XYZprinting 3D Printer

Model : 3C10A

User Manual

English

Contents

1. Introducing the Product

Technology is no longer limited to labs or factories. People of all ages, including children, can now enjoy the fun made possible by technological developments.

XYZprinting has continued to make remarkable achievements in the field of 3D printing. In the past 2 years, we have successfully introduced 3D printing technologies to family settings. In 2015, XYZprinting released 3D Printer never seen before in the market. 3D printing technology can now be used to print different food ingredients through an easy to use interface. XYZprinting 3D Printer allows users to simply press a few buttons and create innovative work that integrates digital information with a diverse selection of materials that may include clay or the Play-doh is not only capable of creating materials in the desired shape and form; it can also be used for post-production processing and decorations. Inbuilt sensors allow the printer to accurately measure the item's height and print the materials directly upon the item. Users may print different materials in a variety of colors on the object to enhance visual aesthetics.

The principle of 3D printing is to extrude materials from the cartridge in a three-dimensional space, generating layers stacked upon each other to build the desired form. Users can download pictures from the cloud database. Alternatively, they may also use their own 3D graphics software to create their favorite images. Since the emergence of this technology, digital technology enthusiasts will be able to demonstrate their skills by actually creating their designs.

XYZprinting has identified market opportunities and lifestyle applications offered by 3D printing technology, releasing a number of novel 3D printing products that emphasize convenience and diversity. Our products extend to personal, family, and educational settings. With the help of printing technology, everyone can become a designer and creator. We hope that in the not too distant future, the once exclusive space-age technology of 3D printing will become an integral part of every household.
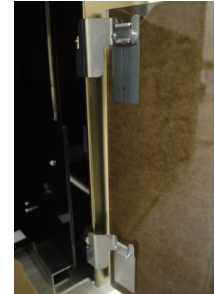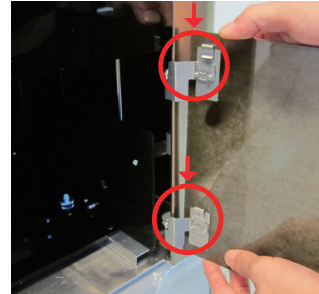
1-1 Product appearance

Touch panel
USB port

Ingredient tube room

Printing room

Power jack
USB port

1-2 Accessories

Ingredient tube x 3, Screw cap with 1 mm, 2 mm, and 4 mm diameters (3 of each)

Printing bed

USB cable

Power cord

Power adapter

Tray

Printing room front door

1-3 Specifications

Printer dimension	471 x 480 x 610 mm	Maximum printing dimension	150 x 200 x 150 mm
Printing method	Extrusion and injection (mutilple ingredients tubes)	Printing thickness	0.8-3.2mm
Extruder diameter	1 / 2 / 4 mm (Optional)	Software	Slicing software from XYZprinting
Operations	5" touchscreen	System support	Win 7/Win 8
Connection	USB 2.0	File format	STL and XYZ format (.3wf)

2. Introducing product operations

01 Install the printing chamber cover

The printing chamber cover is provided together with the printer. Please refer to the picture and install the cover securely.
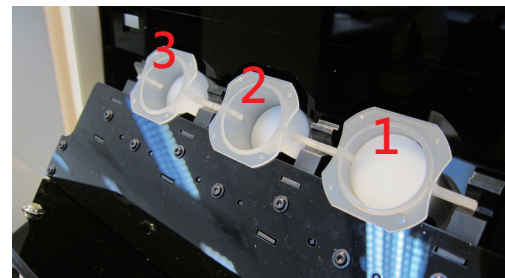

02 Plug in the power socket and switch on the printer

The power switch is located at the side of the printer near the bottom. Please make sure that the printer is placed on a stable platform before plugging it into a power source and switching it on.

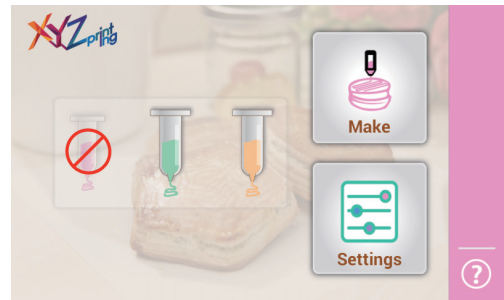### 03 Installing the cartridges in the cartridge chamber

This printer model is capable of being loaded with 3 ingredient tubes for 3 different material types. Opening the cover of the Ingredient tube room will reveal 3 slots numbered 1, 2, and 3 from right to left. Ingredient tubes must be loaded in a proper sequence. You must start loading from slot 1 before proceeding to the slot on the left. If the ingredient tubes are not installed in this particular sequence (1 to 3), the carrier will be unable to retrieve the ingredient tubes (such conditions may arise when: Only 1 cartridge is placed in slot 2 or slot 3 while slot 1 is left empty).

04 Check if the printer has detected the ingredient tubes

- Once the Ingredient tube has been installed, return to the Main Screen to check if the printer has detected the Ingredient tube.

- Cartridges that have been detected by the printer will be colored to provide easy identification. This shows that the printer has already detected the Ingredient tube.
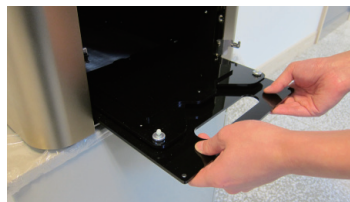

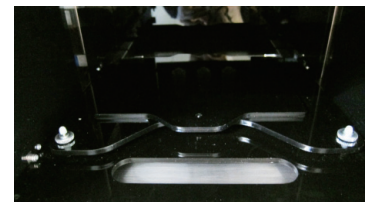## 05 Loading the material plate and tray

Please refer to the steps below to combine the printing bed and tray and load them into the printing room.

❶ Please slide the front edge of the tray diagonally so that it makes contact with the rolling wheel.

❷ Orient the tray so that it becomes horizontal and slide it into the printing room (please make sure that the tray can slide back and forth smoothly on the rolling rail)
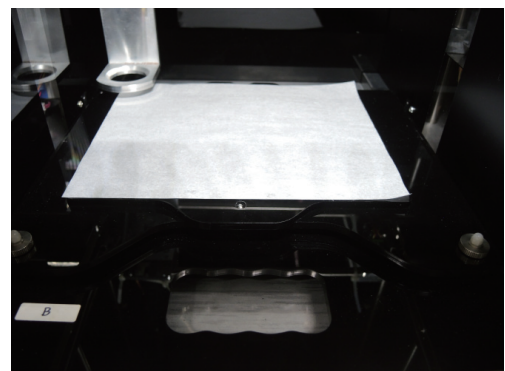
❸ Place the material plate in the center of the tray (the orienting hole must be pointing outside).

06 Placing the lining paper on the printing bed

When printing, place the lining paper on the printing bed. The user may also use double-sided tape to temporarily secure and smoothen the lining paper.
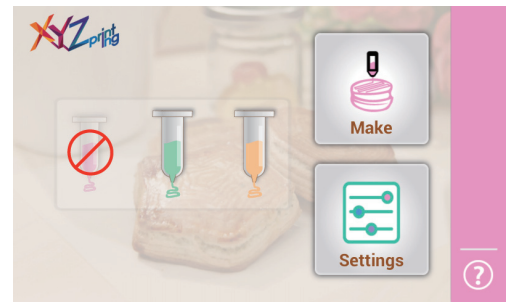
Note! Unevenness of the lining paper will severely affect printing quality.

07 Select "Make" from the touch panel

Return to the Main Screen and press "Make" to start your printing project.

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08 Select "My Recipe"

Print data can be derived from 3 sources:
- My Recipe
- USB
- Computer connection (for printing using computer connections, please refer to the software manual)
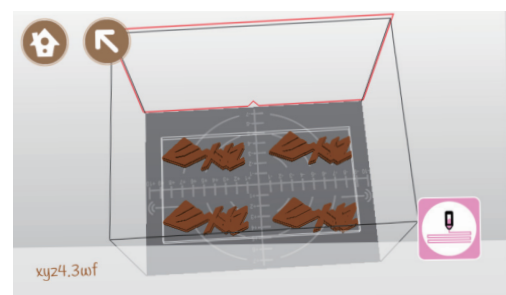
2-1 My Recipe

01 My Recipe

Select the option of "My Recipe" and click on the picture of your desired printing project. If you want to print from a USB drive, please enter the file name and skip to Step 14.
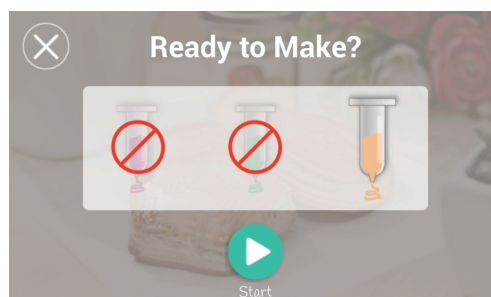
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02 Press the Print Icon

Confirm the picture displayed on the screen and press the print icon displayed at the bottom right corner.
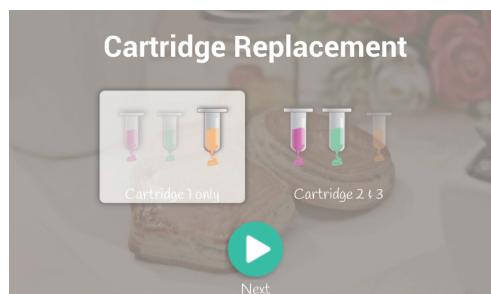
03 Press "Start" to confirm printing or "X" at the top left corner to cancel the printing.

Before pressing the button to initiate printing, please check that: 1. The Ingredient tubes have been installed in the slots; 2. The lining paper has been placed upon the material plate; 3. There are no Ingredient tubes on the moving platform.

04 "Cartridge Replacement" option

When materials run out during the printing process, the user may use the Cartridge Replacement option to use materials from "Cartridge 1 Only" or "Cartridge 2&3".
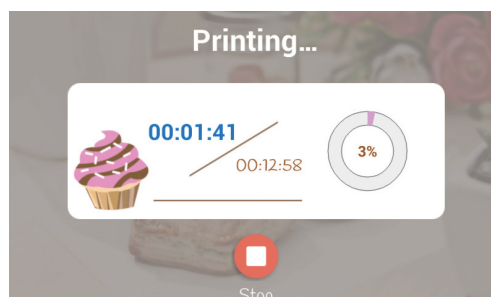

"Cartridge 1 Only": The printer will return the spent Ingredient tubes to the Ingredient tube room. The user may take out the Ingredient tube and place a new Ingredient tubes in slot 1. The printer will then load a new Ingredient tube and continue printing.

"Cartridge 2&3": The printer will return Cartridge 1 to its slot in the Ingredient tube room and automatically load Ingredient tube from slot 2 and slot 3 accordingly to continue printing.

05 Start printing

The touch panel shall display printing time, remaining time, and percentage progress.

06 After printing is complete, wait for the Ingredient tube to be returned to its original location before retrieving the finished product.

2-2 Printing from the USB drive

01   Insert your USB drive.
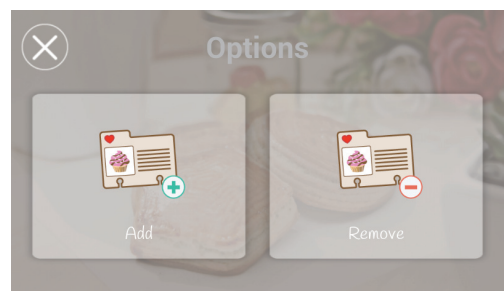
02 "USB" will be shown in the Main Screen

Ensure that the USB is successfully read (an arrow will be displayed at the bottom of the USB when successfully read)

03 Enter "My Recipe" folder and click on the "pen and paper" icon at the top right corner to start editing

04 The "Option" screen will be displayed. Select the "Add" or "Remove" icons to add or remove files respectively from your USB.

05 Selecting "Add" will open the USB and display the folders contained within. Please select the picture files you wish to add (multiple selection allowed). Once you have verified the files selected, select "Done" at the top right corner to transfer the file to the machine.

06 Repeat Steps 1 to 6 of section 2-1 to print the files.
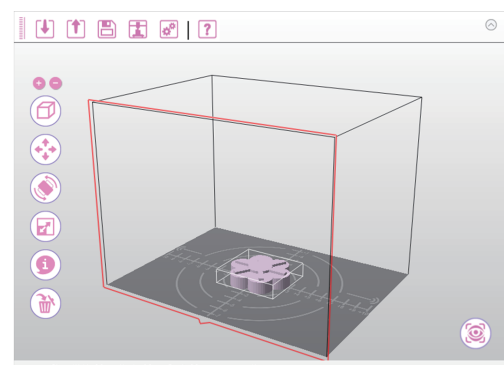
2-3 Printing from the PC

01 Use the USB cable to connect the printer to the PC (for detailed settings of printing parameters, please refer to the software user manual).
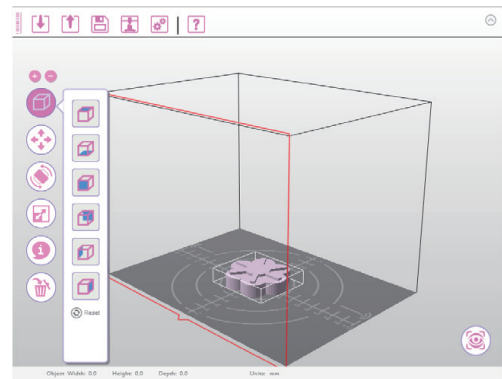
02 Importing the files

Please open software provided form XYZprinting and then select "Import" to import the files (in .stl format).

03 Press "Print" after adjusting the parameters

After verifying the print dimensions, select "Print" to adjust the parameters accordingly and begin printing.

04 Printing after verification

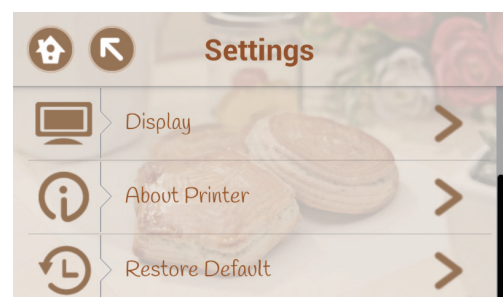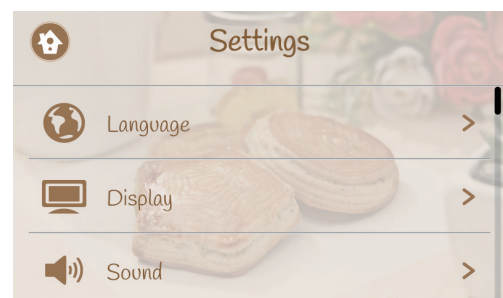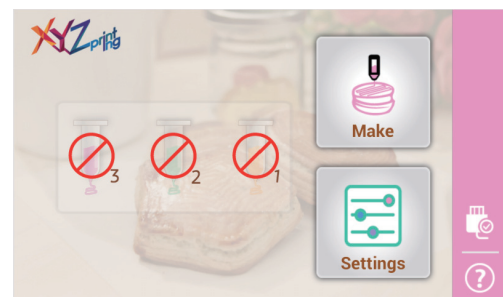Select "Print" to initiate printing.

Before printing, please check that the Ingredient tube, lining paper, and printing bed have been placed accordingly.
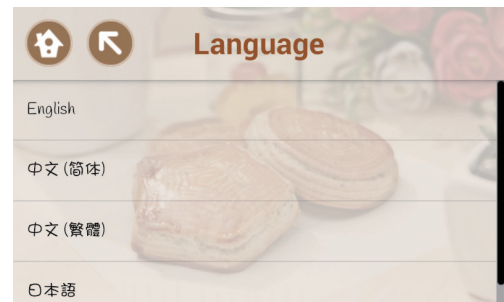

2-4 Settings

01 Press the "Settings" icon on the Main Screen to enter the printer settings screen.
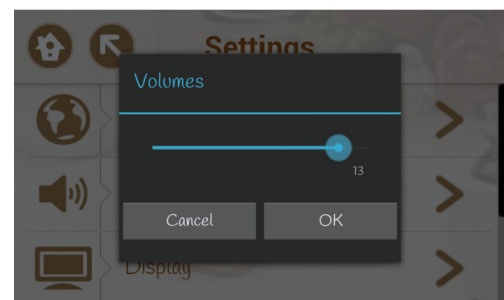
02 "Language"

Press the "Language" function in the settings screen to bring up the language options. The printer offers multiple languages to choose from.
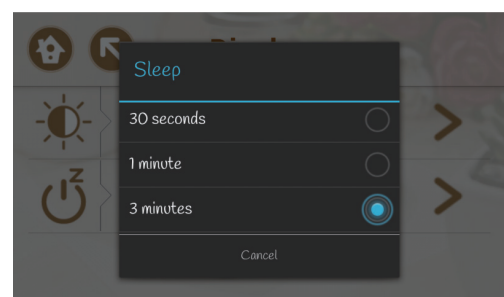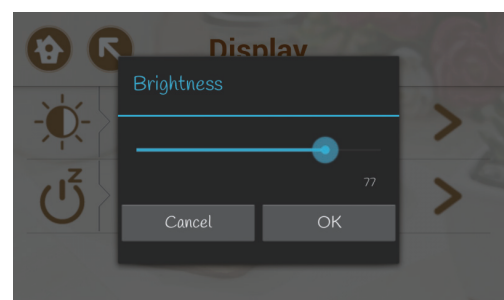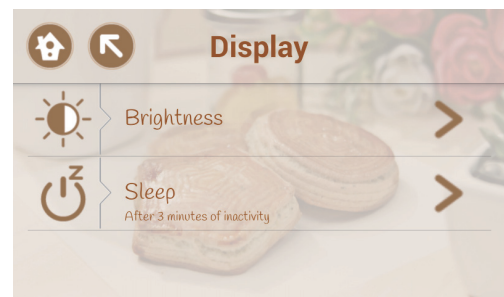

03 "Sound"

Press the "Sound" function in the settings screen to change the sound when pressing the button. "0" means that no sound will be played.
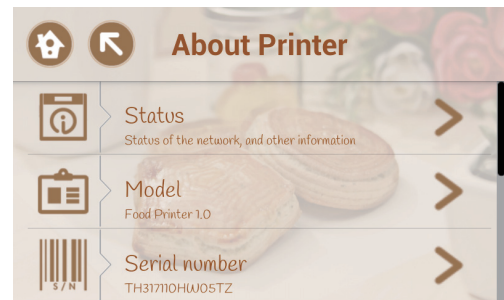

04 "Display"

Press the "Display" function in the settings screen to enter the "Brightness" and "Sleep" options. The user may use these options to adjust screen brightness as well as printer sleep time.
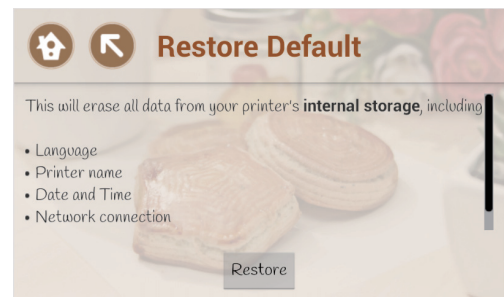
05 "About Printer"

"About Printer" shows the machine's current status, including Status, Model, Serial Number, OS Version, Application Version, Firmware Version, and Legal Information.
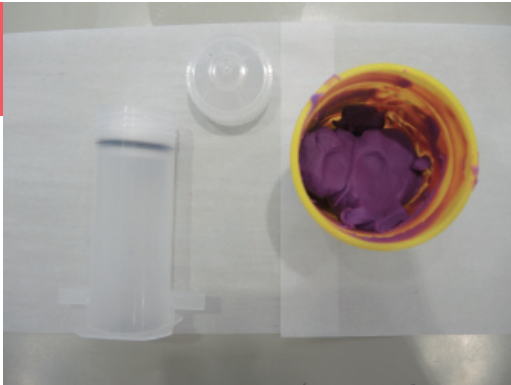

06 "Restore Default"

Click "Restore" to let the system clear user-stored data in the printer and return all parameter to factory settings.
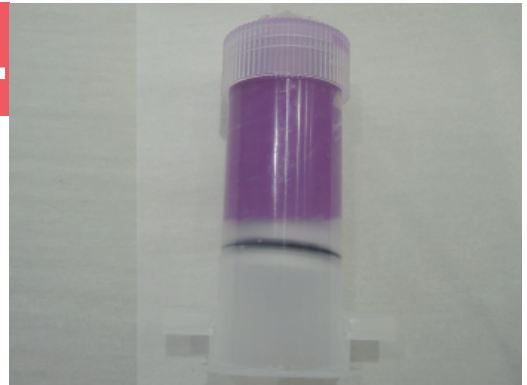
2-5 Cartridge loading demonstration - play-doh

This 3D printer is mainly used to print paste-like materials. The picture shows the play-doh. The cartridge will use pressure injection to extrude the material and stack them to form the desired 3D shape. The play-doh offers many potential applications. Users are free to use their creativity and use different materials as needed.

01

Prepare the Ingredient tube and the materials to be loaded into the ingredient tube.

Before refilling, make sure that the ingredient tube is dry, the screw cap has been removed, and that the plunger is pushed to the cartridge outlet end.

02

Use the steel spoon to load the material.

03

Refill the ingredient tube with the material by using the spoon and make sure that the material is tightly packed.

04

Fill the material so that it is level with the ingredient tube outlet, and then place the screw cap.

05

Push the plunger forward from the inlet end of the ingredient tube and make sure that the material is extruded from the nozzle.
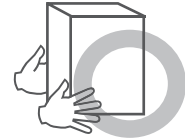
06

After refilling the ingredient tube with material, you can put the tube in the printer and print the object.

3. Reminders

⚠️

- Only start printing when the printer is placed on a level surface.

- Do not move the printer when it is switched on (or during printing).

- The printer is heavy. Please use both hands when carrying the printer. Please place the printer gently and avoid bumping heavily against the printer as this may affect printer functions.

- If the printer must be transported for long periods of time (on vehicles), please secure the printer carrier at 3 locations using cable ties (please refer to the unpacking instructions provided on the Quick Guide for these locations)

User requirements

- Do not place in the printer in an overly humid area.

- Keep the cover closed before and after use.

- The maximum load of the ingredient tube is when the material layer is even with the ingredient tube extruder after closing the plunger cover. Loading excessive materials may cause it to leak which may contaminate the printer and prevent normal functions.

Emergency handling

- If the printer malfunctions, please immediately stop its use and unplug the power cable. Continued use may lead to printer damage.

- If the printer malfunctions, please contact the dealer or XYZprinting customer service personnel promptly. Do not attempt to repair the machine on your own.
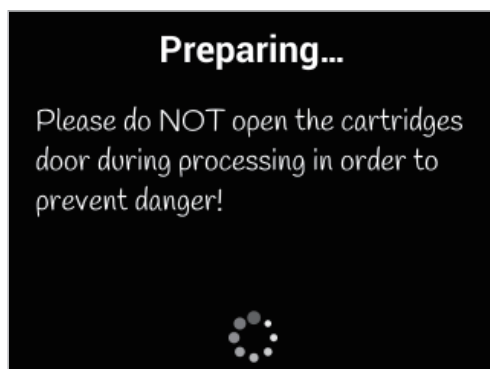
4. Safety regulations

Before printing

- Please check if the external cover of the ingredient room has been closed properly to ensure that the carrier is able to load the materials properly.

- If the user intends to print materials on an existing object, please ensure that the top part of the object to be printed is level and even. Uneven surfaces will seriously affect print results.

During printing

- Do not reach your hand into the printing room during printing.

- Do not open the cover of the ingredient room. This may prevent the carrier from loading and replacing the ingredient tube properly.

- The user may manually stop the printing process during printing. If the printer jams or if printing is stopped during the printing process, please shut down the printer, wait for several seconds before restarting the printer and reprint your project.

Warning Screen

After printing

- The material plate is constructed using plastics. Please avoid exposing the plate to high temperatures as this may damage the plate.