QUICK START GUIDE

PROJET® X60 SERIES

ProJet 160, 260C, 260Plus, 360, 460Plus

Quick Start Guide

Rev A

Note: Please refer back to http://infocenter.3dsystems.com/projetcjpx60/ (http://infocenter.3dsystems.com /projetcjpx60/) for the most up-to-date Quick Start Guide
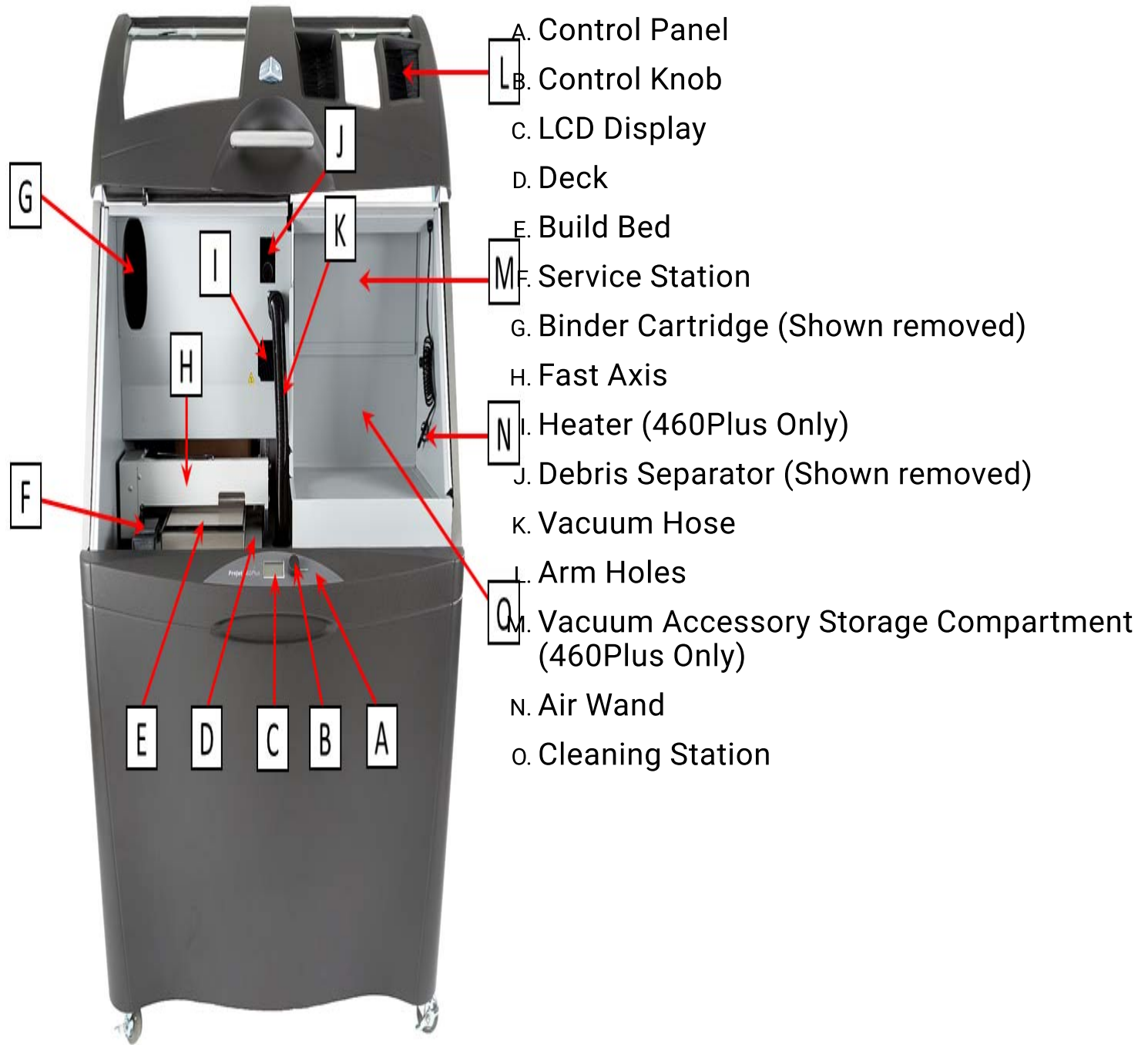
FAMILIARIZATION PROJET® CJP 160, 260C AND 260PLUS

This Guide is intended as a reference for users who are familiar with their ProJet® CJP X60 Series printer, and are ready to start their first build. The 3DPrint^{TM} Software should be installed and ready to run. Ensure that the software is properly configured for your printer and print style. For more-detailed instructions, please refer to the Projet® CJP X60 Series User Guide.
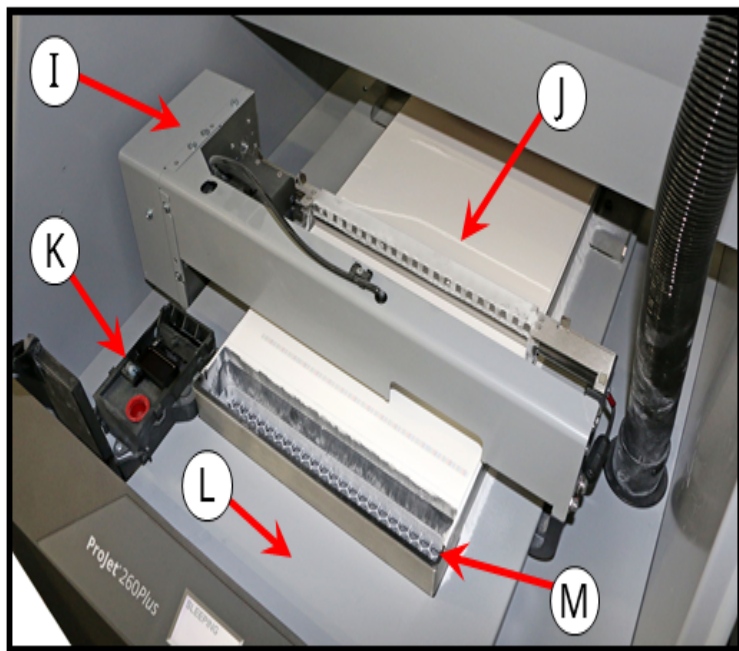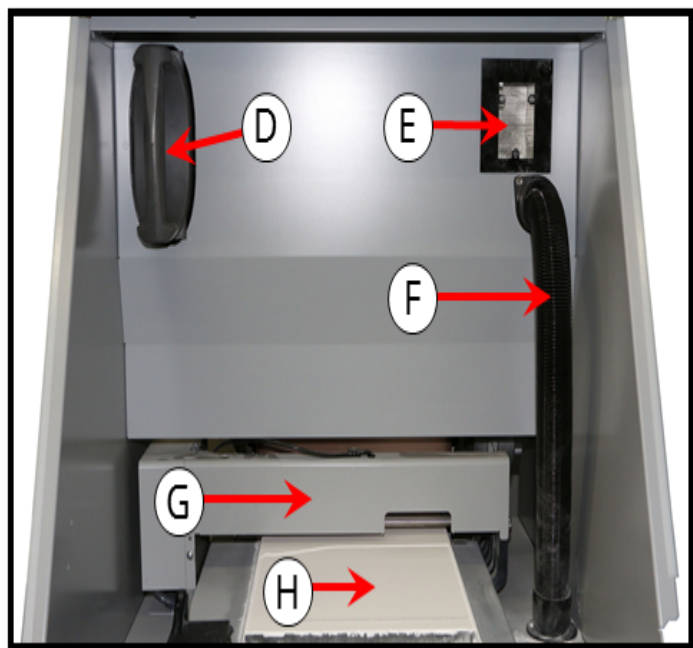
A - Control Panel	F. Vacuum Hose	K - Service Station
B - LCD Display	G - Fast Axis	L - Deck
C - Control Knob	H - Build Bed	M - Front Overview
D - Binder Cartridge	I - Fast Axis	
E - Debris Separator	J - Build Bed	

FAMILIARIZATION PROJET® CJP 360 AND 460PLUS

(460Plus is depicted)

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

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.
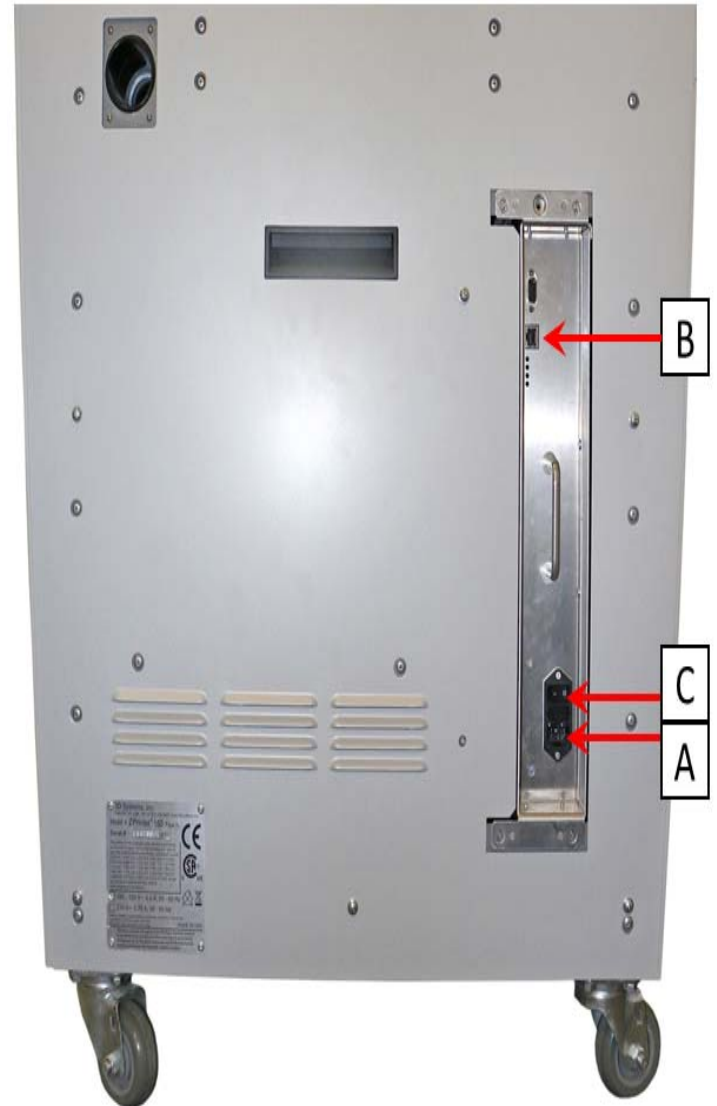
Printer in Sleep Mode - 48 W

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

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

. Plug power cord into power outlet (A) (located at the backside of printer) and into facility's power outlet.

. Plug one end of the Ethernet cable into Ethernet port (B) and the other end into your PC's network port.

. Switch power on (C)

Once the LCD display shows online;

Push the Control Knob (D) 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.

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® CJP 160, 260C, 260Plus, 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 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 reservoir, 3DPrint displays BINDER LOW in the Printer Status dialog.
Important: Do not add binder unless you are prompted to in the 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 the display. Important: Never use the vacuum for any material other than clean Core. Doing so will clog the vacuum system.
- 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.
- 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.

STARTUP CHECKLIST

Startup Checklist:

Has air been purged from binder line? (1st print)

Ensure the Deck, Fast axis and Build bed are clean of Core or other contaminants

Ensure the debris separator is empty

Ensure the carriage and rails are clean

Ensure the service station is clean

After emptying it of any remaining Core, raise the build platform to the top of the build bed

Ensure there is nothing inside the printer that will obstruct the fast axis as it moves (especially the vacuum hose – rotate it out of the way if necessary)

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® CJP X60 Series User Guide for further instructions on properly cleaning your printer.

Open your 3D content in 3DPrint.

Under Settings tab, press "Materials."

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

In Home tab, press "Build" icon.

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 for 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).
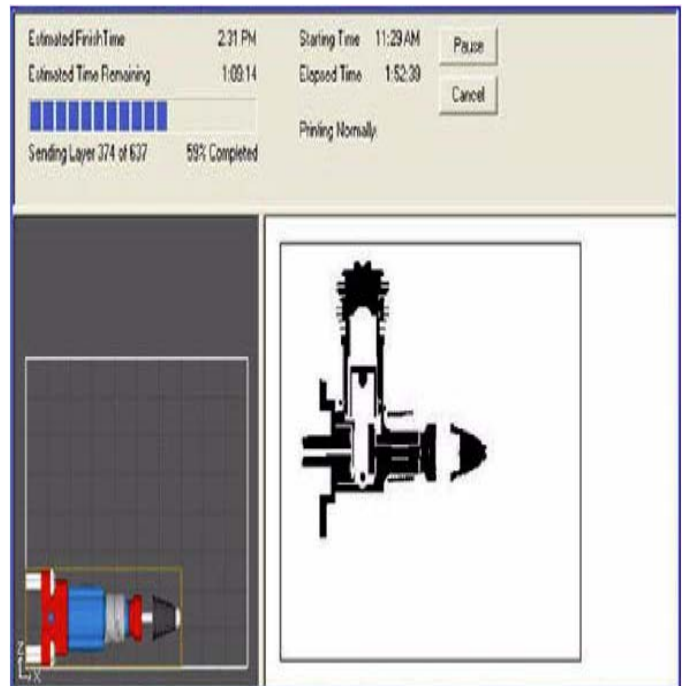
7. Click Print to start your build.

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.

✍ Important: Pausing for more than 10 minutes may cause print defects.

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.

If 'Empty Build Piston after Printing' is selected prior to printing in the 'Printer Station' window, 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.
- After all parts are removed, vacuum any Core that may remain in the Build Bed.

Manual Core Removal (160, 260C, 260Plus and 360)

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

- 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 Station to clean the Core from the part.
- After all parts are removed, vacuum any Core that may remain in the Build Bed.

Fine Core Removal

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

- 160, 260C & 260Plus: Open the printer's top cover and move the part to the external Cleaning Station. Open the Cleaning Station'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 place the part into the post-processing unit and close the top cover. Select VACUUM & CLEANING on the LCD menu; the vacuum and compressor start.

- Test the air flow from the air wand 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. Use caution on delicate areas. A small brush may also be gently used.

- Push the Control Knob once to turn the air compressor off. Return the Air Wand to its clip. If possible, allow the part to dry for several hours in the post-processing unit.

CLEANING

It is very important that you keep your printer well-maintained. Please read the x60 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 (/projetcjpx60/print/book/export/html/861#vacuum-core)

Empty the Debris Separator (/projetcjpx60/print/book/export/html/861#empty-debris-separator)

Clean the Rails and Carriage (/projetcjpx60/print/book/export/html/861#clean-rails)

Clean the Service Station (/projetcjpx60/print/book/export/html/861#service-station)

Vacuum Up Excess Core

Select VACUUM & CLEANING on the LCD menu. Open the top cover. The vacuum starts.

Vacuum the following areas:

‣ The top of the Fast Axis; also reach inside to vacuum the Rails and the top of the Printhead Carriage.

‣ The Build Bed (but not the Feeder side).

‣ The deck around the Build Bed

‣ Press the Control Knob once to turn off the vacuum.

Important: Do not vacuum the Service station. Use the vacuum only on clean, reusable Core

Empty the Debris Separator

Pull the Debris Separator out of its housing on the printer.

Empty the contents into a trash receptacle.

Use the soft brush found in the Accessory Kit to brush caked Core fom the screen and into a trash receptacle.

Return the empty Debris Separator to its housing. Be sure to push the Separator flat against the panel for a secure fit.

Clean the Rails and Carriage

Pull the Fast Axis toward the front of the printer.

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. Clean the Build Bed and Deck of any water or

damp Core.

Clean the Service Station

You will need several dry paper towels and a cotton swab, a squirt bottle filled with distilled water, disposable gloves, and Pick and Syringe from the Accessories Kit.

Open the printer top cover and the Service Station cover.

Place paper towels around the Service Station as well as the Front Overflow and the Build Bed.

Pull the Service Station wiper lever all the way forward until the rubber squeegees are fully exposed. Use caution - Binder may fling off of the squeegees. Hold the lever and squirt water on and around the squeegees.

Pay special attention to the underside of the squeegee scraper bar. Ensure it is fully cleaned.

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, and Front Overflow. Push the wiper lever back to its original position.

POST PROCESSING

Please refer to the Post Processing Guide for part post-processing instructions for your ProJet$^{®}$ CJP X60 Series printer. http://infocenter.3dsystems.com/projetcjpx60/post-processing-guide (http://infocenter.3dsystems.com/projetcjpx60/post-processing-guide)