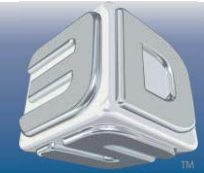


# ProJet® 160, 260C, 360, 460Plus

## Quick Reference Guide

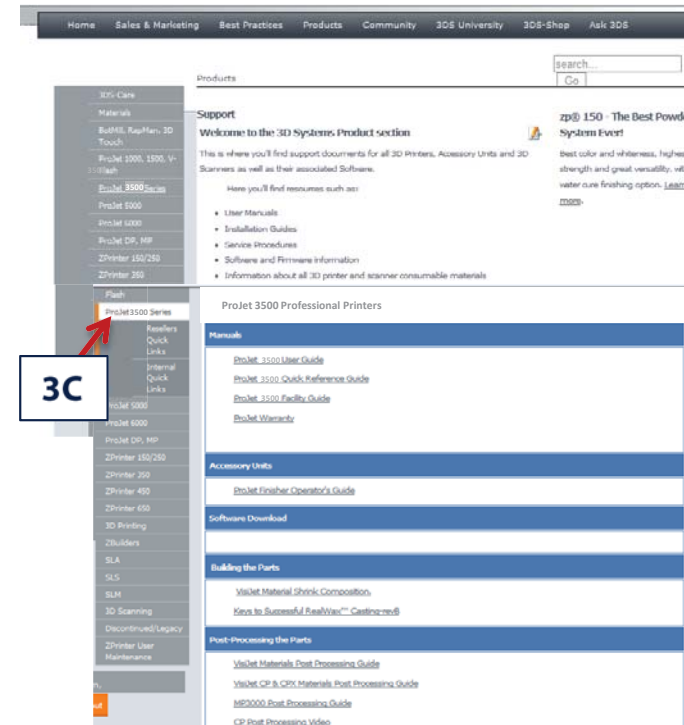


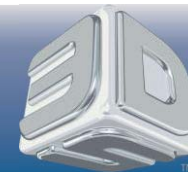
It will be necessary to register your ProJet 3-D Production System, to access the ProJet Online User Guide. To register, type in <http://3dscentral.3dsystems.com> in the web browser. You will be asked to supply a "User ID" and "Password" which should be something that is easily remembered. The printer's serial number that is located on the back side of the machine is also required during registration. Once registered, an email confirmation will be sent to you with a link to 3D Systems' 3DS Central login page. (<http://3dscentral.3dsystems.com>). Please log in using your user name and password to access the user guide.

## 1 CUSTOMER'S 3D CENTRAL ACCESS

This quick reference guide will give you basic instructions on how to get your printer ready to successfully build your first part. For more detailed instructions, please access the ProJet™ 160, 260C, 360 & 460Plus User Guide by logging into <http://3dscentral.3dsystems.com>.

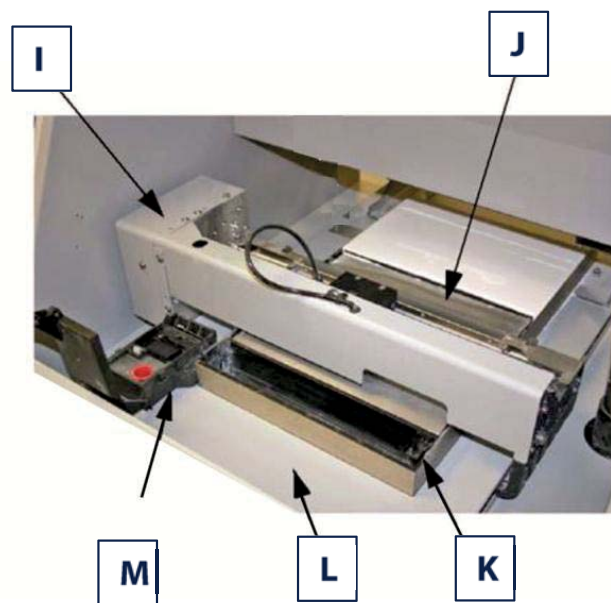
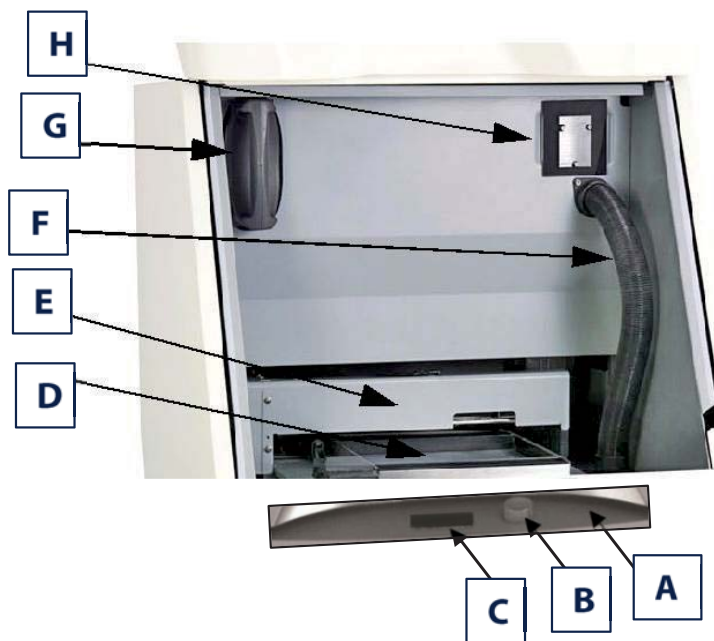
- Enter your email address and the password that was sent in the confirmation email.
- Once in 3DS Central, click on "Product" located at the top menu bar.
- Next, click on ProJet X60 Series located on the side bar; your user guides and other valuable printer documents are located here. Click on the document to open or download a copy to save.





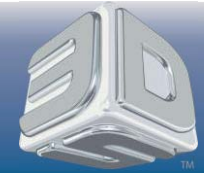
## 2 FAMILIARIZATION ProJet® 160 and 260C

This Guide is intended as a reference for users who are familiar with their 3D printer and needs to start a first build of a part. Your 3DPrint™ Software is installed and ready to run. Ensure that the software is properly configured for your printer and choice of core. For more detailed instructions, please refer to the user guide.



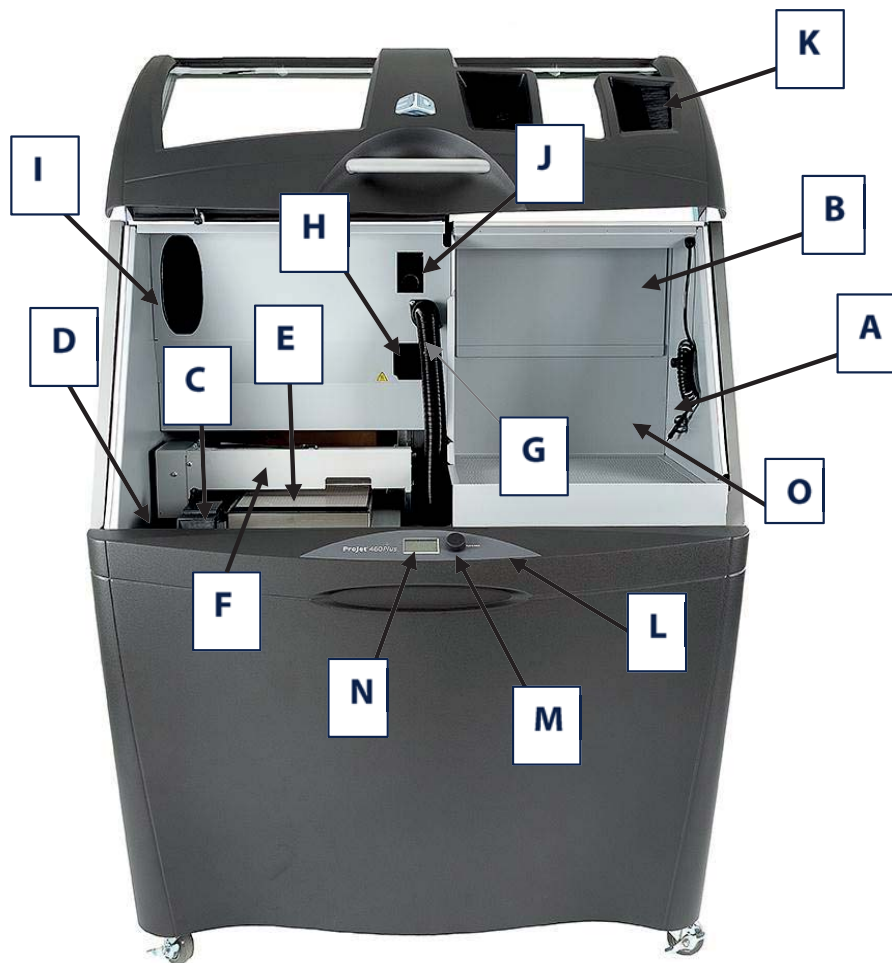
**A. Control Knob**  
**B. LCD Display**  
**C. Control Panel**  
**D. Build Bed**  
**E. Fast Axis**  
**F. Vacuum Hose**  
**G. Binder Cartridge**

**H. Debris Separator**  
**I. Fan Axis**  
**J. Build Bed**  
**K. Front Overflow**  
**L. Deck**  
**M. Service Station**



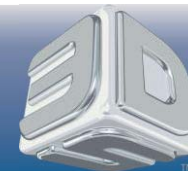
### 3

#### FAMILIARIZATION **ProJet® 360 & 460Plus (460Plus is depicted)**



- A. Air Wand
- B. Glove Box (460Plus Only)
- C. Service Station
- D. Deck
- E. Build Bed
- F. Fast Axis
- G. Vacuum Hose
- H. Heater (460Plus Only)
- I. Binder Cartridge
- J. Debris Separator
- K. Arm Holes
- L. Control Panel
- M. LCD Knob
- N. LCD Display
- O. Cleaning Station





## 4 POWER SUPPLY

Verify facility's electrical service rating before connecting power to the printer.

### Electrical requirement:

Printer in operation

100 - 120V~, 50-60 Hz, 5.5 Amps.

230V~, 50-60 Hz, 2.75 Amps.

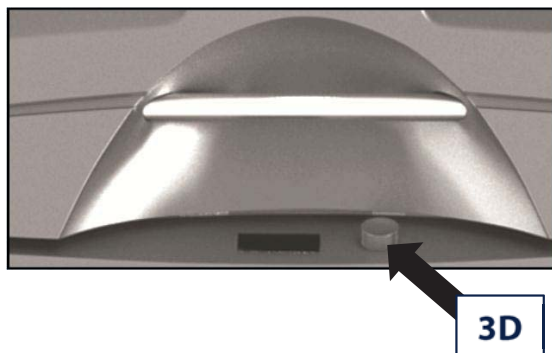
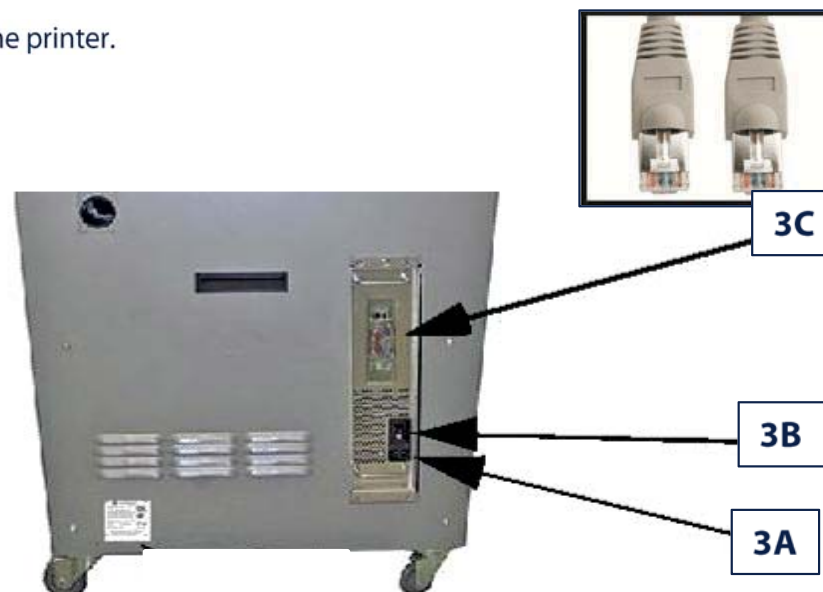
Printer in Sleep Mode - 48 W

100 - 120V~, 50-60 Hz, 0.4 Amps.

230V~, 50-60 Hz, 0.2 Amps.

- Plug power cord into power outlet(3A) (located at the backside of printer) and into facility's power outlet.
- Switch power on (3B).
- Plug RJ-4C cable (3C) into terminal (located at the backside of printer) and into computer's USB terminal.

**NOTE: A shielded Ethernet cable is required when connecting from the printer to your computer.**

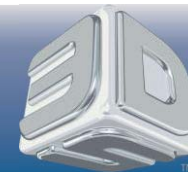


Push the Control Knob (3D) once to:

- Bring up the printer menu.
- Select a menu command.
- Start/Stop/Cancel a menu function.

Turn the Control Knob left/right to highlight menu items.

When selecting the **Raise/Lower Platform** commands, hold the Control Knob down to raise/lower the platform.



### 5

## SETTING UP YOUR PRINTER

**NOTE:** Before starting your first part, please ensure that the printer is clean and that it is kept well maintained. Please see the ProJet® 160, 260C, 360 and 460Plus User Guide for further instructions on properly cleaning your printer.

### Add Binder

To add binder, follow the steps below.

- Before inserting the cartridge into the housing, check the expiration date, and also ensure the cartridge label is in the correct orientation.
- Insert cartridge into its housing. Ensure it is pushed all the way in; you should feel it gently snap into place.
- **Important:** If a cartridge does not snap into place, *do not force it*. Check the orientation and that it is the correct type of cartridge and try again.
- If there is not enough binder in the cartridge, 3DPrint displays **BINDER LOW** in the **Printer Status** dialog.

**Important:** Do not add binder unless you are prompted to in the 3DPrint **Printer Status** dialog.



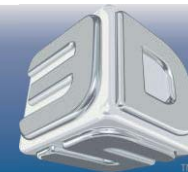
### Add Core

To add core, follow the steps below.

- Open the printer cover and vacuum core into the feeder by selecting **VACUUM** on display. **The printer cannot start a print job when the top cover is open; ensure cover is closed before printing. Do not open the cover while the machine is printing.**
- 3DPrint evaluates the geometry of the part to determine if there is enough core in the Feeder to complete the build. If there is not enough core, 3DPrint displays **ADD CORE** in the **Printer Status** dialog. **Important:** Do not add core to the Feeder unless you are prompted to in the 3Dprint **Printer Status** dialog.







## 6

### SETTING UP A BUILD TO PRINT

**NOTE:** Before starting your first part, please ensure that the printer is clean and that it is kept well maintained. Please see the ProJet® 160, 260C, 360 and 460Plus User Guide for further instructions on properly cleaning your printer.

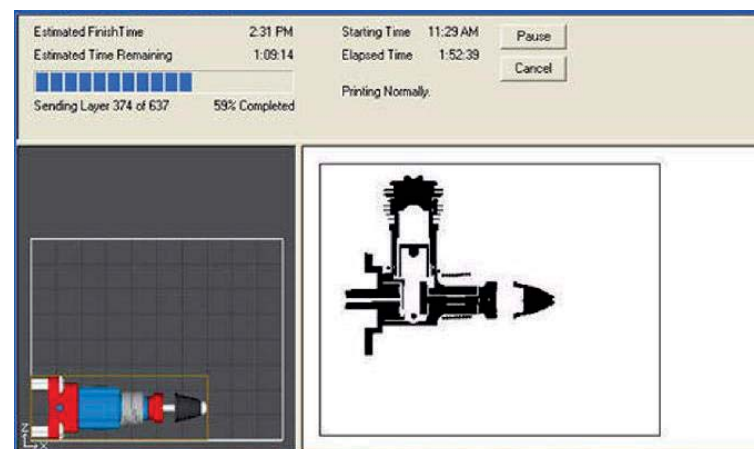
1. Open your 3D content in 3DPrint.
2. Under **Settings** tab, press "Materials."
3. Check your printer settings to be sure the correct printer and material set are displayed.

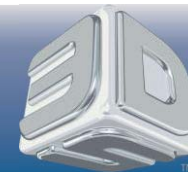
**NOTE:** If you need to change any settings, refer to the **Setup and Print the Build** section of the *User Guide*.

4. In **Home** tab press "Build" icon.
5. Check the Printer Status window. If all the **Print Head**, **Core**, and **General** items display **OK**, the **Print** button is enabled.

**NOTE:** If any items need attention, the **Print** button is disabled. Refer to the **Additional Operations** section of the *User Guide* There you'll find details on how to get the printer ready and clear any messages.

6. Select any Print Options for this build. If the part has delicate features, deselect the option for **Empty Build Piston After Printing** (ProJet 460Plus only).
7. Click **Print** to start your build.
8. The **Printing** dialog opens and reports the status of the print job as the build progresses.
9. Click **Pause** to pause the current print job, Click again to resume printing.
10. Click **Cancel** to cancel printing this job.





## 7 FINISHING BUILD

### Gross Core Removal

When the build is finished, you will need to remove the core around the part.

#### Automatic Core Removal (460Plus only)

When the build is finished, the printer starts an automatic heated drying cycle. A counter on the printer LCD counts down the time remaining before the part is dry.

After the drying cycle completes, the printer automatically removes excess core by vibrating the Build Bed and vacuuming through the bottom of the Build Bed.

- Remove the part and carefully transfer it to the Cleaning Station to clean the core from the part.



### Manual Core Removal

When the build is finished, the printer starts an automatic drying cycle (heated on the 460Plus; unheated on the 160, 260C and 360). A counter on the printer LCD counts down the time remaining before the part is dry.

- Close the top cover, then select **VACUUM & CLEANING** on the LCD menu. Open the cover. The vacuum starts.
- Vacuum core from around the part. Be careful around delicate sections. Use the Control Knob to move the Build Platform up as needed.
- Carefully move the part to the Cleaning Chamber to clean the core from the part.



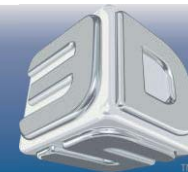
### Fine Core Removal

Any loose core on the part must be removed before proceeding with the post-processing steps.

- **160 & 260 Only:** Open the printer's top cover and move the part to the Core Recycling Unit. Open the recycling unit's top cover and place the part onto the bed; close the top cover. Select **EXTERNAL CLEANING** on the LCD menu; the vacuum and compressor start.
- **360 & 460Plus Only:** Open the printer's top cover and the Core Cleaning Chamber's top cover. Place the part into the recycling station and close the top cover. Select **VACUUM & CLEANING** on the LCD menu; the vacuum and compressor start.
- Test the air flow against your hand and adjust as needed. Turn the Control Knob left to decrease pressure, or right to increase pressure.
- Using the Air Wand, remove all remaining core on the part.
- Push the Control Knob once to turn the air compressor off. Return the Air Wand to its clip. Allow the part to dry longer in the Cleaning Chamber..







## 8 CLEANING

**It is very important that you keep your printer well maintained. Please read the ProJet® 160, 260C, 360 and 460Plus User Guide to properly clean your printer. A clean, well-maintained printer produces better parts, has less downtime, and needs fewer service calls.**

### **Routine Cleaning After Every Build**

After every build, it is important to clean your printer following the steps below.

Routine cleaning includes the following steps:

- Vacuum Up Excess Core
- Empty The Debris Separator
- Clean The Rails and Carriage
- Clean The Service Station

### **Vacuum Up Excess Core**

- Vacuum the Build Bed, the Fast Axis, and the Deck.
- Close the top cover, then select **VACUUM & CLEANING** on the LCD menu. Open the cover. The vacuum starts.

Vacuum the following areas:

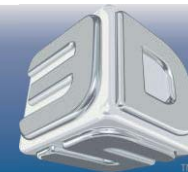
- The top of the Fast Axis; also reach inside to vacuum the Rails and the Printhead Carriage.
- The Build Bed (but not the Feeder side).
- The deck around the Build Bed.

**Note:** Be careful not to vacuum inside the service station itself. Press the Control Knob once to turn off the vacuum.

### **Empty The Debris Separator**

- Pull the Debris Separator out of its holder on the printer.
- Empty the contents into a trash receptacle.
- Use the soft brush found in the Accessory Kit to brush caked core from the screen.
- Return the empty Debris Separator to its holder. Be sure to push the Separator flat against the panel for a secure fit.





### CLEANING (Cont'd)

#### Clean The Rails and Carriage

- Pull the Fast Axis out toward you.
- Using a paper towel dampened with distilled water, wipe the top and bottom Rails. Move the Carriage back and forth as needed to clean the entire length of both rails. Using a clean, dry paper towel, thoroughly dry both Rails.
- Using a fresh paper towel, wipe the Carriage to remove any core. Also clean the Build Bed and Deck.

#### Clean The Service Station

- You will need several dry paper towels and a cotton swab; a squirt bottle filled with distilled water; disposable gloves; Pick and Syringe from the Accessories Kit.
- Open the printer top cover and the Service Station cover.
- Place paper towels around the Service Station. Also cover the front overflow and the Build Bed.
- Pull the Service Station wiper lever all the way forward until the rubber squeegees are fully exposed. Hold the lever and squirt water on and around the squeegees.
- **Important:** Don't get water in the front overflow or on the build bed.
- Wipe the front and back of the squeegees clean. Use the Pick to scrape away any excess core.
- Thoroughly clean and dry the Service Station, Deck, Build Bed, Front Overflow. Push the wiper lever back to its original position.

## 9

### POST PROCESSING

For Please refer to the appropriate ProJet® 160, 260C, 360, 460*Plus* User Guide for part post processing instructions.