disk Printing

### 2. Print



1. Generate a file of type cxdlp  $\rightarrow$  Save the file to a USB flash drive;



2. Insert the USB flash disk, which can be pulled out after the file import is finished.



The current interface is for reference only. Due to the continuous upgrading of functions, it shall be subject to the latest software/firmware UI published on the official website.



Warning: During the printing process the machine can't be shaken, so as not to avoid influencing affect the printing quality.

### 12. USB Disk Printing



1. Select USB disk files;





3. Press "Start" button;

4. Printing...

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#### 13. Creality Cloud Online

Make sure WiFi is correctly connected before using online printing Steps: Settings  $\rightarrow$  WiFi  $\rightarrow$  Select the corresponding WiFi.

Warm Tips: ① Only 2.4GHz WiFi is applicable to the 3D printer, and it cannot be connect to 5GHz WiFi routers;

② Only WPA-PSK/WPA2-PSK security protocol is applicable to the 3D printer, and other protocols may result in the failure to connect the printer to WiFi properly. To change the security protocol, users may change it in setting interface of the router.





1. Click Creality Cloud online model;

2. Select the model;







3. Download the model;

4. Choos to use parameters;

5. Click "Start" to print.



#### 14. Creality Cloud App Print



1.Download





and 7. Upon completion of slicing, click "Printer".



3. Add equipment



8. Select device



4. Scan QR Code
Settings → Detail →
Connect to Creality Cloud → QR code



5. Device naming



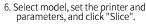
9. Print progress



#### Notes:

- 1. The steps for adding devices vary for different mobile phone operating systems;
- Set the correct area in "Settings Other Settings - Language and Area".
- 3. Make sure WiFi is correctly connected before using online printing.



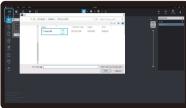


#### 15. WIFI Print

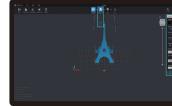
#### 1. Slicer



- 1, Before printing, make sure HALOT BOX and the printer are connected to the same WIFI.
- 2. Enter password before transfering the file, Be consistent with the password set on the printer. (Click "Print Settings → Camera Monitor → Camera Password")



1. Open the slicer software of HALOT BOX, click "open" on the left of the screen and add model file.



2. If the model needs to add support, click the upper left icon to set corresponding parameters.



3. Click icon ①→Setting slice printing parameters② →Click.



4. wait for slice to be finished→Select "Remote Printing" for WiFi printing.



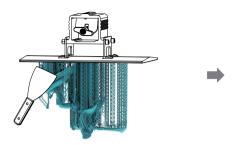
5. After entering the password, click Start transmission.



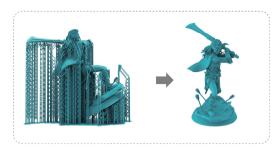
6. Once the transmission is over, select the file on the machine to start printing.



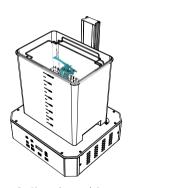
### 16. Post-processing Guide



1. Remove the printed model with a blade;



2. Remove the support from the surface of the model;



3. Clean the model;

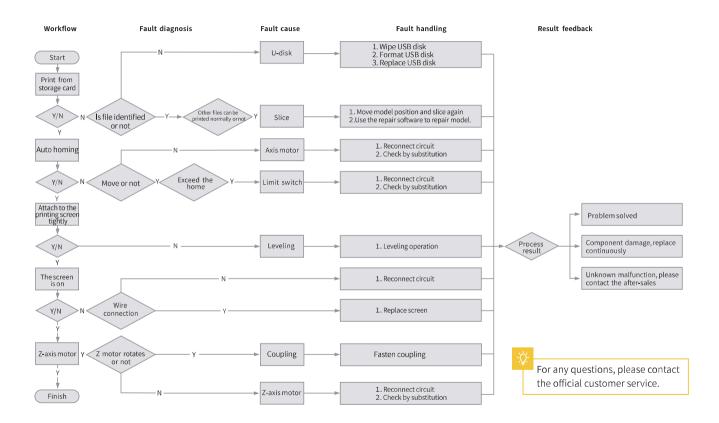


4. Cure the model;

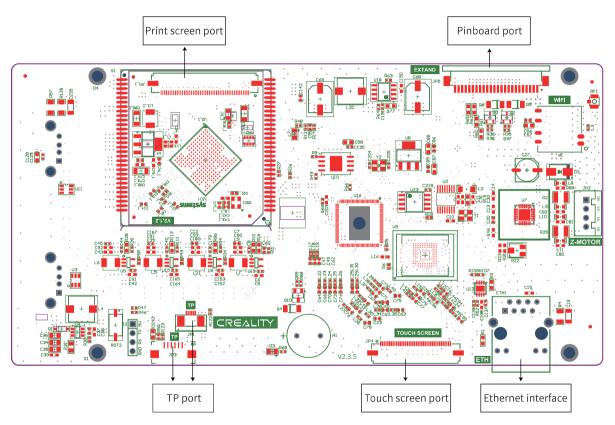
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Please dismantle the model with reference to this process and consult the official customer service if you have any questions.

### 17. Troubleshooting

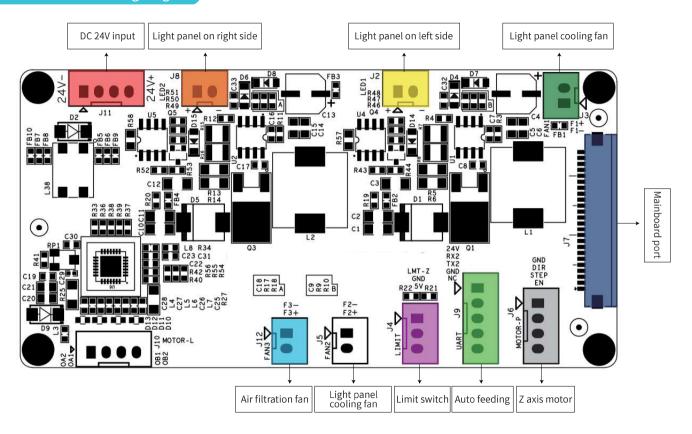


## 18. Circuit board wiring diagram



Mainboard circuit wiring diagram

### 18. Circuit board wiring diagram



Pinboard circuit wiring diagram

#### FCC WARNING

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and (2) this device must accept any interference received,

including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance

could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device,

pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions,

may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception,

which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- -- Reorient or relocate the receiving antenna.
- -- Increase the separation between the equipment and receiver.
- -- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -- Consult the dealer or an experienced radio/TV technician for help.To maintain compliance with FCC's RF Exposure guidelines,

This equipment should be installed and operated with minimum distance between 20cm the radiator your body: Use only the supplied antenna.

#### IC Cautiont:

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

To maintain compliance with RF exposure guidelines, this equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux apparei ls radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Pour maintenir la conformité aux directives d'exposition aux radiofréquences, cet équipement doit être installé et utilisé avec une distance minimale de 20 cm entre le radiateur et votre corps.

Due to the differences between different machine models, the actual objects and the images can differ. Please refer to the actual machine. The final explanation rights shall be reserved by Shenzhen Creality 3D Technology Co., Ltd.



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