XYZprinting

da Vinci 1.0

HD23DP01488

Product Manual

Cartridge Slot

Remove the packaging supports

Control Panel

Display Panel

Extruder Module

Z-Axis Rod

USB Port

Power Switch

Power Connector

Front Door

Print Bed

Remove the heated bed fixing screws and printing module fixers
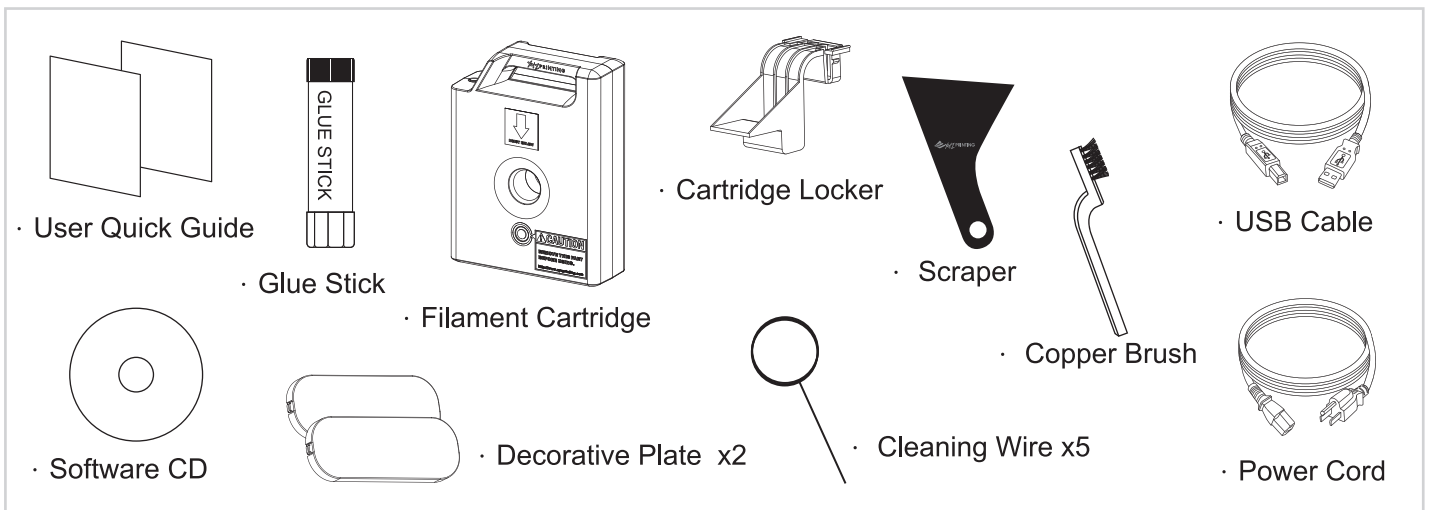
Overview

This guide provides details on how to start off your da Vinci 1.0 3D printer correctly. Before you can begin printing, there are some easy procedures you need to become familiar with:
● How to open the box safely
● How to load filament
● Getting to know XYZware software

· User Quick Guide

GLUE STICK

· Glue Stick

· Filament Cartridge

· Cartridge Locker

· Scraper

· Copper Brush

· USB Cable

· Software CD

· Decorative Plate x2

· Cleaning Wire x5

· Power Cord

Important Safety Instruction

● Do not place the printer in humid or dusty environments such as bathrooms and high traffic areas.
● Do not place the printer on a unbalanced surface and/or inclined position. Printer may fall down or tumble and it may cause serious injury.
● Do not touch the interior of the printer while printing, as it may be hot and include moving parts. Please keep the front door closed during printing to avoid injury.

Product Manual

Open the box ⚠

Note: Cable tie illustrated in step 4 in this section is used to fix the extruder during transportation. It should be removed before powering on the printer, or the printer may not funtion normally.

1. Open the box and remove the accessories and the cushion.

2. Take out the printer by holding the side handles.

3. Remove plastic bag and tapes.

4. Open the top cover, then remove packaging supports and tapes from inside.

Tapex2
Packing support x2   Cable tie x1

5. Remove the cardboard.

6. Remove the print bed shipping tapes and foam cushioning pieces.

7. Remove the bottom screw and the plastic piece under print bed.

8. Remove the drip tray packaging tapes.

A
B

9. Use the USB cable to connect the printer to PC. Connect the power cord to the printer then turn on the power switch.

Install Cartridge

1. Remove filament stopper and tape.

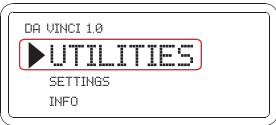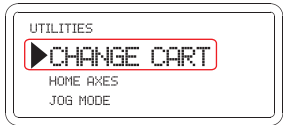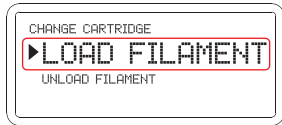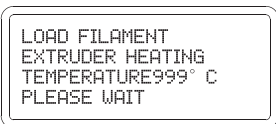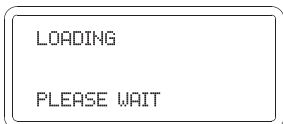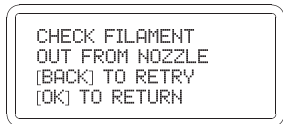2. Install the new filament cartridge into the empty slot.

3. Place and push to click the cartridge locker into the slot.

4. Push the filament through the filament guide tube to the hole of the extruder and press "LOAD FILAMENT" function on the display menu.
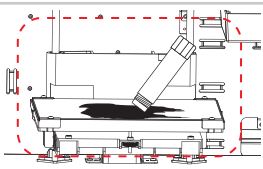
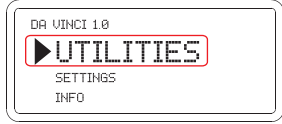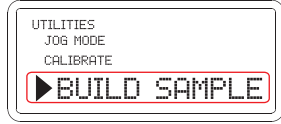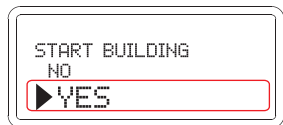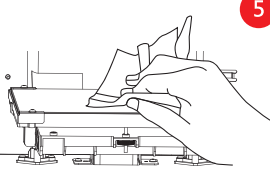Note: Before pushing the filament into the guide tube, it is advised to cut the tip of the filament off at a 45° angle with a cutting pliers, filament loading will be easier.

Tips:Grasping the release arms while inserting, it will make it easier to push filament into the extruder.
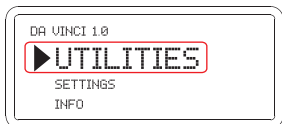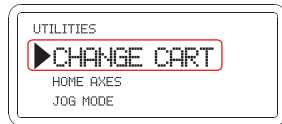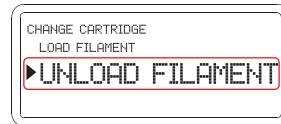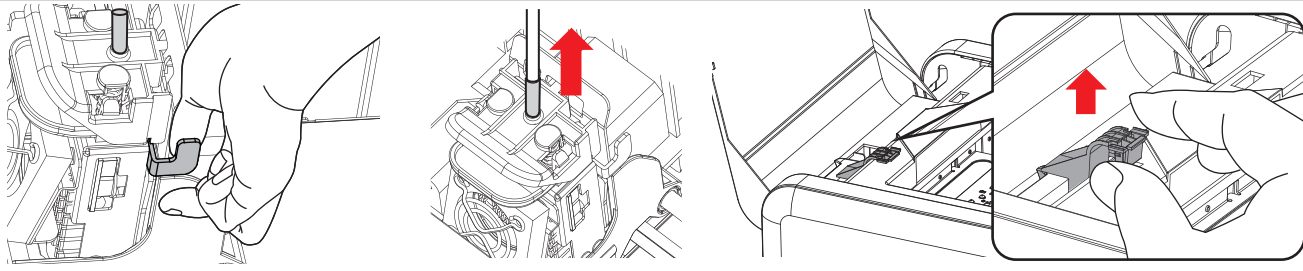
Product Manual

Load filament

```
DA VINCI 1.0
▶UTILITIES
  SETTINGS
  INFO
```

1 Choose"UTILITIES" and press"OK" to continue.

```
UTILITIES
▶CHANGE CART
  HOME AXES
  JOG MODE
```

2 Choose "CHANGE CART" and press "OK".

```
CHANGE CARTRIDGE
▶LOAD FILAMENT
  UNLOAD FILAMENT
```

3 Choose "LOAD FILAMENT" and press "OK".

```
LOAD FILAMENT
EXTRUDER HEATING
TEMPERATURE999° C
PLEASE WAIT
```

4 Please wait for extruder to reach working temperature.

```
LOADING


PLEASE WAIT
```

5 Please wait for completion of filament loading.

```
CHECK FILAMENT
OUT FROM NOZZLE
[BACK] TO RETRY
[OK] TO RETURN
```

6 Check if the nozzle outputs filament and press "OK" to go back to main menu.

Sample print

Apply glue to print bed before printing. Glued area depends on the measurement of the object(s) to be printed.

```
DA VINCI 1.0
▶UTILITIES
  SETTINGS
  INFO
```

1 Choose "UTILITIES" and press "OK" to continue.

```
UTILITIES
  JOG MODE
  CALIBRATE
▶BUILD SAMPLE
```

2 Choose "BUILD SAMPLE" and press "OK" to continue.

```
BUILD SAMPLE
▶ DEMO
  KEY CHAIN
  STAR VASE
```

3 Select one of the samples.

```
START BUILDING
  NO
▶YES
```

4 Select "YES" and press "OK" to start printing.

5 Remove the printed object when the print bed has descended. Cover a damp cloth on the print bed (while cold) for 2~3 minutes. Then wipe the moistened glue from the print bed with the damp cloth gently.

Unload filament

Note: To avoid clogging the extruder, complete the "UNLOAD FILAMENT" procedure before changing the cartridge. Do not cut filament from the extruder.

```
DA VINCI 1.0
▶UTILITIES
  SETTINGS
  INFO
```

1 Choose "UTILITIES" and press "OK" to continue.

```
UTILITIES
▶CHANGE CART
  HOME AXES
  JOG MODE
```

2 Choose "CHANGE CART" and press "OK".

```
CHANGE CARTRIDGE
  LOAD FILAMENT
▶UNLOAD FILAMENT
```

3 Choose "UNLOAD FILAMENT" and press "OK".

3 Remove filament slowly when printer has reached working temperature as instructed. Then remove cartridge locker and the cartridge unloaded.

Maintenance Tools

Important Safety Instruction

⚠️ The maintenance tools provided should only be handled by an adult. Please keep the tools away from children. Incorrect handling or maintenance of the printer may cause damage to the product or personal injury.

Information and usage of the advanced maintenance tools

▌ Scraper

Scraper is used to remove printed objects from print bed when printing is completed.

(Caution: do not remove the printed object while the print bed is hot.)

▌ Cleaning Wire

Cleaning wire is used to remove the filament left in the path inside the clogged nozzle.

(Caution: Print bed may be hot during cleaning, please keep away from the platform to avoid personal injury.)

When cleaning the printer nozzle, gears or filament path please ensure to keep hands clear of the print bed which may be hot.

▌ Copper Brush

Copper brush is used to clean and remove molten filament left on the tip or surface of the extruder and inside the drive gear. When the printer fails to calibrate consistently; clean and remove the filament from extruder(s) surface.

Specifications

FEATURES	da Vinci 1.0 3D Printer	FEATURES	da Vinci 1.0 3D Printer
Print Technology	Fused Filament Fabrication(FFF)	Nozzle Diameter	0.4 mm
Printer Head	Single Head	AC Input	100-240V, 50~60Hz
Build Volume(W x D x H)	20 x 20 x 20 cm	Connectivity	USB 2.0 x 1
Layer Resolution Settings	Standard 200 microns	Display	FSTN LCM (16 Characters x 4)
	Speed 300 microns	Control Method	Key x 6
	Ultra fast 400 microns	Indicator	Buzzer
	Custom 100-400microns	Lighting	LED
Filament Diameter	1.75 mm	Weight	26 Kg

Know about XYZware
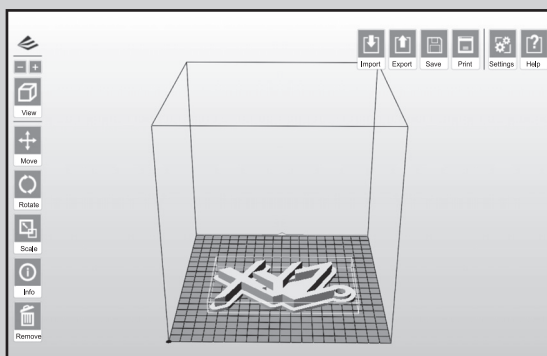
For Mac OS and Windows8/8.1 user or software related topics, please visit following webpage for further information and download the proper XYZware version:
http://support.xyzprinting.com/downloads

「XYZware」 is developed by XYZprinting Inc. It is designed for everyone, with or without modeling skill. You can view the model in various perspectives by importing (*.stl) file to it. It is also used to print objects from da Vinci 3D printer.XYZware can be found in the bundle software CD. To check our latest software updates and further information, please go to:

http://support.xyzprinting.com/manuals

(Notice: Some instructions and video tutorials might require online registration to obtain authorization.)
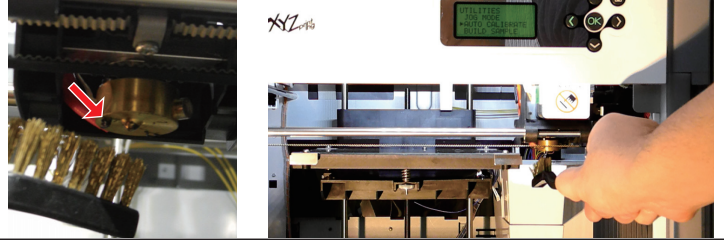
Print Bed Adjustment Instructions

⚠️ **This print bed has been factory calibrated before shipping. Recalibration is necessary if there are print issues when starting to print or the nozzle gets too close to the print bed. When in doubt, it is recommended to contact service center for more information.**

Print bed adjustment flow chart

| Step 1 | Step 2 | Step 3 | Step 4 | Step 5 |

Perform again!
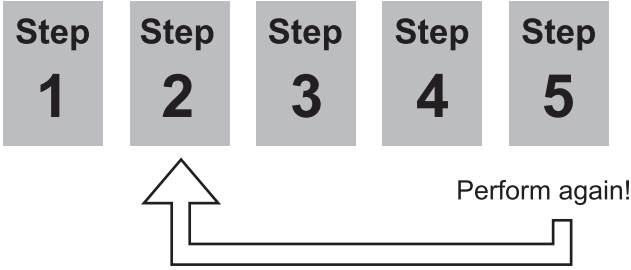
To clean the molted filament from nozzle thoroughly, it is recommended to activate "CLEAN NOZZLE" function to keep heating the extruder for better cleaning.

Print bed adjustment steps

1. Click "INFO>SYSTEM VERSION" using the function keys to make sure your firmware is the latest.
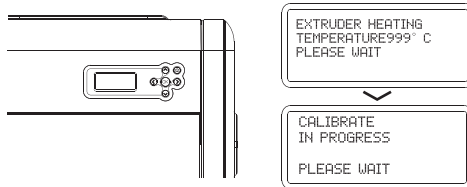
   DA VINCI 1.0
   UTILITIES
   SETTINGS
   ▶INFO

   INFO
   STATISTICS
   ▶SYSTEM VERSION
   CARTRIDGE STATS
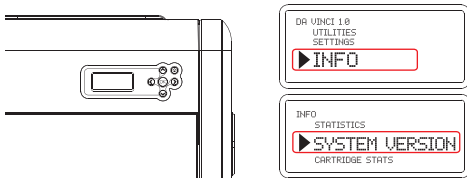
2. Click "UTILITIES>CALIBRATE" using the function keys and select "Yes" to perform calibration.

   DA VINCI 1.0
   ▶UTILITIES
   SETTINGS
   INFO

   UTILITIES
   JOG MODE
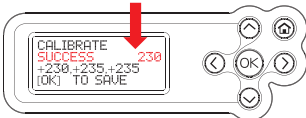   ▶CALIBRATE
   BUILD SAMPLE
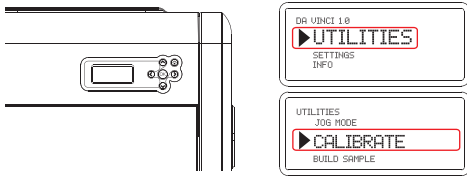
3. The printer starts automatic measurement. Wait for 2~3 minutes and verify the data shown.

   ⚠️ **Note: During the measurement process, the print bed and print module will be heated. Care should be taken during operation!**
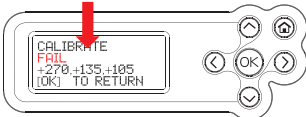
   EXTRUDER HEATING
   TEMPERATURE999°C
   PLEASE WAIT

   CALIBRATE
   IN PROGRESS
   PLEASE WAIT

   I. If **SUCCESS** is shown.

   CALIBRATE
   SUCCESS   230
   +230,+235,+235
   [OK] TO SAVE

   →The printer does not need adjustment and press **OK** to exit.
   II. If **FAIL** is shown.

   CALIBRATE
   FAIL
   +270,+135,+105
   [OK] TO RETURN

   →The printer needs adjustment, refer to the values shown. If the 3 values are more than +/- 20 from each other, this will result in a "FAIL" calibration.
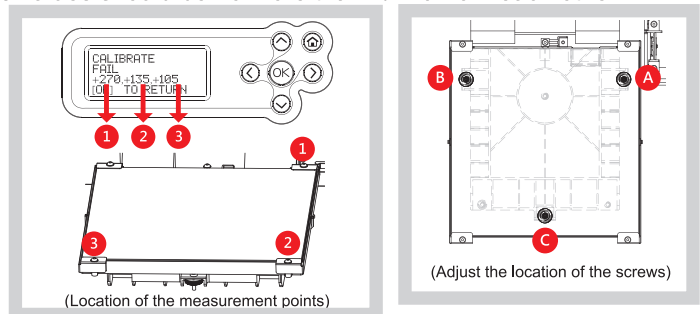
4. Refer to the values for adjustment:

   Step-by-step adjustment
   I. Adjust the screw at Point A to reduce the difference between the 1st and the 2nd measurements.
   II. Adjust the screw at Point B based on your evaluation of the results obtained from the previous steps.
   III. Finally, adjust the screw at Point C to reduce the difference between all measurements
   Note:
   * Please adjust the values to between 200~250
   * 3 values should be no more than +/- 20 from each other.

   CALIBRATE
   FAIL
   +270,+135,+105
   [OK] TO RETURN

   (Location of the measurement points)

   (Adjust the location of the screws)

   View the printer from the front when making adjustment
   Rotate the screw to the left to raise the bed (value increases)
   Rotate the screw to the right to lower the bed (value decreases)
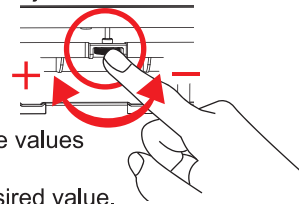
   Each full turn leads to a change of 50 to the values shown.
   Use small dial turns to approximate the desired value.

5. After the adjustment is finished, perform step 2. Wait until **SUCCESS** is shown and press **OK** to complete calibration.

   CALIBRATE
   SUCCESS 230
   +230,+235,+235
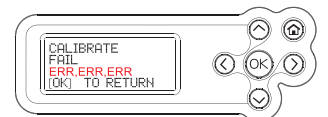   [OK] TO SAVE
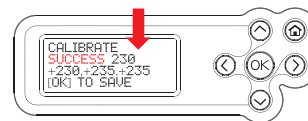
※ Reminder
If the value shown is always **ERR,ERR,ERR**, follow the steps below to clean.
A. Clean the surface of the print head using the copper brush.
(Clean the contact point between the print head and print bed)
B. Wipe and clean the measurement points as shown in step 4.
C. Perform the calibration process again.

   CALIBRATE
   FAIL
   ERR,ERR,ERR
   [OK] TO RETURN

For further information and instruction of the service code, please refer to XYZprinting website (http://support.xyzprinting.com/) or contact service center for help.

Service Code	Display Panel Description
0 0 1 0	Extruder or print bed higher/lower than maximum/minimum temperature during printing
0 0 1 1	Extruder or print bed cannot heat to the specified temperature
0 0 1 3	The temperature of print bed reach to warning range limited
0 0 1 4	The temperature of extruder reach to warning range limited
0 0 3 0	X axis motor failed results moving failed or X axis home sensor failed results home detect failed
0 0 3 1	Y axis motor failed results moving failed or Y axis home sensor failed results home detect failed
0 0 3 2	Z axis motor failed results moving failed or Z axis home sensor failed results home detect failed
0 0 4 0	Memory storage cannot read/write
0 0 5 0	Flashrom cannot read/write

Note

Please retain all original packaging material and please ship your product with the original packaging for warranty purpose. Shipping without original packaging material may cause product damaged during the shipment and may cause chargeable service fees.