X-MAKER

User Manual

Hi, this is AOSEED X-MAKER.

X-MAKER, an AI-powered 3D printer, is a brand new product with a gamification 3D design App. Thanks to the minimalist interaction design, intelligent algorithms and high-speed Wi-Fi data transmission, the one-touch printing feature makes this 3D printer available to everyone allowing you to create anything. The X-MAKER does not It's not just a 3D printer, but it also includes a powerful software and rich content, like "Things", "Theme", "Design" and "Explore" modules, which are constantly updated. It doesn't matter if you are beginner or an advanced player, you will always have new ways to play.
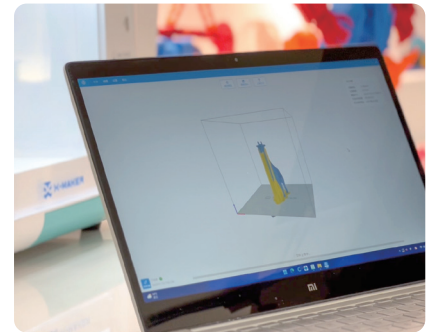
X-MAKER -- Make Creativity Touchable.

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Our Product

X-MAKER 3D Printer

X-MAKER Design App

X-PRINT Slicing Software

Packing list

3D Printer x1

PLA Filament x1

Filament Holder x1

Power Cord x1

Flexible & Magnetic Base plate x1

Pliers x1

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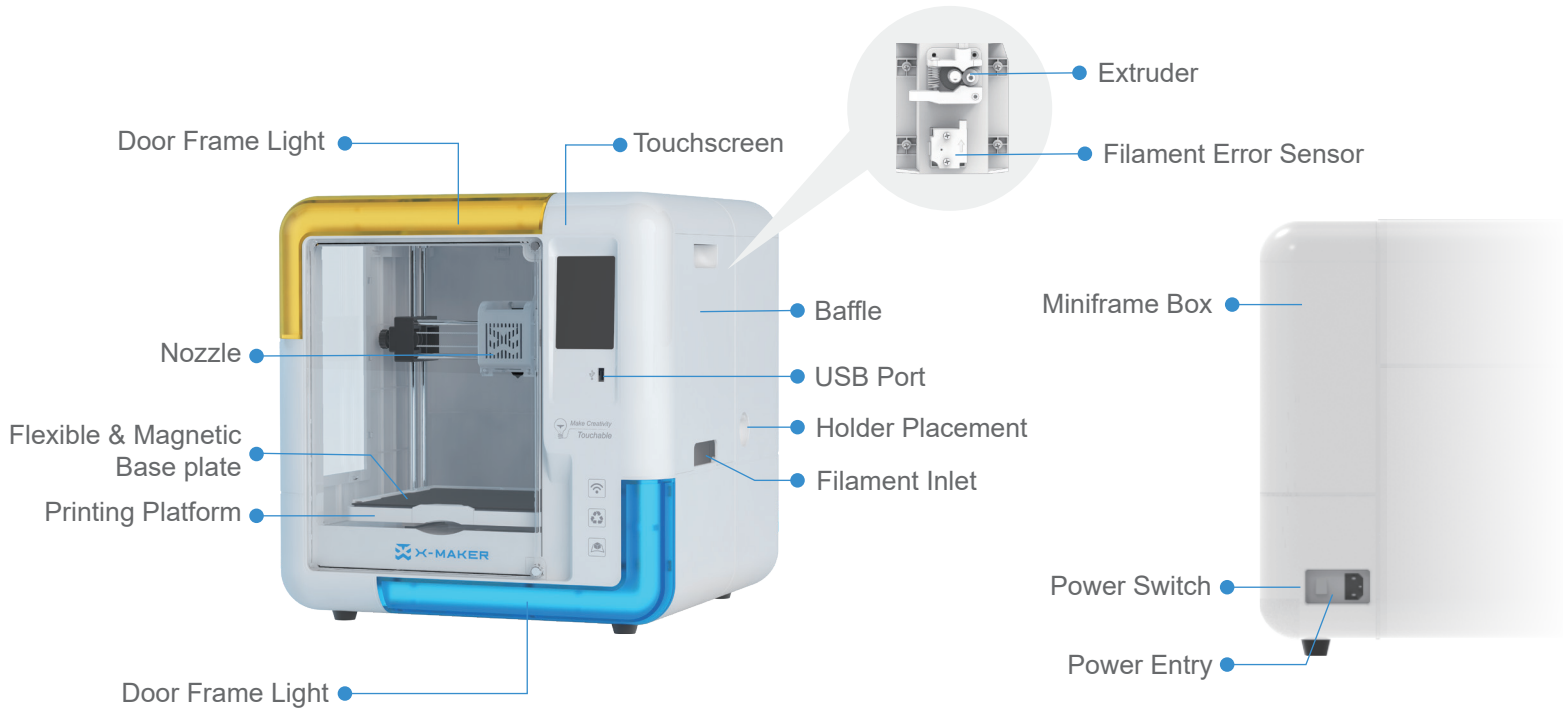
Quick Start x1

U Disk x1

- Printable creative models
- X-MAKER App installer
- X-PRINT installer

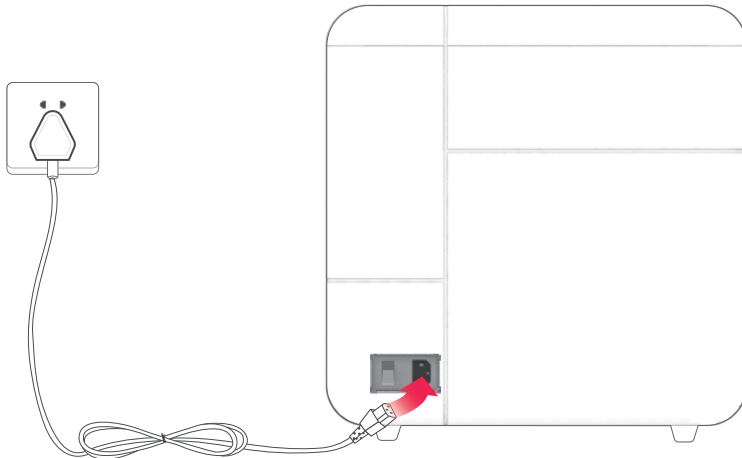# Main components

Door Frame Light

Touchscreen

Extruder

Filament Error Sensor

Nozzle

Baffle

USB Port

Flexible & Magnetic Base plate

Holder Placement

Printing Platform

Filament Inlet

Miniframe Box

Door Frame Light

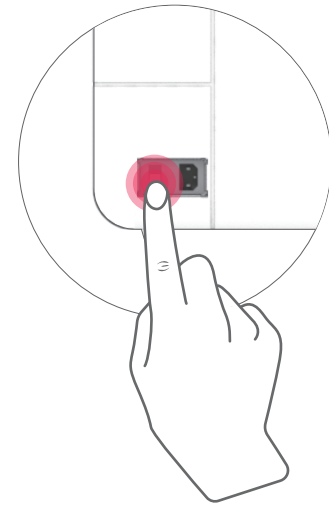Power Switch

Power Entry

Connection

Connect the power cord to the printer and the other end to a power outlet. (Please keep your hands dry.)

Turn on
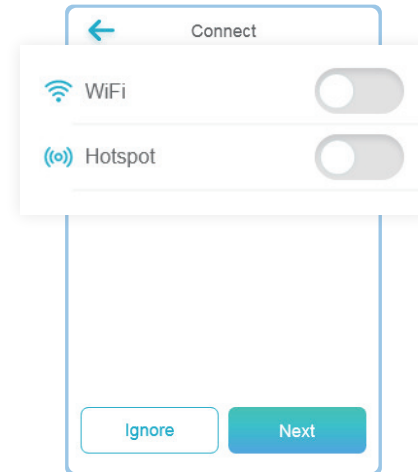
Turn on the printer using the power switch on the back.

Welcome setup

After power on, the welcome setup will appear on the touchscreen. Follow the steps and complete the setup.

Language

Select your preferred language. You can also change it by going to "Setting -> Language".
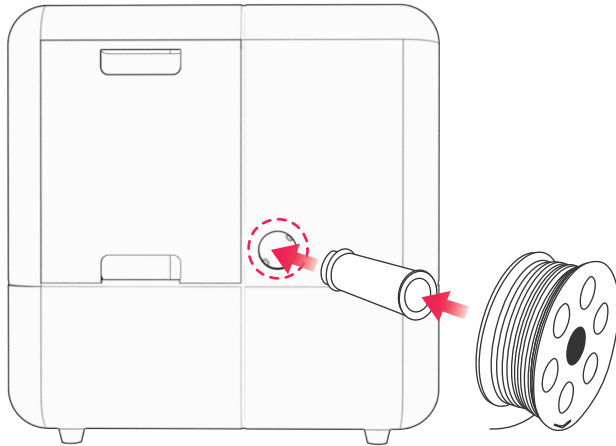
Connection

Wi-Fi: With the same WLAN, the X-MAKER App can be connected to the printer.

Access Point: When there is no WLAN available, the printer's access point can provide Internet access to the application.

Install the filament holder

Filament Inlet

Filament Inlet
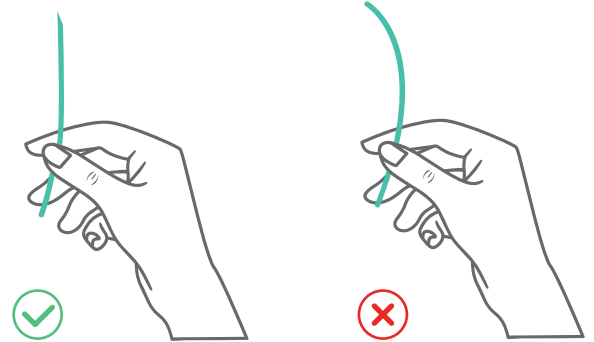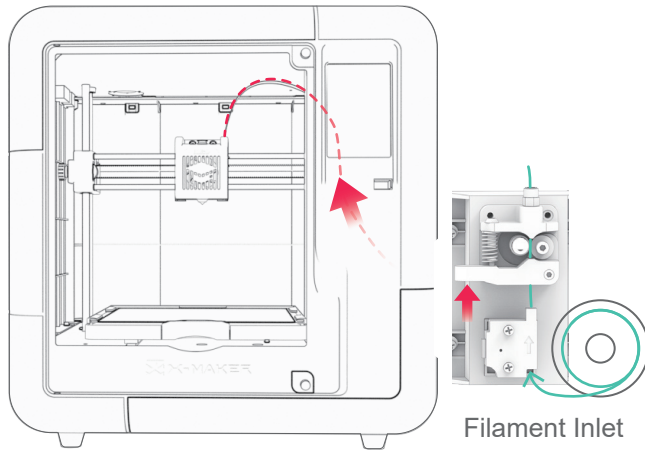
✔ Right

✘ Wrong

Install the filament holder

Install the holder on the right side of the printer.

Place the spool

Place the filament spool in the holder.

(Please make sure the filaments are not knotted or crossed.)
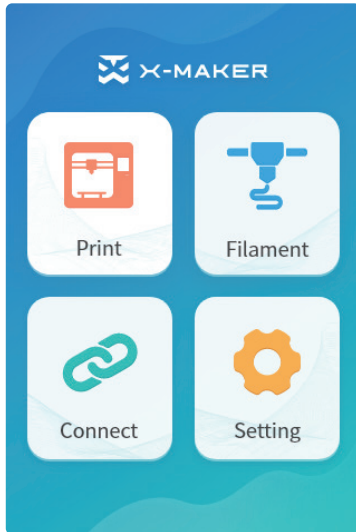
Install the filament

Filament Inlet

Note: The tip of the filament should be straightened and cut at an oblique angle.

Instructions

Insert the tip into the filament inlet until the prefeeder grabs the material. Push the spring up (as shown by the red arrow in the figure above), so that to make the filament enter smoothly.

Touchscreen

Homepage

Print: Select the file to print

Filament: Load / unload

Connect: Network connection

Setting: More settings
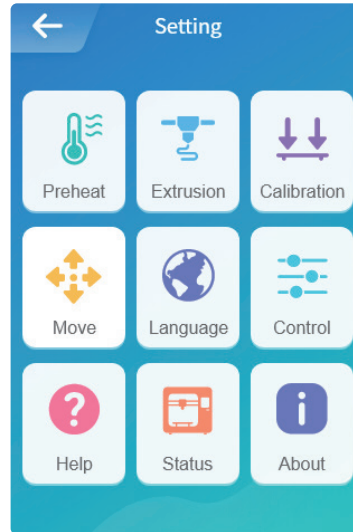
Setting

Preheat: Nozzle/hotbed heating and cooling

Extrusion: Load or unload manually

Calibration: Adjust the distance between the nozzle and base plate

Move: Adjust X/Y/Z axes

Language: Change language

Control: Switches for light recovery, fan and power loss

Help: More information

Status: Printer status

About: Printer specifications

Load the filament
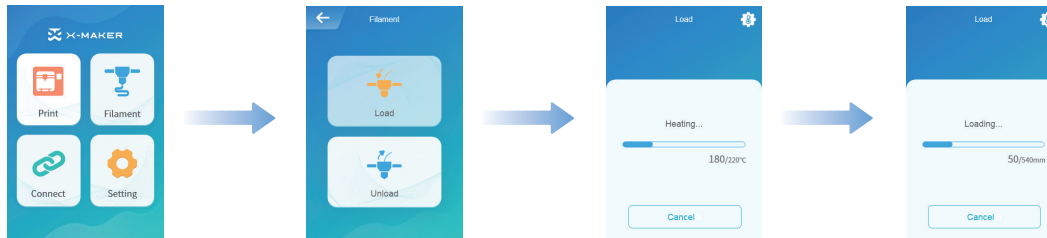
Method 1

Go to "Filament -> Load" and wait for the nozzle to heat up. When the nozzle reaches target temperature, the filament will be loaded automatically. Wait for the filament to come out of the nozzle and press the [Cancel] button.

Method 2

Go to "Setting -> Preheat" and set target temperature, then select "Start" to continue. (The target temp for PLA is 200 °C, and for ABS is 230 °C. If you use a third-party material, please refer to the target temperature on the packing box.)

Go to "Extrusion -> Load" and set the feed length to 10mm. Charging ends when the filament exits the nozzle.

Note: The filaments must be pushed to the end of the pipe so that it comes out of the nozzle as soon as possible.

Unload the filament

Method 1

Go to "Filament -> Unload" and wait for the nozzle to heat up until the filament is unloaded under the extruder gear and pull out the filament directly.
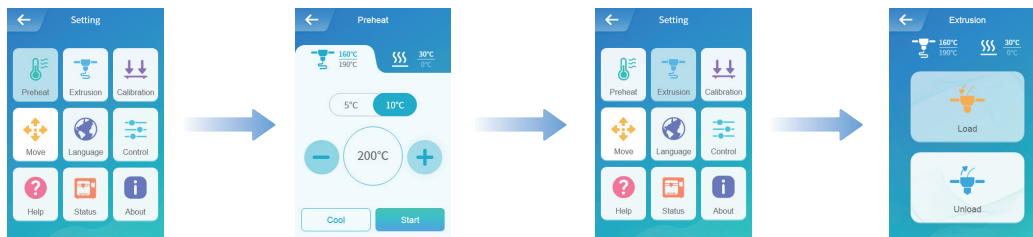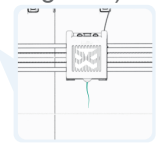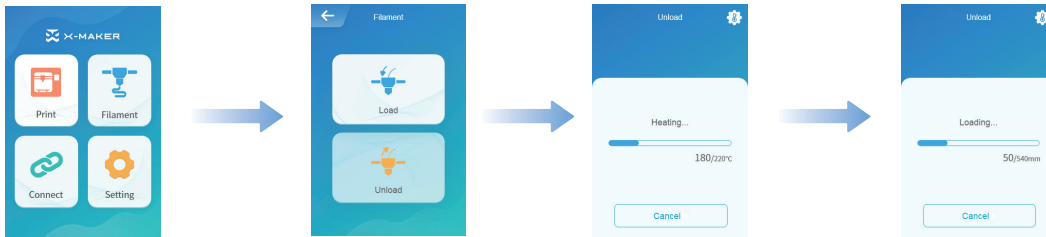

Method 2

Go to "Setting -> Preheat" and set target temperature, then select "Start" to continue. (The target temp for PLA is 200 °C, and for ABS is 230 °C. If you use a third-party material, please refer to the target temperature on the packing box.)

Go to "Extrusion -> Unload" and set the feeding length to 10mm. Repeat the above operation for 3-5 times until the end of the material comes out towards the filament inlet. Push the spring up and pull out the filament.

Model printing

Print status		Current temperature of hotbed
File name	**MODEL...xcode**	Target temperature of hotbed
Current temperature of nozzle	200°C / 200°C 30°C / 0°C 150	Current Z-axis coordinate
Target temperature of nozzle		

Printing...

3D Viewer

Print progress

Remaining time — Left: 0:55:48 — 70%

Pause/Start (Printing can be resumed.)

Stop (Printing can't be resumed.)

Stop   Pause   Setting

More settings
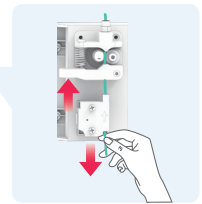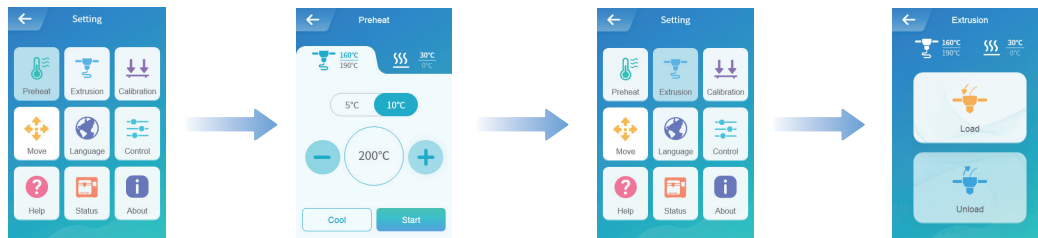
◆ Printing interface

## You can print the model by performing the following steps

1. Get your pattern to cut using X-PRINT.
2. Load the file into the printer and print it with one-touch. (Make sure your printer and X-MAKER app are connected to the same WLAN.) * Alternatively, you can save the file to a U-disk for printing with offline printers.

Printing complete

Remove the print

Once the print job is finished, allow the baseplate to cool down for 5 minutes before reaching inside. If the print is removed without complete cooling, some parts of the print may adhere to the baseplate. (*Don't touch the nozzle and allow it to cool down below 45 °C to avoid burns.)

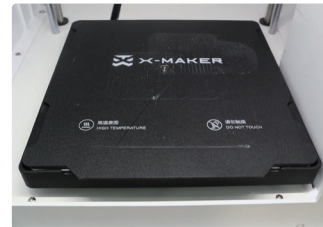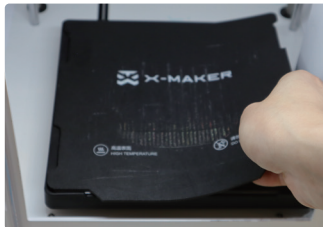Use pliers to remove the support structures of the impression.
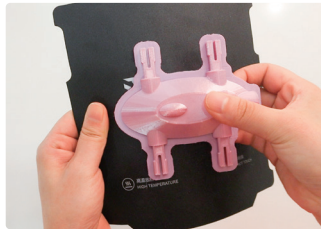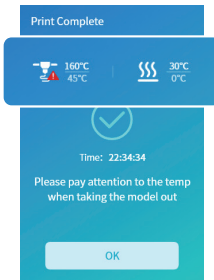
Remove the print

Remove support material

Place the base plate

After removing the print, use tools to carefully clean the remaining parts of the print on the base plate. Put the base plate back on the heating platform. (As shown in the figure below)

Remove support material

Some models have overhanging parts. In this case, you must print a support structure under the model to prevent these parts from falling off. The support structures must be removed when the print is finished. You can remove the support structures manually or using pliers.

The image on the left shows the model with the support structure.The image on the right shows the model with the support removed.


pliers

Model with the support

Model with support removed

Remove the support with care and do not damage the model.
Use pliers carefully, children should be under constant supervision during the process.

Change the filament

In an idle state

Go to "Filament -> Unload" and wait for the nozzle to heat up until the filament is unloaded under the extruder gear. Remove the filament and load a new spool of filament.
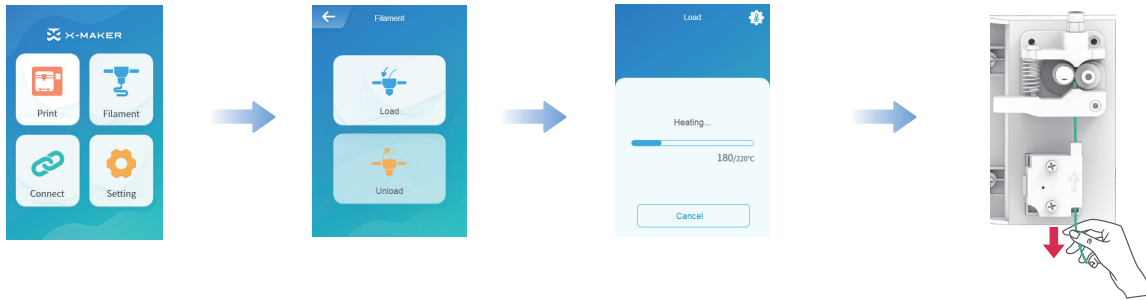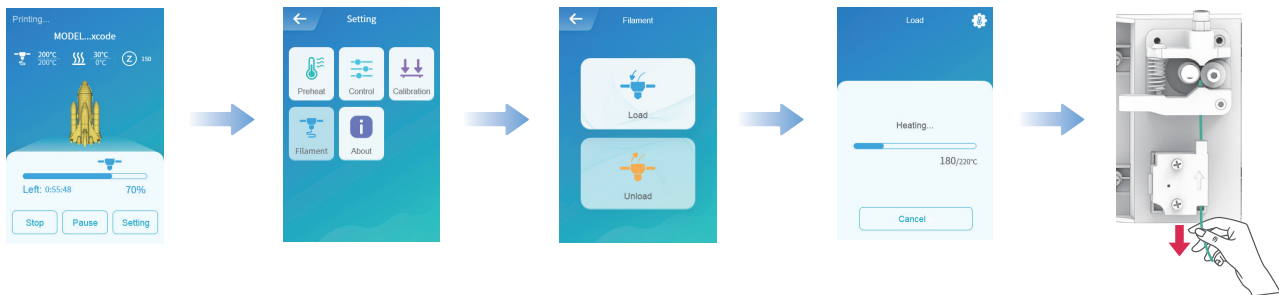

During printing

Go to "Pause -> Filament -> Unload" and wait for the nozzle to heat up until the filament is unloaded under the extruder gear. Remove the filament and load a new spool of filament. Then press the [Start] button to continue the print job.

Note: Don't touch the [Stop] button by mistake, or your print job will not be able to continue.

Move

To ensure optimal printing results, you need to perform the XYZ axes calibration during maintenance.
Go to "Setting -> Move -> Reset" and wait for the XYZ axes to reset. Select the moving distance: 1mm, 5mm, or 10mm.
Press the [+/-] button and move the XYZ axes. (If the distance is set to 10mm, press the [+/-] button once and the X/Y/Z axis will move 10mm accordingly; press twice and it will move 20mm.)
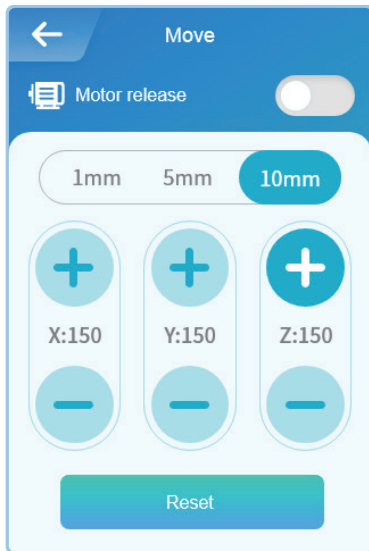
◆ Move

Motor release

Activate this mode and you will be able to adjust the nozzle and base plate manually. Turn off this mode and the printer will be energized again. Only the nozzle and base plate can be adjusted using the touch screen. (See "Move" operations for more information)
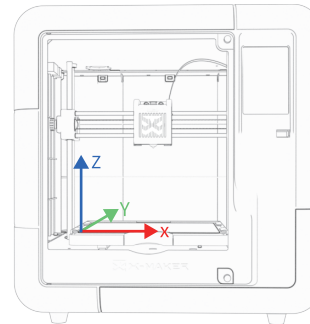
X/Y/Z axes

Calibration&Leveling

After using the X-MAKER 3D printer for a long time,the calibration should be performed to adjust the distance between the nozzle and the base plate.

1. If the distance between them is too wide, your print will not adhere properly to the base plate.

2. If the nozzle is too close to the base plate, it can prevent material from extruding.

> Note: Calibration is a professional operation. Usually, there is no need to perform manual calibration. The distance has been set before printers leave the factory. It is recommended to adjust the offset value in the range from -0.5mm to 0.5mm.

Manual leveling is required in the event that prints become warped.

Calibration

Make sure there is no excess of material under the nozzle tip before calibrating, or you may get inaccurate results;
Place the calibration card in between the nozzle and the base plate and go to "Setting -> Calibration".The Z offset value is shown on the touchscreen; Use the touchscreen controls to adjust the distance until you feel some resistance when moving the card. Select [Save] to continue. (Press the [+] button once and the nozzle will be raised by 0.1mm; press the [-] button once and the nozzle will be lowered by 0.1mm.)

Leveling

Click [Leveling] again and t he nozzle will move to nine points following the sequence shown in the image on the right.
Repeat the Step 3 above for each point and adjust the distance between the nozzle and the base plate until you feel some resistance when moving the card. Click the [Complete] button and the calibration is finished!

Leveling sequence
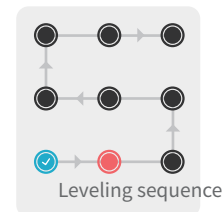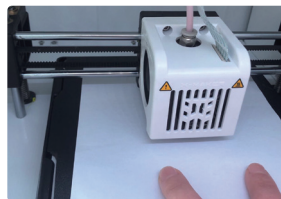
Control

CONTROL includes switches for internal light, external light, fan, ES mode, child lock, power loss recovery and filament error sensor.
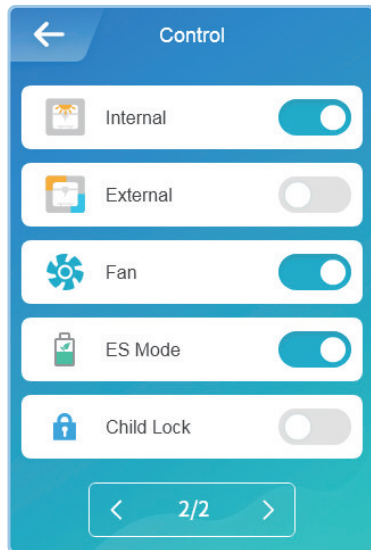
Control

Internal: Control the lights inside

External: Control the external lights

Fan: Control the fans to cool down

ES Mode: Low the temperature inside for optimal printing results

Child Lock: Prevent the print stop or other problems caused by children's mistaken touching

Power Loss Recovery: Proceed with the print job after a power failure

FES: Pause the print job automatically and prompt you to change the filament when the filament runs out.

* It is not recommended to turn off the fan.

Help

Here you can see a QR code for exploring courses, as well as a QR code for downloading X-MAKER App.

Explore gameplay   Download

Status

Nozzle temperature, base plate temperature and XYZ coordinates are shown in this page.

About

From here, you can know about X-MAKER 3D printer's name, model, firmware version and IP address.

· Product name: Printer's name can be changed.

· Version: Current firmware version can be viewed.

· Usage log: Logs for printing can be seen.

· IP address: Each printer's IP is unique, so it's convenient to connect with the X-MAKER App.

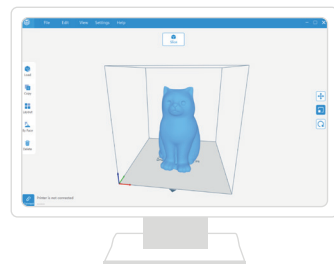*It is not recommended to perform a "Factory Reset". Once it is performed, all records will be cleared.

X-MAKER App

For Windows PC

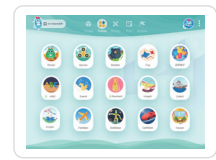You can download the X-MAKER App at qwww.aoseed.com/downloads.

*Windows 7 or above

For Android Tablet / iPad

Go to "Setting -> Help" using the touchscreen and scan the QR code for download it with your tablet/iPad.
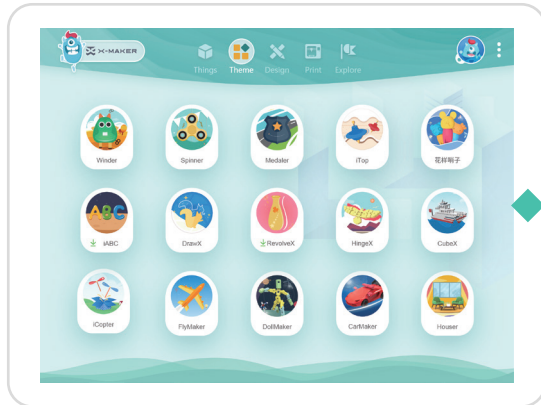Search the name of X-MAKER in the app stores and download.

Open the App store   Search "X-MAKER" / "XMAKER"   Click "Download"

Introduction

Things — Several well-designed and growing model databases.

Theme — Gamification 3D design mini programs

Design — Two LEGO-style and user-friendly design apps
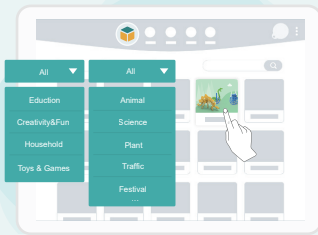
Print — AI-powered one-touch printing feature

Explore — Constant new gameplay and exploration

Things

Well-designed 3D model library in four categories.
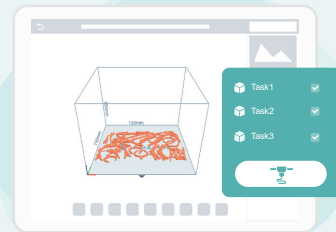Creat anything with your infinite creativity.

Original well-designed 3D model library

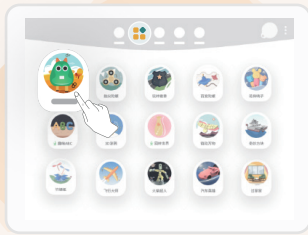

3D real-time view

High-speed & stable Wi-Fi connection

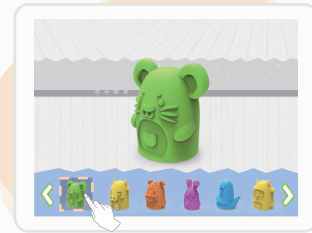Intelligent data process for one-touch printing

Theme

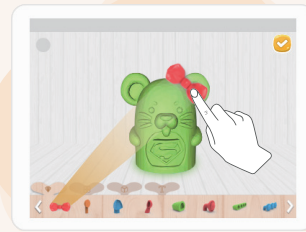Gamify 3D Customized Gadgets for Personalized
Designs Make Creation Touchable.

15 gamify 3D design gadgets

Diverse themes can be selected

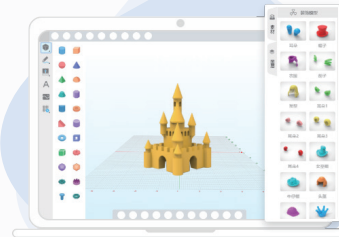High-speed Wi-Fi transmission for printing
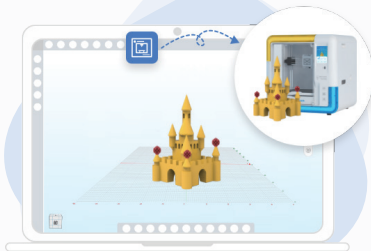

Customize unique model toys

Design

Graphic & Modeling 3D Design Apps for
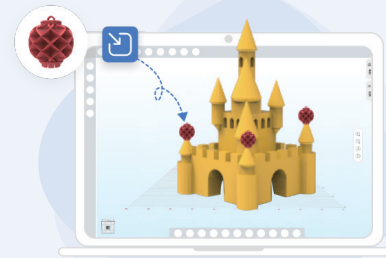Advanced Creations

Two powerful 3D-design apps

Magic 3D geometry design

High-speed Wi-Fi transmission for printing


Compatible with imported models

Print

Connect to the printer

Press the button at the upper right corner and search for available printers.

Select your X-MAKER 3D printer and connect to it . (Make sure your printer and the X-MAKER App are connected to the same WLAN.) Alternatively, you can perform the IP Connection if your printer cannot be found. (The IP address can be found by navigating to "Setting -> About" using the touchscreen.)
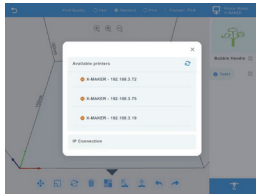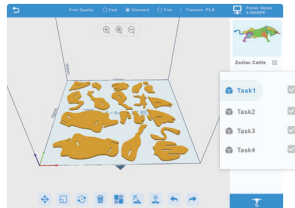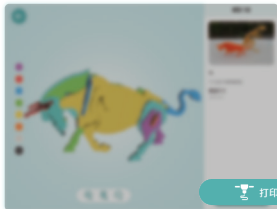

Search for printer
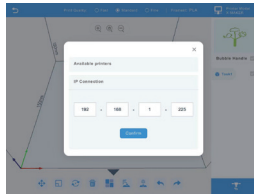
IP connection

Search for IP address

One-touch printing

Click the [Print] icon. The print job will be divided into several tasks with automatical slicing, while all files are uploaded to the printer directly. In each task, you can see how your models are being sliced. Press the [Print] icon again to start printing.

X-PRINT

After successfully setting up the printer and the X-MAKER App, install the X-PRINT - IME's free slicing software on your computer. You can download X-PRINT at www.aoseed.com/downloads.

Supported OS
Windows

System Requirements
· Display card compatible with OpenGL 2
· Intel Core 2, AMD Athlon 64, or later
· At least 4GB of memory (8GB or above is recommended)
· 64-bit processor

Installation
After downloading, run the installer to complete the installation of the X-PRINT. When opening the X-PRINT for the first time, you will be asked to select your X-MAKER 3D printer.
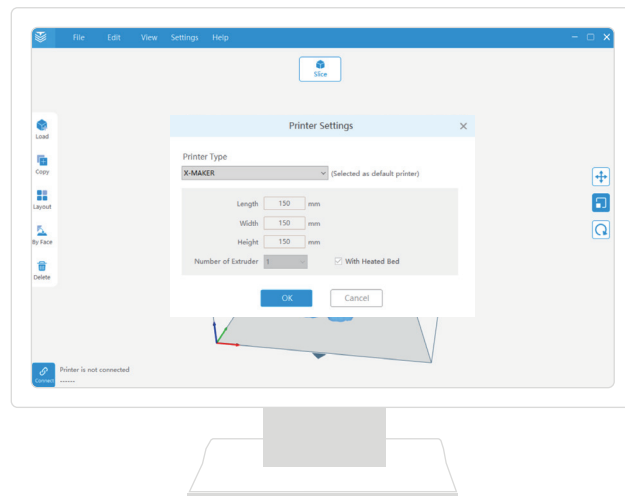
* If you skip this step, you can connect it to the printer later, by going to "Setting -> Printer".

Interface

UI elements the X-PRINT

① Menu bar

② Adjustment tools

③ Printer connection
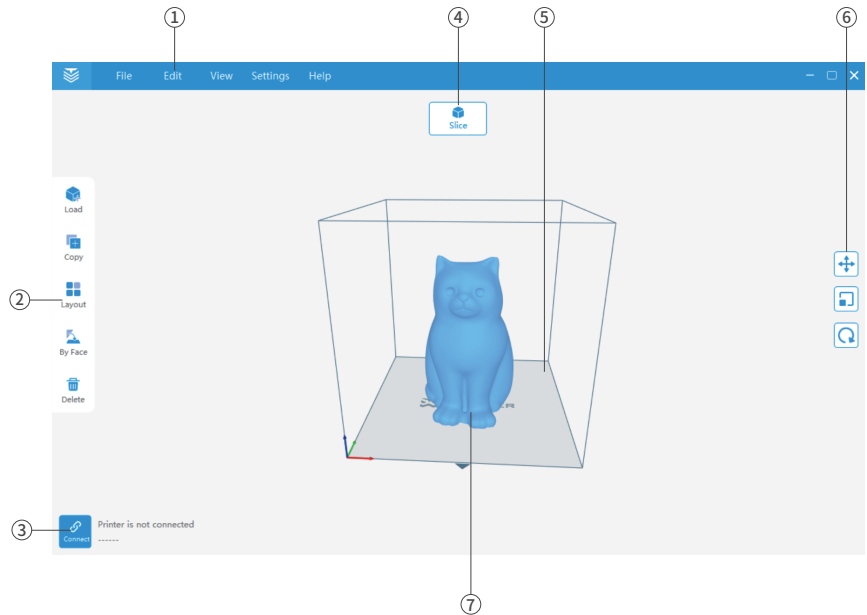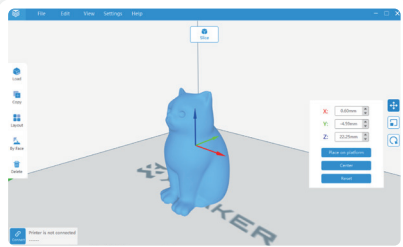
④ [Slice] button
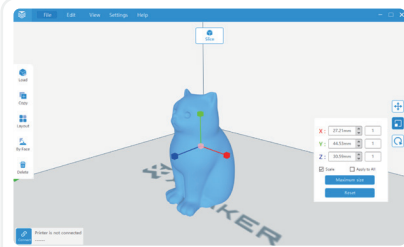
⑤ Working range

⑥ Model editing panel editing

⑦ 3D viewer

Model editing

The X-PRINT includes functions to move, scale, rotate, or duplicate parts and optimize the layout.
An Optimal layout can reduce the need for support material.
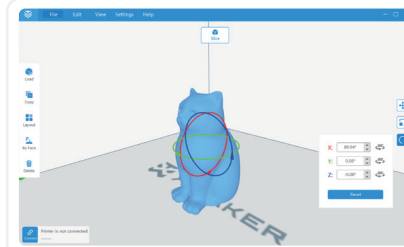
Move

Select the model you would like to move and click the [Move] button. You can move the model by setting exact coordinates of it, or by dragging the arrows.You can also use [Centered] or [Place on base plate].

Scale

Select the model you would like to scale and click the [Scale] button. You can scale the model by setting the exact model size in millimeters, dragging arrow handles. You can also print the model at the maximum size.

Rotate

Select the model you would like to rotate and click the [Rotate] button. You can rotate the model by setting the exact rotate degrees or dragging rotate hoops.

For more information about the X-PRINT, please consult the
X-PRINT user manual at en.ime3d.com/Support/XMaker

Model slicing

Prepare the model for slicing before the print stage. Go to "Settings -> Slice settings" and set the parameters control.

Layer height: The Layer height is the thickness at which each horizontal layer is sliced. A thinner layer height produces a higher resolution. Similarly a thicker layer heights reduce resolution.

Infill density: The Infill density refers to the printing of internal structures. A 0% infill prints a completely hollow model. A 100% infill prints a completely solid model

Print speed: A faster print speed decreases print time, but with reduced strength and toughness.

Adhesion type: Different adhesion types helps to improve the adhesion to the base plate to prevent the model from sliding. These parts needs to be removed after printing.

Support type: Some models have overhanging parts. In this case, you must print a support structure under the model to prevent these parts from falling down. The support structures can be removed during post-processing.

Bed temp: Set the bed temperature during printing.

For more information about the X-PRINT, please consult the X-PRINT user manual at en.ime3d.com/Support/XMaker

Model printing

Once the slice settings are in place, press the [Slice] button. When the process completes, it will go to the preview stage and immediately will show a [Print] button, as well as a [Save] button. Press the [Save] button and save the files to your computer as Xcode / Gcode. Press the [Print] button and print it via the network that the X-MAKER 3D printer is connected to.

One-touch printing

Make sure that your printer and the X-PRINT are connected to the same WLAN and the file can be uploaded to the printer directly via the network.
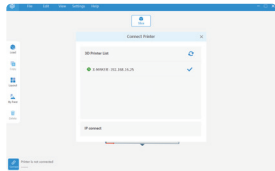
U-disk printing

You can also save the file to a USB for printing if the network is in bad condition.
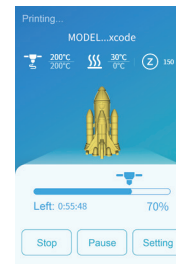
Specifications

Name: X-MAKER 3D printer	Printer dimension: 360*370*370 mm
Model: V4.0	Package dimension: 440*440*460 mm
Nozzle temp: ≤ 265℃	Net weight: 10.9 kg
Bed temp: ≤ 110℃	Grossweight: 13.45 kg
Nozzle diameter: 0.4 mm	Maximum build volume: 150*150*150 mm
Input: AC power 200V~240V, 50/60Hz 1.6A	Control panel: 3.5-inch touch screen
USB2.0 Output：5V ⎓ 0.5A	Connectivity: Wi-Fi / U disk
FCC ID：2A35N-V04	File type: Xcode / Gcode
Compatible filaments: PLA/ABS	Supplied software: X-MAKER App / X-PRINT
Language: Chinese / English	

* Recommended max ambient temp: 35℃

Notices

For printer stability and optimal results, please pay attention to the following matters :
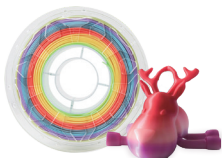
IME3D filaments are recommended. Do not change frequently the filaments of different brands or types to avoid nozzle jamming.

Please notice the supported versions. The X-MAKER app may work with some Android smartphones, but the experience may be affected due to limited screen width.
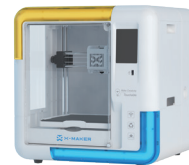

The recommended ambient temp for using the printer is 0-35℃. If you don't use it, please turn off the printer.

Close the glass door and don't reach inside while the printer is in opertion. Make sure there is no problem on the first layer of the model after printing.

Do not block the air outlet on the top of the printer during printing. Do not move the printer while it's in operation.

To avoid unnecessary damage, never disassemble the printer without following professional instructions.

For more information, please visit www.aoseed.com

Troubleshooting

1. The nozzle does not heat up
· Check if the silicone falls under the nozzle. If it did, reattach it after the nozzle cools down and then restart the printer.
· Check if the nozzle cable is loose. Turn off the printer, plug the cable back and then turn on the printer using the power switch.
  (It is forbidden to plug the cables when the power is on.)

2. Extrusion problems
· Check if the extrusion motor is working properly. If not, please consult our after-sales customer service.
· Unload the filament, cut off the end of the filament, then straighten the top and reload.
· Set the temperature to 250 degrees and load filaments for 2-3 times to push out the residue in the nozzle.
· Check if the nozzle has been blocked. If it did, heat up the nozzle and set the temperature to 250°F, then clean the hole
  (0.4mm) at the end of the nozzle with the nozzle cleaner.

3. The print does not stick to the base plate.
· Check if the slicing temperature meets the required temperature for filaments.
· Check if the distance between the nozzle and the base plate is too wide. If it did, calibrate the base plate and adjust the distance.

4. U-disk not read
· Check if the U disk is damaged. Plug in the U disk and try again.
· If the U disk does not match the printer, please check whether its file system is FAT32; If not, please format the U disk and modify its file system to FAT32.

5.The printing is paused or interrupted
· Check if the filament has been consumed. If it did, replace the filaments.
· Check if the filament is broken.
· Check whether the nozzle is clogged. If it did, clean the nozzle.
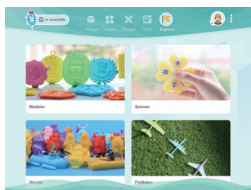· Check if the filaments and spool are wrapped or crossed.

For more user manual and instructions, please visit www.aoseed.com/support/XMaker.

Support and help

More interesting gameplays and usage techniques will be updated in the "Explore" module of the X-MAKER app and on our website.

our website: www.aoseed.com

Explore

Scan for more support

Warranty messages

1. Please carefully read and understand the contents of this user manual before using the product.

2. Within the warranty period, repaired machines can still enjoy the remaining warranty service.

3. Please keep all packaging for warranty purposes, in case of problems during the express delivery process.

4. When requesting for QA service, please provide the product code,the purchase voucher, the order ID and the invoice. Failing that, the company has the right to refuse offering the QA service.

5. Service Hours: Monday to Friday, 9:30 - 18:00 (except official holidays)

    Hotline: 021-65113005

    E-mail: service@aoweidig.com

Thank you for your support and trust in our products!

If you have any suggestions or ideas about our products and services, please send us an email (service@aoweidig.com).

Your comments and suggestions are very important to us. We wish to cooperate more with you!

Get 24/7 Assistance at

Use camera or QR scanner to scan

Or Visit: https://aoseed.afterservice.vip