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Thank You

Thank you for purchasing the JGAURORA A5S.

We believe in sharing the best 3D printing technology and dedicate ourselves to offering you affordable products without compromising quality through an unparalleled commitment to R&D and have seen great success in innovating advanced manufacturing techniques in development of 3D printers and accessories.

Push the limits with JGAURORA and we print what you create.
Before You Begin

• The information contained herein is subject to change without notice.

• The user guide contains detailed instructions and notes on the operation and use of this printer.

• JGAURORA shall not be responsible for any damage or expense that might result from the use of parts other than genuine parts from the JGAURORA.

• For good output quality, JGAURORA recommends that you use genuine accessories from JGAURORA.

• For your safety and benefit, please read carefully before using and keep it handy for future reference.
Safety Information

Failure to follow these guidelines may cause damage to your printer and injury to yourself or others.

• Keep printer away from humidity and dust.
• Make sure the room where you are using the printer is well ventilated and spacious.
• Do not place the printer on an unstable or tilted surface.
• Keep children away from the printer.
• Connect printer to properly grounded power outlets.
• Do not keep nozzle or bed always working at high temperatures if not printing.
• Do not leave the operating printer unattended for too long.
• Do not touch nozzle/bed/model with your bare hands when printer is still running.
• Keep your clothing and all parts of your body away from the printer’s moving parts.
• Goggles will be highly suggested when removing the base layer.
• Turn off printer IMMEDIATELY when there is smoke or unusual noise while printing.
• When not using the printer for extended periods of time, power off the printer and disconnect the AC adapter from the outlet.
Safety Information

Operating Environment

• Operate your printer in a location with the following conditions:

  1. Ambient temperature: 5°C-40°C

  2. Relative humidity: 20%-50% (non-condensing)

• Power supply: AV 110~220V/50HZ AC

Please follow the instructions in Choose Compatible Power Supply (Page 11) and be sure to connect the power cord to a power source as above.
What’s in The Box

Main components and accessories

- Base
- Gantry
- Filament spool
- Spool holder
- Card reader
- SD card
- USB cable
- Toothed belt
- Nozzle
- Screw
- Wrench
- Power cord

Note: Package details are subject to change without prior notice.
Product Overview

- Extruder
- X axis
- Hot bed
- SD card slot
- LCD display
- Gantry
- Feeder motor
- Spool holder
- Filament spool
- USB port
# Product Overview

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>A5S</td>
</tr>
<tr>
<td>Dimensions</td>
<td>536<em>480</em>543mm</td>
</tr>
<tr>
<td>Layer thickness</td>
<td>0.05~0.3mm</td>
</tr>
<tr>
<td>Net weight</td>
<td>Approx. 13.8kg</td>
</tr>
<tr>
<td>Printing speed</td>
<td>10<del>150mm/s (Recommend 30</del>60mm/s)</td>
</tr>
<tr>
<td>Shipping dimensions</td>
<td>640<em>600</em>255mm</td>
</tr>
<tr>
<td>Nozzle Temperature</td>
<td>Room temperature~240°C</td>
</tr>
<tr>
<td>Shipping weight</td>
<td>Approx. 17kg</td>
</tr>
<tr>
<td>Nozzle diameter</td>
<td>0.4mm</td>
</tr>
<tr>
<td>Build size</td>
<td>305<em>305</em>320 mm</td>
</tr>
<tr>
<td>Hot bed temperature</td>
<td>Room temperature~110°C</td>
</tr>
<tr>
<td>Build surface</td>
<td>Black diamond glass heated plate</td>
</tr>
<tr>
<td>Supported materials</td>
<td>PLA/ABS/Wood, etc.</td>
</tr>
<tr>
<td>LCD display</td>
<td>2.8” Touch screen</td>
</tr>
<tr>
<td>Filament diameter</td>
<td>1.75mm</td>
</tr>
<tr>
<td>Connectivity</td>
<td>SD card/USB</td>
</tr>
<tr>
<td>Languages</td>
<td>Simplified Chinese/English</td>
</tr>
<tr>
<td>Supported file types</td>
<td>STL, OBJ, G-Code</td>
</tr>
<tr>
<td>Operating environment</td>
<td>Temperature 5°C<del>40°C/Humidity 20</del>50%</td>
</tr>
<tr>
<td>Supported OS</td>
<td>Windows XP/Win 7/Win 10</td>
</tr>
<tr>
<td>Power requirements</td>
<td>AC 110/220V</td>
</tr>
<tr>
<td>Software</td>
<td>Cura (Win/Linux/Mac) /JGcreat (Windows 64bit)</td>
</tr>
</tbody>
</table>
Setup

Before Assembly

When dealing with the form beneath the hot bed:

1. Loosen all four bolts under the hot bed.
2. Push forward the hot bed and then take out the foam.
Setup

Assembly-Printer

1. Take out all necessary parts and toolbox.
2. Guide the base through the gantry and make sure B points are inlaid in the slot of A points. *
3. Tip over the printer and place it on the table.*

*Followed by tightening all bolts.
Setup

Before Assembly

1. Make sure H1 is as high as H2.*
2. If not, rotate the Z-axis coupler to adjust.**

*H1/H2 refers to the distance from bottom of X-axis to top frame

**Please make sure the printer is powered off in case you power on the printer
Operation

Choose Compatible Power Supply

Confirm that the input matches local voltage especially when you're traveling to a different country:

- Check the input voltage
- Press to toggle between 110V and 230V
- 230V indicates current input voltage is compatible
Operation

Main Screen

- **Prepare**
  - HEAT: Preheat nozzle/bed
  - MOVE: Move X/Y/Z axis
  - HOME: Auto home X/Y/Z axis
  - PRINT: Print model
  - EXTRUDE: Load/unload filament
  - LEVEL: Level bed
  - SET: Settings
  - EN/CHS: Language options
Operation

Bed Leveling

Tap “HOME” in main screen

Press “ALL” to home point

Note: Tightening up all four spring bolts before leveling.

Note: You’re highly recommended to watch video tutorials first or contact JGAURORA before leveling or if you have any problems in leveling.
Operation

Bed Leveling

1. Remove the foam in top frame after 'Home point' process completes.
2. Adjust the Z-axis limit switch as follows If nozzle still touches hot bed after tightening up leveling bolts.*
   2.1. Select **Move** and move Z-axis up a little bit.
   2.2. Move Z-axis limit switch up by 1~2mm.

* Only if necessary.
Operation

Bed Leveling

1. Move the nozzle to below 4 points to level the platform.
2. Start in one corner and put the A4 paper underneath the nozzle.
3. Manually adjust the bed by tightening up or slackening relevant spring bolts until there is slight resistance on the paper from the nozzle.
4. Repeat this step in all the corners of your bed.

Note: You’re highly recommended to watch video tutorials first or contact JGAURORA before leveling or if you have any problems in leveling.
Operation

Bed Leveling

A SUCCESSFUL FIRST LAYER is VITAL to a successful print.
After the printer is assembled and leveled, we suggest you WATCH CAREFULLY when you're printing the first layer.

😊 If the printer is perfectly leveled, you should get nice, flat lines of filament with no gaps between that strongly adheres to the bed.

😔 If not, you can try tightening or loosening the spring bolts below the hot bed while printing to adjust the distance and re-level the bed.

Note: You're highly recommended to watch video tutorials first or contact JGAURORA before leveling or if you have any problems in leveling.
Operation

Loading Filament

Prepare/preheat

EXTRU1: 200/200
ADD
DEC
EXTRUDE
HEAT
CLOSE
BACK

Tap “HEAT” - “Preheat” - “Extruder 1 (E1)”

Hit “ADD” to heat up Extruder 1 to 200°C

Note: Only PLA is used here as filament for demonstration.
Operation

Loading Filament

While preheating, load the filament into the spool holder and insert the filament into extruder.

1. Cut the tip of the filament straight across, and insert it into feeder as you press the spring clamp.
2. Select "Set" - "Change", tap "IN" when temperature reaches 200°C.
3. Continue to push the filament into extruder until filament extrudes out of the nozzle.
Operation

Mounting Toothed Belt

Mounting toothed belt for cable protection.
Operation

Ready for Printing

Save the G-code file on SD card and make sure it's under the root directory.

Insert the SD card and hit “PRINT” in main screen.

Select the G-code file you like to print.

Press “START”.

Printing automatically starts when temperature raises up to preset value.

*Note: If first 1-2 layers fail to stick to the hot bed, STOP printing and try leveling again.*
Operation

Replacing Filament

Reload the supplemental filament as follows if filament is about to run out during printing:

- Tap “OPTION” in printing interface and choose “PAUSE”, the X axis goes back to home point.
- Hit “MORE” - “CHANGE”, select “OUT” to eject the remaining filament.
- Put on a new spool of filament and hit “IN” to feed till the filament comes out of the nozzle.
- Tap “BACK” twice to enter printing mode, hit “RESUME” to resume printing.

Note: 1. Remember to preheat the nozzle first to required temperature if replacing filament after printing completes.
2. Always pull out the remaining filament gently and carefully so as not to damage the nozzle/extruder.
Slicer Software

Software Installation

1. Copy and paste the file from SD card to your computer.
2. Start JGcreate set-up wizard by double clicking the setup.exe icon.
3. Choose a folder path in which you save the file.
4. Click Finish to complete installation and run JGcreat.
Slicer Software

Software Installation

1. Run JGcreat.
2. Select **Settings-Printer-Add printer.**
Slicer Software

Software Overview

Load or import a 3D model file
Move
Scale
Rotate
Mirror
Preview: Solid, X ray, Layers
Slicer Software

Software Installation

Import model and select printing quality.
G-code file is generating if “slicing” prompts in bottom right corner.
Slicer Software

Software Overview

Save file when you've done slicing.
Save the G-code file on SD card and make sure it's under the root directory.

*(For detailed instructions in JGcreate operation, please refer to documents in SD card)*
The purpose of scheduled maintenance is to perform regular maintenance operations as required, in order to prevent possible failures from occurring and ensure good performance throughout the life of the 3D printer.

- Take appropriate measures to minimize the risks to yourself and to others before printing.
- Prior to printing, always make sure that:
  1. Movement of every axis is smooth and without binding.
  2. Nozzle is not clogged or damaged.
  3. Every screw is tight and all connections are secured in position.
  4. Bed is level.
  5. There is no condensation inside the printer.
  6. Printer is properly grounded and installed to satisfy electrical classification requirements.
  7. Printer is operating within the specified ranges of operating temperature and humidity.
Maintenance

• Printer should be cleaned regularly so that there's no dust or other residues accumulated.

• During printing,
  1. Model should not exceed the actual build volume of the printer.
  2. Printer should not be running overload.
  3. If there's unusual noise or vibration, you're recommended to clean and lubricate the rails.
     3.1. Wiping with a clean dry cloth.
     3.2. Apply the lubricating oil on the rails.
     3.3. Move the moving parts back and forth to ensure enough lubrication.

• Always pull the remaining filament out of extruder and keep it under seal in cool and dry place.

• Do not disassemble the printer. If you do so, make sure you put every part back to original position.

• Power off the printer and wait for at least 10s before changing SD card.

• 1~3 hours interval is necessary if printer runs over 96 consecutive hours.
## Troubleshooting

<table>
<thead>
<tr>
<th>S/N</th>
<th>Symptom</th>
<th>Diagnoses</th>
<th>Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Filament breaks at the feeding port of extruder</td>
<td>Filament is about to run out Filament is damaged arising from damp Filament is clogged in tube</td>
<td>Replace the filament Keep the filament under seal in cool and dry place Clean the tube</td>
</tr>
<tr>
<td>2</td>
<td>Filament slides from the extruder</td>
<td>Filament is too thin</td>
<td>Cut off the thin part</td>
</tr>
<tr>
<td>3</td>
<td>Abnormal temperature</td>
<td>Temperature sensor failure</td>
<td>Replace with a new temperature sensor</td>
</tr>
<tr>
<td>4</td>
<td>Model is not in the right position</td>
<td>Loose timing belts</td>
<td>Tighten up the bolts and timing belts</td>
</tr>
<tr>
<td>5</td>
<td>Warping found on model</td>
<td>Bed is not level</td>
<td>Level the bed</td>
</tr>
<tr>
<td>6</td>
<td>Fail to generate G-code file</td>
<td>Incorrect settings Wrong save path</td>
<td>Choose the correct machine type Select right save path</td>
</tr>
<tr>
<td>7</td>
<td>Fail to install software</td>
<td>OS may not be supported</td>
<td>Install the supported OS</td>
</tr>
</tbody>
</table>
Technical Support

• Please refer to the warranty card for details of warranty policy.

• If you have any questions about your printer, feel free to contact us.

Shenzhen Aurora Technology Co., Ltd.

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