



Precision Legend 2.0 Operating Instructions

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1. General

1.1 Manufacturer

Kalman Hafner 3D GmbH
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75175 Pforzheim
Germany

1.2 Disclaimer

Kalman Hafner has made every effort to ensure that these instructions are as clear, complete and correct as possible. The information contained in this document includes general descriptions and/or technical characteristics relating to the performance of the products in the delivery. This document is not intended as a replacement for determining the suitability or reliability of this product for specific use cases and should not be used as such. It is the responsibility of the user to carry out an appropriate and comprehensive risk analysis, evaluation and test of the products with regard to the user's specific application. Neither Kalman Hafner nor its partners or subsidiaries will be held liable for misuse of the information in this document.

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1.3 Reading and storing these instructions

Please read through this manual and safety information carefully before using the Precision Legend. Failure to observe this information may lead to injury or death. Keep all safety information and notices in a safe place and make them available to successor users of the product. Follow all instructions. This will help avoid injuries, electric shocks or other hazards that may cause material damage and/or severe or lethal injury.

The Precision Legend may only be used by persons who have read and fully understood this user manual. Ensure that all persons using the Precision Legend have read all warnings and instructions and are observing them. Kalman Hafner will not be liable for any material damage or personal injuries that result from improper handling or from failure to observe the safety information. Your warranty becomes void in such instances.

1.4 Warranty

Your Precision Legend comes with a legally required one-year warranty. The warranty period starts from the date of purchase. The warranty excludes consumables. These are: the LCD display, Teflon, refill caps for resin bottles.

1.5 Hazards and signal words



HAZARD SYMBOL



DANGER

An immediate risk to life or health
(severe injury or death)



CAUTION

Potentially hazardous situation
(moderate injury or material damages)



NOTE

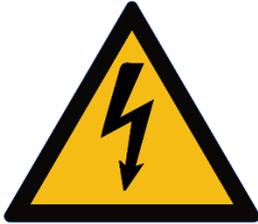
Tips on use and useful information



IMPORTANT

Specific behaviour or activity that is
mandatory to ensure safe working with
the machine

1.6 Specific risk warnings



Risk from live electrical parts



Risk of hand injury



Risk from optical UV radiation

1.7 Mandatory actions



Wear protective gloves



Use goggles



Wear protective clothing

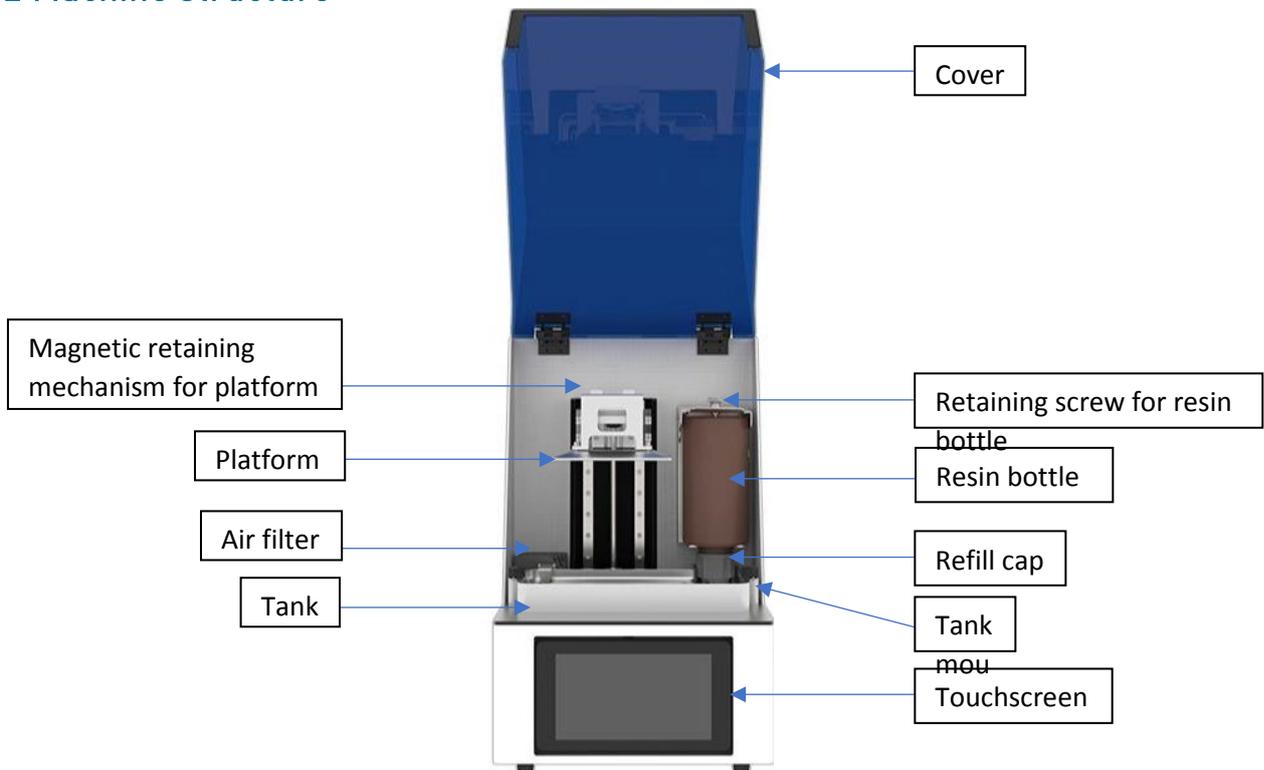
2. Delivery contents

2.1 Accessories



- 1 External power supply, 24 V
- 2 Replacement screws for display and casing
- 3 Allen key
- 4 Printing platform
- 5 Resin tank
- 6 Replacement Teflon for resin tank
- 7 Resin mixer (optional for third-party resins)
- 8 Air filter
- 9 Spray bottle
- 10 Refill cap for resin bottles
- 11 Paper filter for resin
- 12 Sand paper for preparing the printing platform
- 13 Spatula

2.2 Machine structure



3. Setting up

3.1 Unpacking and installation recommendations



→ Step 1: Unpack the printer and remove all packaging films

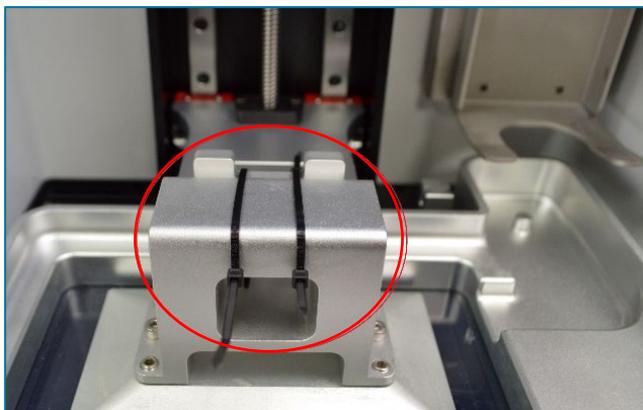


IMPORTANT

IMPORTANT: Place the Precision Legend on a stable surface. Shaking and vibrations can affect print quality. We also recommend placing the printer in a dark area away from natural and artificial light sources.



→ Step 2: Lift up the cover



→ Step 3: Remove the cable tie from the platform mount



CAUTION: The platform automatically starts moving upwards when the printer is turned on



DANGER: Live electrical parts



→ Step 4: Insert the plug on the 24 V mains adapter into a mains supply socket and press the On/Off button

3.2 Preparing a print job



→ Step 5: Remove the platform by pushing back the magnetic retaining mechanism

 Note: A bit of force is needed here



IMPORTANT: Always use appropriate protective clothing when handling solid and liquid resins. Specific information can be found in the safety datasheet for the resin you are using



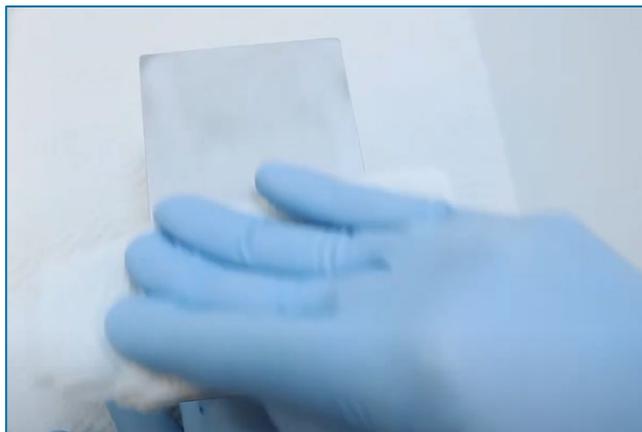
→ Step 6: Coat the platform with the “primer resin” provided (Showmaster)

i Note: When you first use it, the platform has already been coated with the “primer resin”; continue to step 11

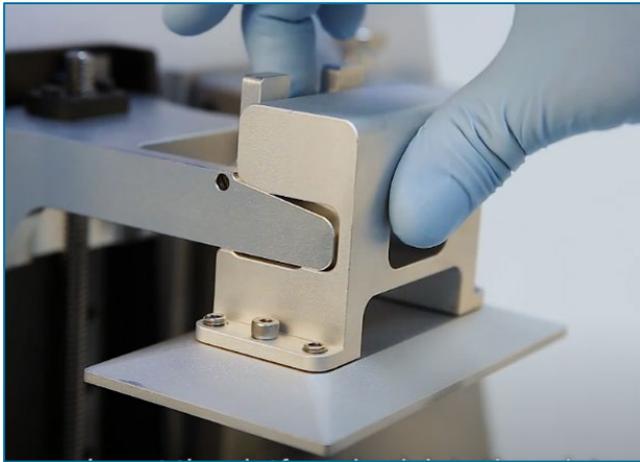
This improves the adhesion of 3D prints on the platform



→ Step 7: Place the coated platform in the UV curing device and cure the resin for 3 minutes

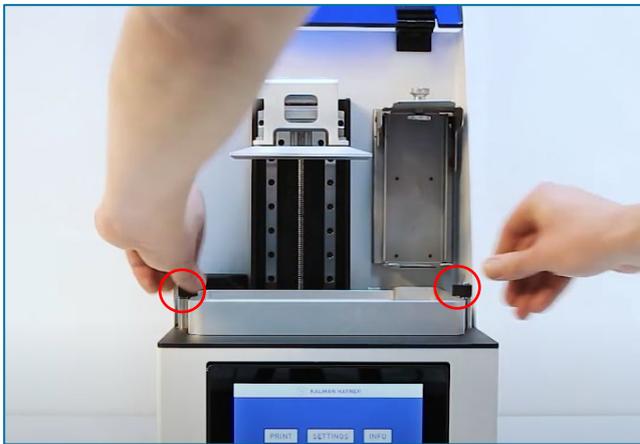


→ Step 8: Use a paper towel to wipe away any unhardened resin residues



→ Step 9: Put the platform back in the printer and push it into the magnetic retaining mechanism

i Note: The retaining mechanism must be parallel to the platform handle when correctly locked into position



→ Step 10: Ensure that the tank retaining clamps are closed.

i Note: If the clamps are not closed, high pulling forces can cause the tank to be lifted



→ Step 11: Place the filter casing provided into the grille opening on the back left of the tank



NOTE

Only make use of the refill system if you will be using the printer on a daily basis. Any resin remaining in the tank will degrade more quickly if exposed to oxygen and light. We recommend putting leftover resin back into the bottle or -

another suitable, fully opaque and sealable container.



→ Step 12: Fill the tank with resin

i Note: For your first print we recommend using around 80 ml of resin, just enough to cover the Teflon

Alternative



→ Step 13: Screw the refill cap onto the resin bottle



→ Step 14: Place the bottle with the refill cap into the holder

- Remove the retaining screw
- Push the locking mechanism upwards and place the neck of the bottle in the fork
- Screw down the retaining screw until the bottle is held firmly in place
- Push the locking mechanism back up and move the bottle down



NOTE

The resin is kept at a set level. After printing, therefore, the platform must be cleaned more thoroughly as it is submerged deeper into the resin

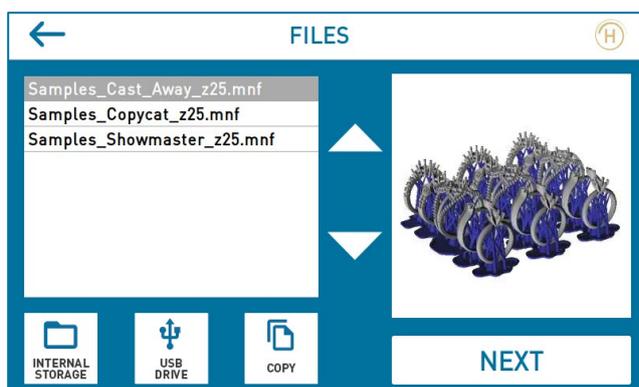


→ Step 15: Close the cover

3.3 Starting a print job



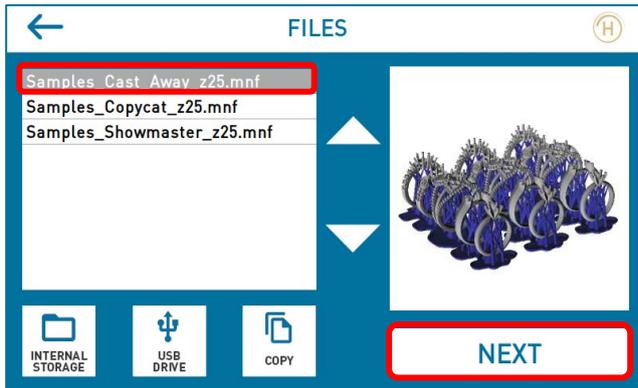
→ Step 16: Press **PRINT** on the touch display



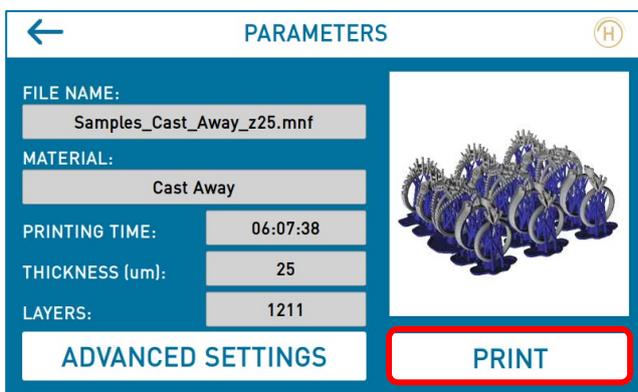
→ Step 17: Select a sample dataset suitable for your resin

 Note: Three datasets are stored on the printer

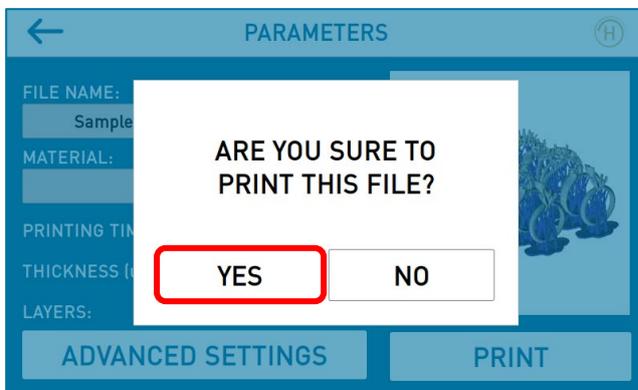
- Cast Away
- Copycat
- Showmaster



→ Step 18: Press **NEXT**



→ Step 19: Press **PRINT**



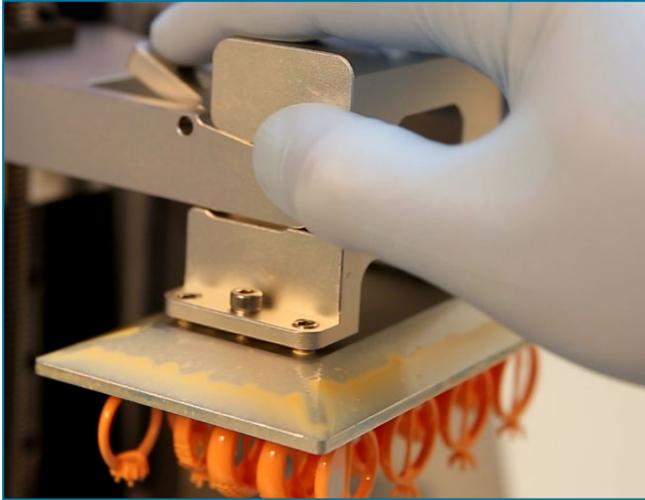
→ Step 20: Press **YES** to start the printing process

i Note: The platform will now move downwards and the printing process will start

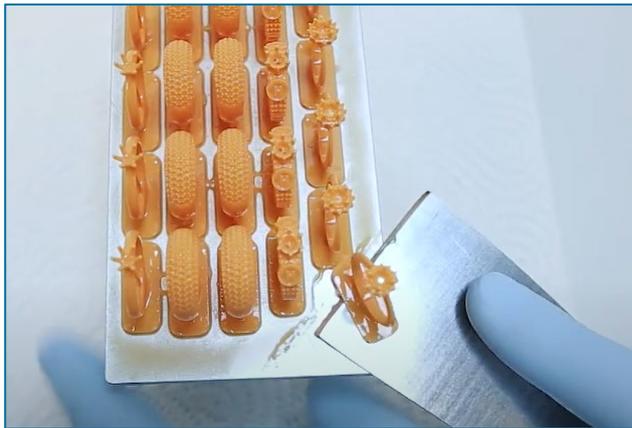


CAUTION: Risk of hand injury due to crushing. Never touch the printer when the platform is in motion

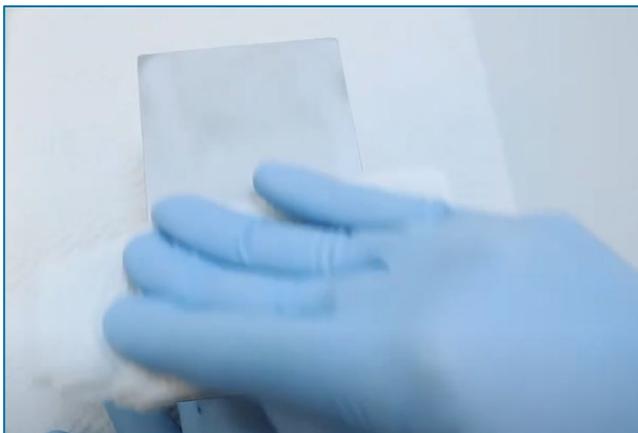
3.4 Post-curing models



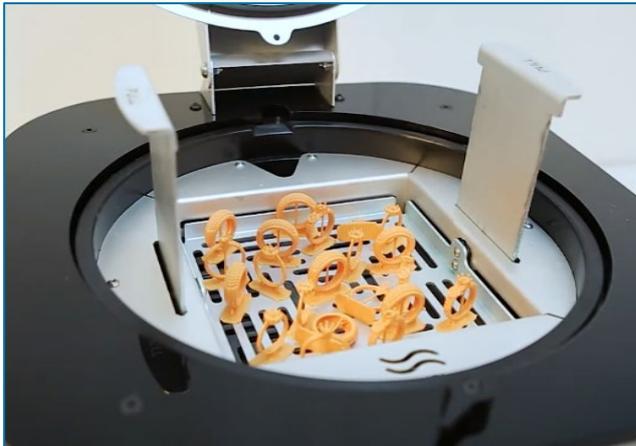
→ Step 21: Once the printing process has finished, open the cover and remove the platform (step 2 and step 6)



→ Step 22: Remove the models from the platform using the spatula provided



→ Step 23: Clean excess resin from the platform using paper towels and standard proprietary spirit

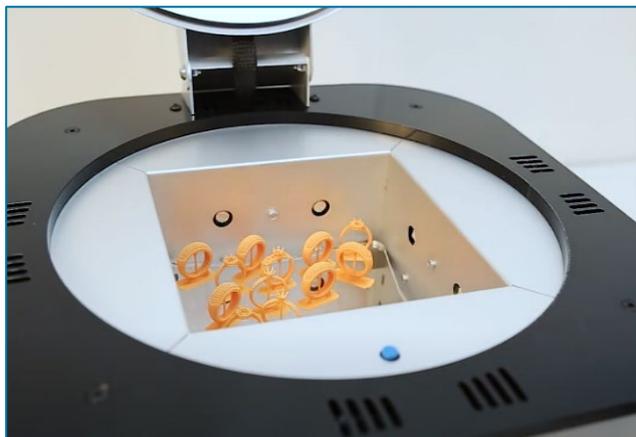


→ Step 24: Clean the models for 8 minutes in the washing station (filled with spirit)

i Note: If you do not have a washing station, use the spray provided



→ Step 25: Dry the cleaned models using compressed air



→ Step 26: Cure the models in the UV curing device

i Note: Recommended settings: curing time of at least 40 minutes at 100% power and 60°C