# MBot Grid IV 3D Printer
USER MANUAL

mbot 3d GRID

●UNPACKING YOUR PRINTER

1. Place the box on the ground and open it up.
2. Slowly take MBot Grid II+ out of the box by grasping the upp
two hands. Place it on a sturdy table.
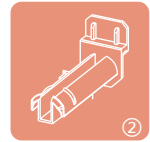3. Gently remove all the fixtures holding parts in place for tr
with scissors.

Download software and user manual from official website: ww.mbot3d.com/software

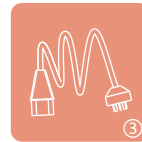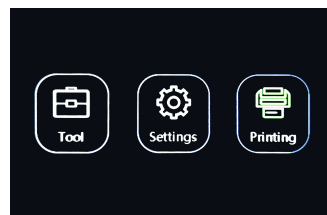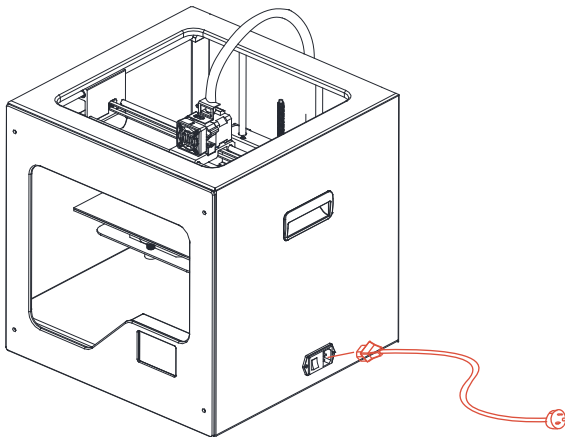***WHAT INCLUDED:**

①
Print bed

②
Spool holder

③
Power cord
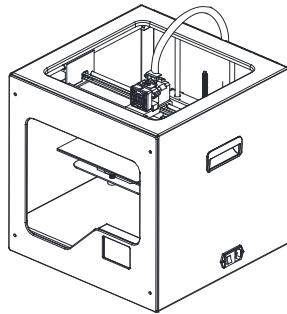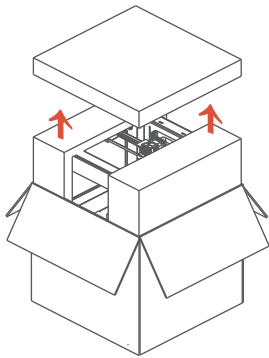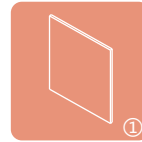
④
Toolkit

●TURN ON THE MACHINE
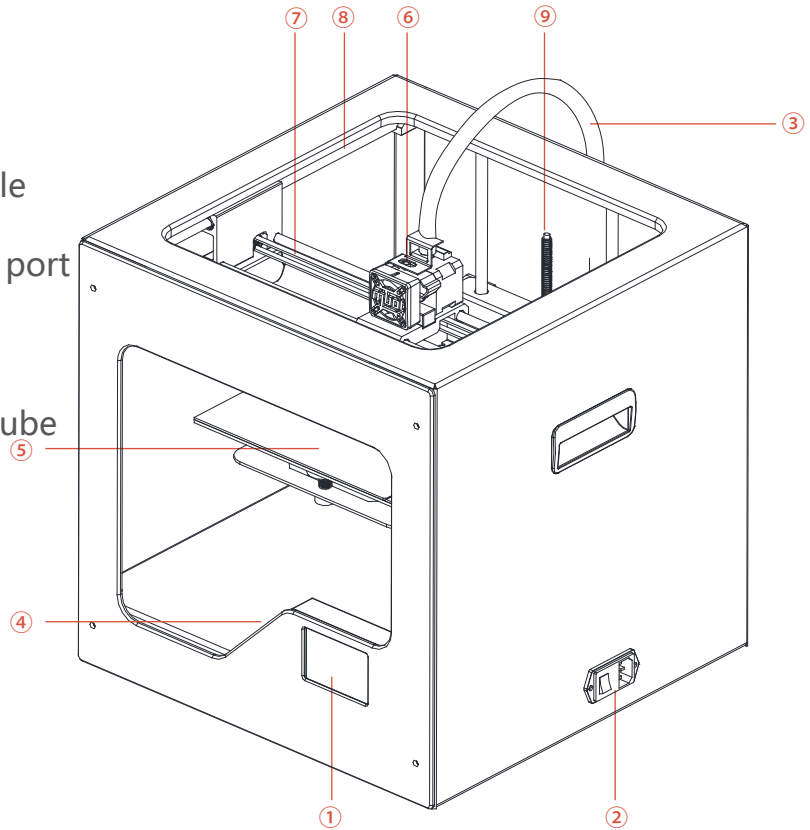
Plug the power cord into the power supply, and then turn on the
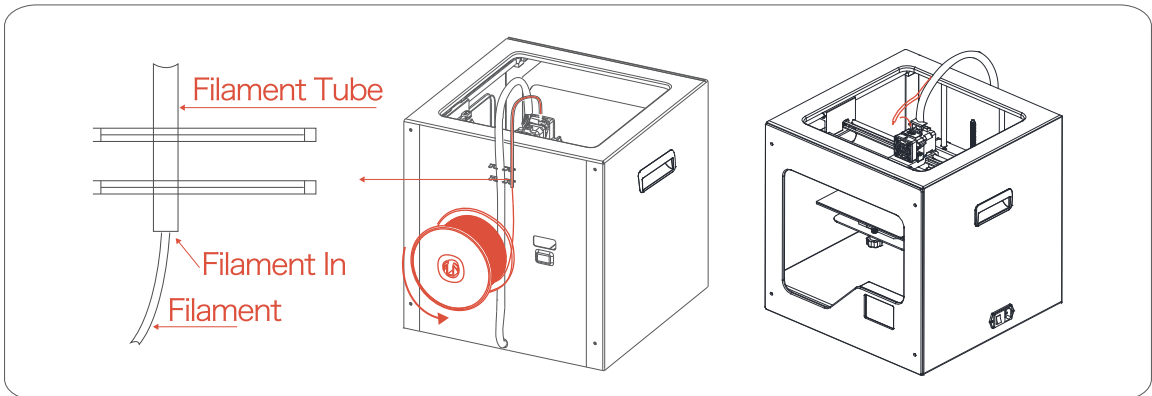the right of the machine.

Tool   Settings   Printing

BOOT MENU

●AT A GLANCE

[1] LCD panel

[2] Power switch

[3] Print head cable

[4]U disk/SD card port

[5]Build platform

[6]Filament feed tube
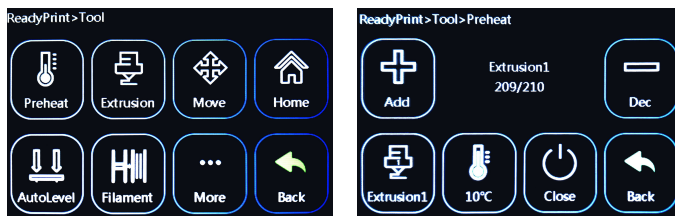
[7] X axis

[8]Y axis

[9]Z axis

●LOADING FILAMENT

① Insert spool holder and filament spool into the square holder mount on the side of the printer.
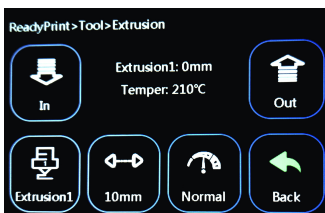

Filament Tube

Filament In

Filament

② Select the pre-heating option in the Tools menu, press the Add button to set the Extruder 's pre-heating temperature.
Through ▣ temperature setting icon to adjust the add number, you can change at 1℃, 5℃,10℃.
Change the temperature according to the filament needed, Usually PLA set at 220℃.

ReadyPrint>Tool

| Preheat | Extrusion | Move | Home |
| AutoLevel | Filament | More | Back |

ReadyPrint>Tool>Preheat

Add   Extrusion1 209/210   Dec

Extrusion1   10℃   Close   Back

③ When the temperature of the print head is heated to the set temperature, the filament are inserted into the feed port of the print head, and then click the feed button. The feed length can be set to three level of 1, 5, and 10 mm, and the feed speed can be set to three level of low speed, normal speed and high speed. After feeding, the filament extruded from the nozzle should be cleaned up, then the filament are loaded, and the material unload operation is the same.

ReadyPrint>Tool>Extrusion

In   Extrusion1: 0mm Temper: 210℃   Out

Extrusion1   10mm   Normal   Back

●PRINT

Notice: You should put the platform on the printer's build stage first before printing.

① Slicing the printing 3d model(STL format file) to gcode file (which can be read by the printer) through MPrint software, copy the generated gcode file to USB Memory Disk or SD Card, and insert it into the printer's slot which is on the left side of the touch screen.

② Select the Printing option,in the file directory, select the file you want to print, and it will start printing.

③ You can cancel and pause printing during printing, or you can change the print temperature and print speed with the operation options.
PRINTER SUPPORT Power-loss Recovery feature, After power-on again, the screen will display the printing interface and you can click the resume button to continue last printing job, you will have to wait for some time for heating the nozzle head and heated bed.

*Matters needing attention

1. Please use tested original consumables, otherwise easy to cause the print head congestion.
2. Before building, make sure the build plate is fixed and clean.
3. Keep the machine away from any liquid. Or, it may get damaged.
4. The nozzle temperature is over 200°C when the printer is operating. Avoid touching.
5. ABS will produce a strong smell when building, so please keep ventilated.
6. Pause to change new filament when material is running out. You can even load filament during building. Just remember DO NOT move the position of print head, otherwise the print will be destroyed.
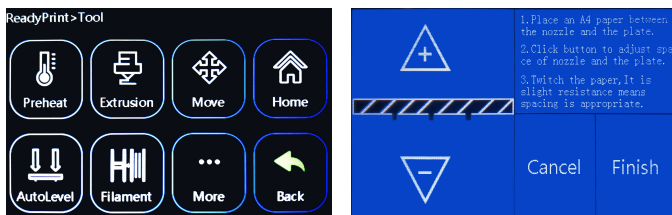
●LEVELING THE BUILD PLATFORM

Note: When the printer is shipped from the factory, the build platform was leveled and the gap with the nozzle also adjusted. Since it may cause displacement during transportation, please re-adjust the gap between the platform and the nozzle.

The gap between the platform and the nozzle is too large, the model can not stick to the platform, when the gap is too small, the model is not easy to remove, and the gap size is suitable for the thickness of two A4 papers.

## ●Adjusting the gap between platform and nozzle.

1. Make sure the build plate is fixed.
2. Check the print nozzle is clean, no remaining material.
3. Select the AutoLevel In the Tool menu, the extruder moves between three points to calculate the height difference, it will stop at the center of the build platform, then follow the touch screen's instruction to continue.

●Adjust the build platform manually

The build platform will auto calculate the height difference and make compensation during the printing. USUALLY you do not need to adjust the platform. If need, you can do it as follow.

First homing the XYZ, then move the printer head to the magnet on the right rear of the platform, raise the platform to just touch the printer head, fix the Z axis, and then move the printer head to the left to the magnet on the left rear of the platform. Use the supplied screw to push the bottom left of the platform. Twist until just touch the printer head, then move the printer head to the magnet on the front of the platform, and then do the same operation again. After leveling, you need to press the automatic leveling again to adjust the gap between the nozzle and the platform.
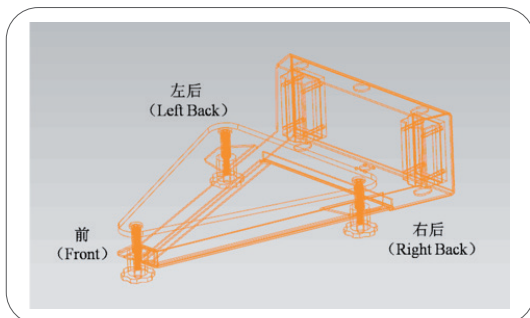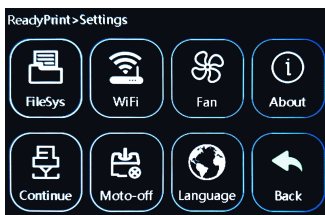
●Other operations

1. MOVE

The movement command under the tool menu can move the X, Y, Z three axes, which is convenient for other operations or to judge whether the three-axis motor works normally. When moving, the movement distance can be adjusted by three gear positions of 0.1mm, 1mm and 10mm.
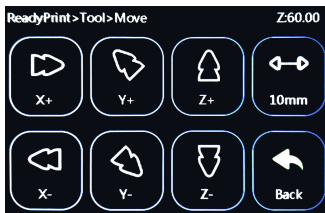
2. SETTING

Fans, motor switches, and languages can be set.

●Troubleshooting

3.The print head does not feed or discharge when loading filament

①Push the front head of the printhead cooling fan to observe the internal structure of the feeder. Observe whether the feed port on the gear side is blocked by excess filament. If there is any, after the print head is preheated, use a tool such as a screwdriver to plug or dispose the blocked filament and then feed.

②If there is no excess filament blocked, the newly loaded filament can directly enter the nozzle, or the feeding motor is rotating, then it is judged as a nozzle plug. In this case, after the print head is preheated, insert the nozzle from the bottom up with the needle attached to the toolbox, and pass it back and forth several times. If the plug is in a slight condition, this method can make the nozzle continue to work. If it still does not discharge, please contact the after-sales and need to replace the nozzle.
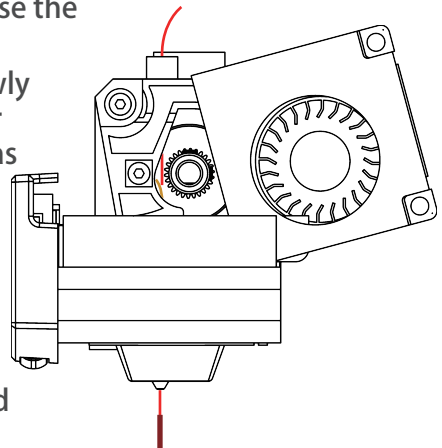
Note: The second case is common in printers for a long time.
Or use the low-quality filament that are not qualified on the market.

Thanks again for choosing MBot 3D printer!

Tech Support:
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Email: info@mbot3d.com
http://www.mbot3d.com