AFINIA H480 3D PRINTER
UNPACKAGING
for Windows and Mac OS X

Unpacking Your Afinia 3D Printer

Your Afinia 3D Printer comes with the Installation Disc, Manual, Unpack and Setup Guide (this document), and an Accessory Pack. Remove these items before removing the Printer from the box.

Carefully lift the Printer and foam from the box, removing the side foams while supporting the printer.

Remove the foam between the Extruder and the printer.

There are two packaging clips on the Printer that are used to hold the platform and extruder assembly in place during shipping. These clips must be removed before the Printer is powered on.

Turn the Printer so the back is facing you.

The first clip will be just below the extruder assembly, held in place with tape. Remove the tape, then slide the clip down to remove it.

The second clip is holding the Z-axis arm down. Gently lift the X-axis arm a few inches. Do not lift the arm by the platform as this may affect the levelling of the platform!

Once the arm is raised, rotate the top of the clip towards the front of the Printer. The clip will slide off the arm once it is in the correct position.

Save the packaging clips! It is highly recommended that you reinstall these two clips if you need to ship the Printer in the future.

Accessory Pack Contents

Next, open the Accessory Pack and verify the contents with those listed below:

1. USB Cable
2. Platform Probe and Data Cable
3. Filament Guide Tube
4. Filament Hanger
5. Nozzle Wrench & Hex Wrenches
6. Spare screws & washers
7. Tweezers
8. Exacto Knife and blades
9. Snipping Pliers
10. Putty Knife
11. FR-4 (Perf) Board
12. Gloves (1 pair)
13. Spool of Filament (1, Natural)
14. Power Cable
15. Power Supply

You will need the Filament Hanger, Filament Spool, Filament Tube, Hex Wrenches, Power Supply and Power Cable, and USB Cable to complete the Hardware Setup and Installation. Please follow the instructions on the other side of this document.

For more detailed information on the Setup and Installation process, please review the Afinia 3D Printer User's Manual.

AFINIA H480 3D PRINTER
INSTALLATION & SETUP GUIDE
for Windows and Mac OS X

To install and set up your Afinia 3D Printer, please follow these steps:
For more information, please see the Afinia 3D Printer User's Manual!

1. Attaching the Material Spool

Attach the Material Spool to the Afinia 3D Printer by following these steps:

A. Connect the power adapter to the power interface and turn on the power switch.

B. Insert the tab on the back of the spool holder into the slot on the left side of the printer. Slide the spool holder down as far as it will go to secure it.

C. Put the ABS plastic spool onto the holder with the end of the filament pointing up from the back.

D. Thread the filament through the Filament Guide at the top of the spool holder.

E. Insert the end of filament into one end of the Filament tube. Feed the filament through the tube until about 4 inches of filament protrudes from the tube.

2. Install the Software and Drivers

Mac

Insert the Installation Disc into your Mac. Open the disc, go into the ***Mac*** folder, and double-click the ***Afinia Mac Setup.pkg*** icon. Follow the prompts through the installation. The drivers will be added and the Afinia software will be installed to the ***Applications*** folder.

Windows

Insert the Installation Disc in your PC. Start the Afinia 3D Printer ***setup.exe*** file and install it to the specified directory .

Follow the instructions in the Installer to be sure the drivers and software are all in place before connecting the Afinia 3D Printer to the PC when prompted to do so.

For installation on Windows XP, you will need to manually specify the driver location.

- If you are installing from the Installation Disc, select the disc as the location of the drivers.
- If you are installing from a downloaded file, the drivers are copied to the ***Program files\Afinia\Afinia 3D Printer\Drivers*** folder; specify that location during the hardware installation. For more details on this process, please see the User's Manual.

3. Load the Print Material Filament

This process will be the same on both Mac and Windows.

A. Start the Afinia 3D Software (refer to the software install procedure if you have not already installed it), and select **Initialize** from the **3D Print** menu.

B. After the Printer has initialized, select **Maintenance** from the **3D Print** menu. Click the **Extrude** button. After the printer nozzle has warmed up to 260° C, the printer will beep; you can also monitor the nozzle temperature in the **Maintenance** window.

C. Once the nozzle is heated, push the filament into the hole at the top of the extruder head and hold it there with gentle pressure until the extruder motor starts pulling it through the extrusion head. The extruder will extrude a thin filament of material for a short period of time.

4. Prepare the Platform

Before you start printing, the platform must be prepared so that the model adheres to the platform enough to be printed without the model moving. There are several options for preparing the platform, such as clipping the supplied perf board onto the heater bed, that are discussed in the User's Manual.

5. Level the Print Platform

To print correctly, the platform must be level. Perform the following steps:

A. Open the **Maintenance** dialog box from the **3D Print** menu.

B. Click the **To:** button to bring the platform to the height shown, then slowly increment the height until the platform is about 2mm from the nozzle, clicking **To:** after each increase.

C. Use the five position buttons to check that the platform at all four corners and the center are the same distance from the nozzle.

D. If the platform is not the same distance from the nozzle at all five points, you will need to adjust the platform until it is level. There are 3 screws under the platform that are used to level the platform. Adjust the screws as necessary until all four corners and the center of platform are the same vertical distance from the nozzle.

6. Auto-Level the Platform

After physically leveling the platform, run the Auto-Level utility which will help accomodate an uneven print surface.

A. Attach the Platform Probe to the Extruder head.

B. Connect one end of the Data Cable to the data connection on the Probe.

C. Connect the other end of the Data Cable to the green connection on the back of the printer, routing the Cable around the right side of the printer frame.

D. Select **Auto Level** from the **3D Print** menu.

E. The printer will run through a 9-point calibration routine.

F. Once the routine is complete, detatch the Probe and unplug the Data Cable from the Probe.

7. Auto-Detect Nozzle Height

After leveling the platform and running the Platform Calibration, the nozzle height must be set.

A. Connect one end of the Data Cable to the connection on the back of the Nozzle Sensor, located at the back of the print platform.

B. Connect the other end of the Data Cable to the green connection on the back of the printer if it wasn't left connected after the Auto-Leveling

C. Select **Nozzle Height** from the **3D Print** menu.

D. The Printer will raise the platform with the nozzle over the nozzle Probe until the Probe detects the nozzle.

E. The detected nozzle height will be displayed and automatically set for you.