FORMAX®

ColorMax9
Digital Color Printer

3/2025

OPERATOR MANUAL

Table of Contents

Safety Precautions, Warnings & Cautions

Safety Precautions

Observe safety rules when operating the ColorMax9 printer.

Before using the printer, read this manual carefully and follow recommended procedures, safety warnings, and instructions.

- Keep hands, hair, and clothing clear of rollers and other moving parts.
- Avoid touching moving parts or materials while the machine is in use. Before clearing a jam, be sure machine mechanisms come to a stop.
- Always turn the machine off before making adjustments, cleaning the machine, or performing any maintenance covered in this manual.
- The **Power Cord** and **Power Supply** are supplied with the machine. Plug into a properly grounded, easily accessible wall outlet near the machine. Failure to properly ground the machine can result in severe personal injury and/or fire.
- Power cords and wall plugs are the primary means of disconnecting the machine from the power supply.
- **DO NOT** use an adapter plug on the line cord or wall outlet.
- **DO NOT** remove the ground pin from the line cord.
- **DO NOT** route the power cord over sharp edges or trap it between furniture.
- Avoid using wall outlets that are controlled by wall switches or shared with other equipment.
- Ensure that there is no strain on the power cord caused by jamming it between equipment, walls, and/or furniture.
- **DO NOT** remove covers. The machine’s covers enclose hazardous parts that should only be accessed by a qualified service representative. Report any cover damage to your service representative.
- This machine requires periodic maintenance.
- Use this equipment for its intended purpose **ONLY.**

In addition to the guidelines above, be sure to follow any specific occupational safety and health standards for your workplace or area.

General

Warnings

- If you find a large ink leak, switch off the printer immediately, disconnect the power plug from the power source, and call for service. Continued use of the printer could cause fire or serious electrical shock.
- If the printer emits smoke, unusual odors, or makes odd noises, leaving it could cause a fire or serious electrical shock and/or damage to the unit. Switch the printer off immediately, disconnect the power cord from the power source, ensure the printer has stopped smoking and call for service. **DO NOT** attempt to repair the printer by yourself -- this intervention could cause fire or serious electrical shock.
- Use only a slightly damp cloth – thoroughly wrung out – to clean printer surfaces. Never use alcohol, thinner, or other flammable liquids. If such materials come into contact with electrical components inside the printer, it could cause fire or serious electrical shock.

Cautions

- There are high voltage points inside of the printer. To avoid fire or electrical shock, never attempt to disassemble or repair the printer.
- Never insert or drop any metal objects into the printer when it is open. This could cause a fire, serious electrical shock, and/or damage to the printer. If something falls in the printer accidentally, switch the printer off immediately, disconnect the power plug from the power source, and call for service. If you continue to use the printer, this could cause a fire or serious electrical shock.
- If the printer is dropped and damaged, switch the printer off immediately, disconnect the power plug from the power source, and call for service. If you continue to use the printer it could cause a fire or serious electrical shock.
- Never use flammable sprays around the printer.
- Never remove the covers from the printer. Doing so may cause serious electrical shock.
- Keep children from touching the power cord, internal parts of the printer when it is open, and moving parts inside the printer (gears, belts, rollers, and electrical components). This could cause personal injury and/or damage to the printer unit.

Location

Ensure that there is sufficient space around the printer (approximately 9 inches on each side).

Warnings

- Never place items on the printer. If such items were to fall on the printer, this could cause a fire, electrical shock or damage to the printer.
- To avoid causing a fire, never store flammable substances like alcohol, thinner, etc. near the printer.

Cautions

Avoid using the printer in the following locations:

- Locations in which the printer is exposed to open air or high humidity. This could cause a fire, serious electrical shock, or damage to the printer.
- Locations with sudden changes in temperature. Sudden changes in temperature (such as moving the printer to a warm room on a cold day) could cause condensation inside of the printer. If this happens allow the printer to sit for at least an hour at room temperature to adapt to the ambient temperature and humidity.
- Slanted and/or unstable surfaces. If the printer is dropped or slides off, it could cause personal injury. Additionally, heavy objects should never be placed on top of the printer. If the object is dropped or falls, it could cause injury.
- Locations where the printer is exposed to open air or dust. Such environments could cause fire, serious electrical shock, and/or damage to the printer.
- Locations where the printer is exposed to water (such as near a faucet). Doing so could cause severe electrical shock.
- Locations where the printer is exposed to high humidity, large amounts of dust, direct sunlight, high temperatures, or open flames. These conditions could cause fire, electrical shock, or damage to the printer. Use the printer in an environment where temperature and humidity are within the ranges of 59° F to 86°F (15°C to 30°C) and 20 to 80% RH (with no condensation).
- Locations near large office equipment or any other type of electrical device that emits a strong magnetic field. Doing so may disrupt normal printer operation and cause damage.

Be sure to never block the ventilation ports on the printer. A blocked ventilation port could cause heat to build up inside of the printer and cause a fire.

Also, place the printer in an area where you can disconnect the power cord immediately; keep the area around the power cord connection free of obstacles, allowing you to unplug the power cord quickly in the case of an emergency.

Power Supply and Power Cords

Warnings

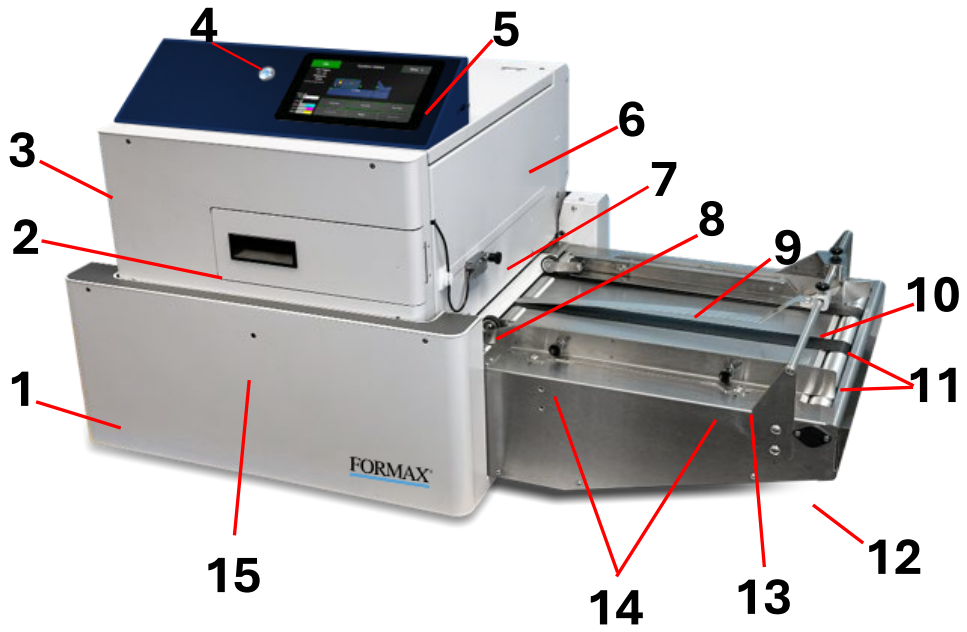
- To avoid causing a fire or serious electrical shock, always use the power cords provided with this printer. Do not use an extension cord.
- To avoid fire or electrical shock, connect the printer power cords to independent power sources that are not shared by other equipment or appliances,
- To avoid fire or electrical shock, ensure that power plugs are securely and completely inserted into their power sources.
- Do not cut or otherwise alter the power cords. To avoid the dangers of fire and electrical shock, never place heavy objects on the power cords, expose them to head, or pull on the cords to disconnect them. If a power cord is damaged in any way (condensation on exposed wires, broken wires, etc.) contact the dealer where you purchased the printer or the nearest service center for a replacement.
- To avoid personal injury from electrical shock, never handle the power cords or plugs when your hands are wet.
- To avoid fire or serious electrical shock, never knot the power cords or wrap them around themselves.
- Disconnect the printer power cords during severe electrical storms. Lightning could cause a fire or severe electrical shock or damage to the printer.
- To avoid a fire hazard, occasionally disconnect the power cords from the printer and the power supply and use a soft dry cloth to clean the cord connectors and connection points. Leaving the cords plugged in and not cleaned for a long period – especially in an area subject to dust, oil, and high humidity – could cause the insulation material to deteriorate.

Cautions

- Be sure to turn off the printer before removing the power plugs from the outlets.
- Check the power plugs and cords for any problems (such as abnormal head, rust, bends, cracks, scratches, etc.) at least once a month.
- If any problem with the power plugs or cords is found, replace them. Using these components without replacement may result in fire or electrical shock hazard.
- To avoid damaging the power plugs (which could cause a short circuit fire or electrical shock), never pull on the power cord to unplug the cord from the power supply. Always grip the plug to remove it from the power supply.
- If the printer will not be used for a long period, disconnect the power cords from their power sources.
- Always keep the area around the power plugs free of obstacles so you can unplug them easily. This allows you to unplug the power cords quickly in the case of an emergency.
- Never use any power sources other than the ones rated for the printer. This printer is designed to be used in the region where purchased. Also, ensure that the power sources can supply sufficient power to the printer. Failure to do so may cause serious electrical shock or damage to the printer.
- The printer must be connected to a socket outlet with a grounding connection by the provided power cords.

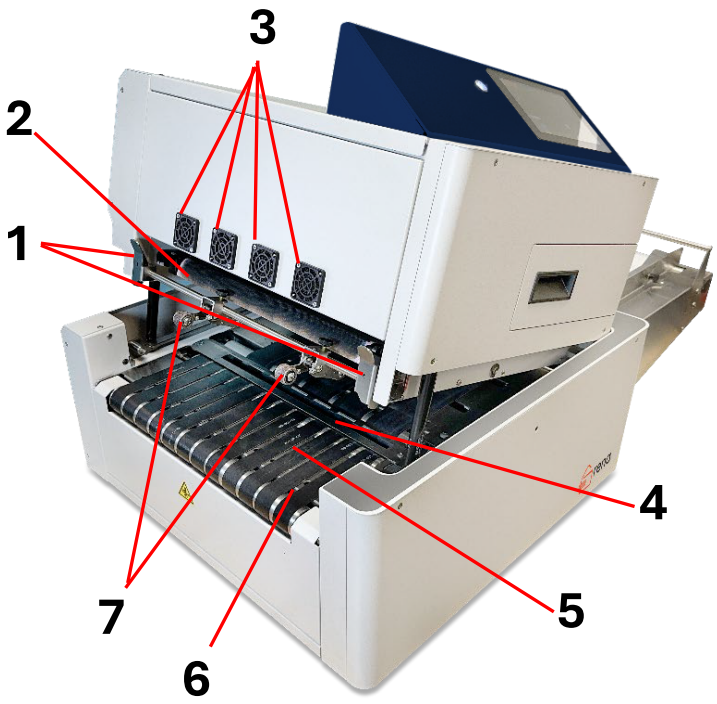
Section 1: Getting Acquainted

ColorMax9 Printer – Front View (Operator Side)



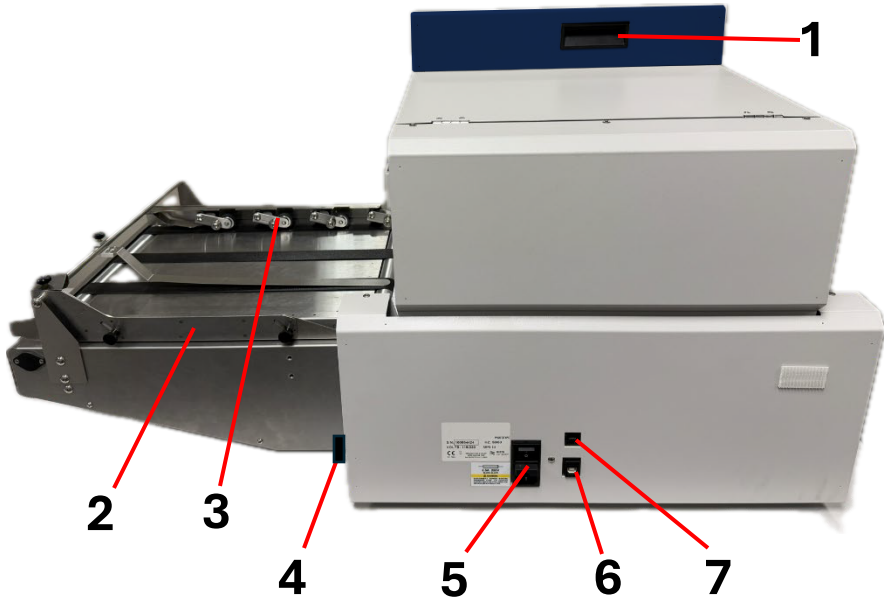
1	**Printer Body -** The printer is a full-color printing system with an integrated media path.
2	**Ink Door** – The ink door provides access to the ink cartridges. When open, printing is disabled and upon closing there is a short delay while all ink cartridges are checked for any changes.
3	**Clamshell / Print Engine area** (print zone)
4	**Soft-Power Button** – Use to power-up or power-down the print engine. ***To power-up***, turn on the Main Power Switch, then press and release this button. The button LED will turn blue and "Starting up..." will be displayed on the screen. It will take a few minutes for the system to fully initialize. ***To power-down***, press and release this button. "Shutting Down..." will be displayed on the screen. If you plan to turn off the Main Power Switch, it is important to wait for the screen to go black and the soft-power button LED to turn off before turning off the Main Power Switch.
5	**Touchscreen / User Interface (UI)** - Provides access to an extensive range of functionality.
6	**Sled Access Cover** – Remove to access/remove Shipping Clips, Service Tray and Print Engine BnB.
7	**Media (TOF) Sensor** - Movable sensor for detecting the media entering the printzone from the registration table. ***IMPORTANT:*** Be sure to position sensor assembly over media's path, avoiding cutouts/holes/windows.
8	**Media Sensor Reflector** – Media (TOF) Sensor must be positioned over this area.
9	**Media Guide** - Use only when needed to help guide media.
10	**Media Hold-Down Strap** – Use to hold down media as it enters under the clamshell.
11	**Media Transport Belts** – To adjust belt positions, press "Run Path" then loosen thumb screws, located below this area. Move belts to desired positions, then secure positions by tightening thumb screws.
12	**Infeed Registration Table** – Aligns and guides media into the printzone.
13	**Media Registration Rail** – Part of the Registration Assembly. Media is registered against this rail.
14	**Registration Roller Assembly Knobs** – Use to adjust registration roller assembly pressure.
15	**Service Access Hole** – Set Media Thickness to 12.5 mm to align screw with hole. Use T20 Torx driver to manually drive Service Tray or BnB in/out of system when replacement is needed.

ColorMax9 Printer – Exit View



1	**Clamshell Release Latches** – Must set Media Thickness to 12.5 mm before opening clamshell.
2	**Service Tray (sled)** – Maintains the printhead. Contains wiper cloth (web) for cleaning the printhead surface. Contains cap to keep printhead nozzles sealed and protected when not in use.
3	**Ink Satellite Exhaust Fans** – Used to evacuate ink overspray that is created during printing/purging.
4	**Print Platen & Drip Tray Assembly** (spittoon) – Supports media during printing. Captures excess ink during bleed printing and purging processes. Must be removed to inspect and clean periodically.
5	**Exit Conveyor Assembly** – Transports media out of the printzone.
6	**Exit Sensor position** – The exit sensor is located here. The exit sensor is used to confirm proper media movement thought the printer. If media is not passing over this sensor, or there are dark colors/or holes in the media passing over this sensor, please be sure to select “Ignore Exit Sensor”. NOTICE: Sensor function can be affected by ambient light. Please shield from external light.
7	**Exit Pressure Rollers** – Used to help drive the media out of the printzone. **NOTE**: Your printer may have versions different than shown here. **IMPORTANT:** Please be sure Exit Pressure Roller assemblies are not positioned above the Exit Sensor.

ColorMax9 Printer - Rear View (non-operator side)



1	**Service Access Handle** - This handle is used to open the Top Cover on the clamshell. **NOTE:** Cover is held closed by strong magnets.
2	**Media Guide** - Use only when needed to help guide media.
3	**Registration Roller Assembly** – Drives media through registration area and against registration rail.
4	**Feeder Interface Connection** – Connect Feeder Interface Cable here.
5	**Power Inlet with Power On/Off Switch** - Connect the power cord to the power inlet. Inlet has an on/off switch. It also has a drawer that contains two fuses (one in use and one spare)
6	**USB 2.0 Port** - Use to connect the printer to a PC using a USB cable.
7	**Ethernet Port** - Use to connect the printer to a network.

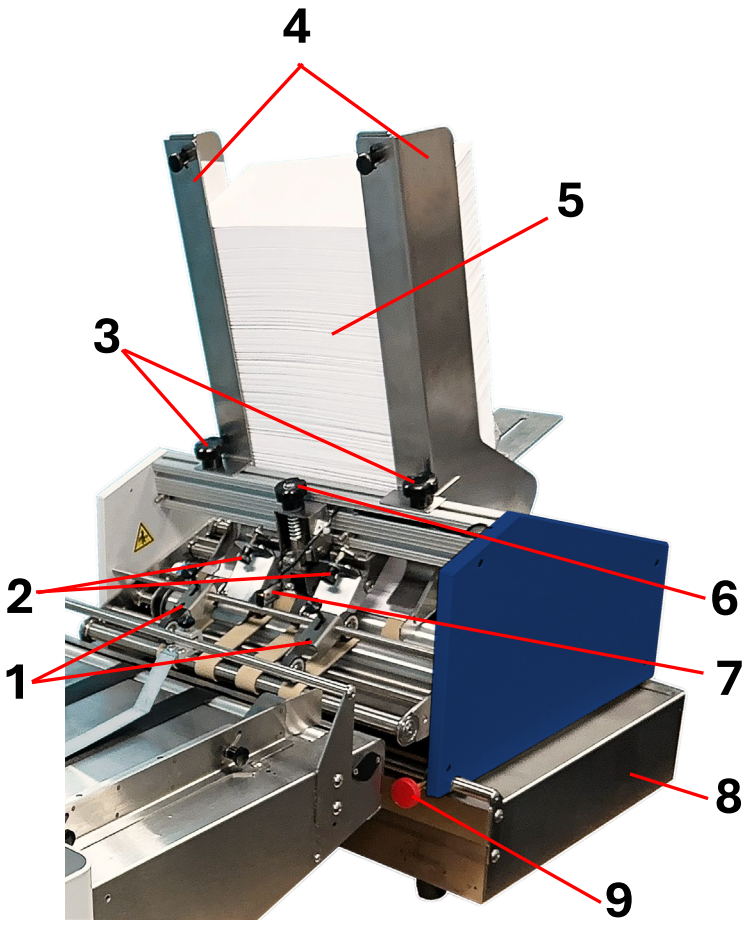
ColorMax9 Printer - Ink Door View

The printer uses four ink cartridges: cyan, magenta, yellow, and black (CMYK) ink. Install these cartridges in the slots behind the ink door.
When the Ink Door is open, the printer stops all communications with the Ink Cartridges and displays “Ink Door Open”.
After the Ink Door is closed, it will take up to 30 seconds to read the ink tanks and show the ink levels.

ColorMax9 Printer - Control Panel / Touchscreen

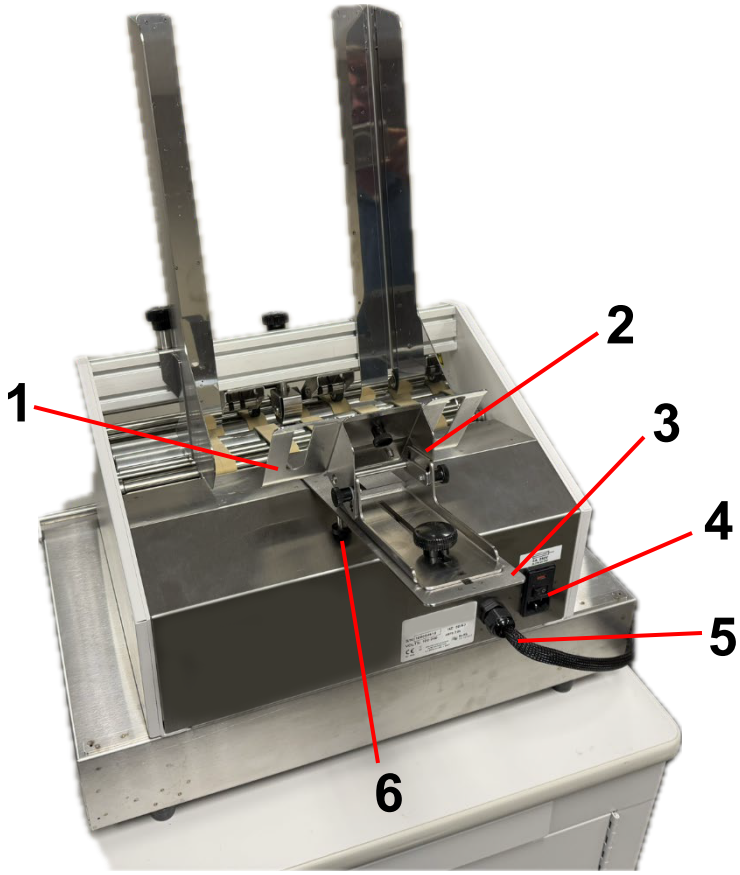
The touchscreen on the printer is a control center for media set-up. It can also be used for monitoring printing as well as pausing and restarting jobs plus recovery for any printing errors. Additionally, it provides the ability to store print jobs and allows the user to view and select print jobs for printing.

ColorMax9 Feeder – Exit View



1	**Exit Roller Assemblies** – Used to drive the media from the feeder into the registration area of the printer.
2	**Pull-out Roller Pressure Adjustment Knobs** – Use to set roller pressure and set starting height for thicker media.
3	**Side Guide Securing Knobs** – Use to secure the positions of the Side Guides.
4	**Media Side Guides** (left & right) – Used to guide and center the media in the feeder.
5	**Hopper stacked with media** – Shown stacked with #10 Envelopes
6	**Sheet Separator Adjustment Knob** – Use to raise/lower the sheet separator.
7	**Feeder Sensor** – Used to detect and measure media length. **NOTICE:** Feeder Sensor gets its power from printer. Sensor LEDs ON does NOT indicate that feeder is powered is ON.
8	**Glide Riser Stand** - Supports the Feeder. Allow for easy repositioning and alignment between feeder and printer.
9	**Feeder Position Securing Knob** – Use to secure the position of the feeder on the Glide Riser Stand.

ColorMax9 Feeder – Entrance View



1	**Wide Media Support Plate** – Attach to Rear Media Support Wedge when feeding wide media.
2	**Rear Media Support Wedge** – Attaches to Jogging Rear Media Support. Adjust to provide proper stack height and angle for optimal media separation and feed.
3	**Jogging Rear Media Support** – Used to support and jog the media stack. The Rear Media Support Wedge attaches here.
4	**Power Inlet with Power On/Off Switch** - Connect the power cord to the power inlet. The inlet has and on/off switch and a removable block that contains two fuses.
5	**Feeder Interface Cable** - Connection used to control feeder. It also connects the feeder sensor and encoder to printer logic. Cable from this point must be connected to the port located on entry side of the printer.
6	**Jogger Control Post** - Post with bumper. Use to allow or stop jog function. Unscrew to extend post to hold Rear Media Support above cam, to stop jogger movement.

Section 2: Installing Printer

Choose a Location

Select an installation location that meets the requirements described below. These requirements will help ensure safe operation and optimal printing results.

- The printer with the registration table and media feeder must be located on a table / bench that is at least 23 x 55 inches (59 x 140 cm).

  NOTE: *A larger table may be needed if you are using an optional conveyor stacker at the exit end of the printer.*
- Once set up, a minimum of 4 inches (10 cm) of free space is required behind both the printer and the media feeder. During installation, sufficient room is required for setting up and making connections between the backs of the feeder and the printer.
- The installation surface must be sturdy and stable enough to support the weight of the printer, registration table, and feeder with a load of media.
- The power cables for the feeder and the printer must be able to connect to appropriate power outlets. These power outlets must be easily accessible.
- Avoid installing the printer near water sources such as faucets, water heaters, humidifier, or refrigerators.
- The environmental temperature must be between 59°F and 89°F (15°C to 32°C).
- The environmental humidity must be within 30 to 80% RH (non-condensing).
- The environment must be well-ventilated and free of dust.

Unpack

Use the following instructions to unpack each box and inspect all printer sections. Keep the packaging for future transportation.

Tools Needed: Box Cutter and Side Cutters.

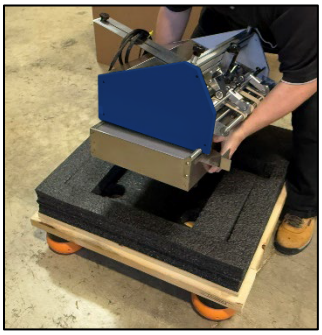
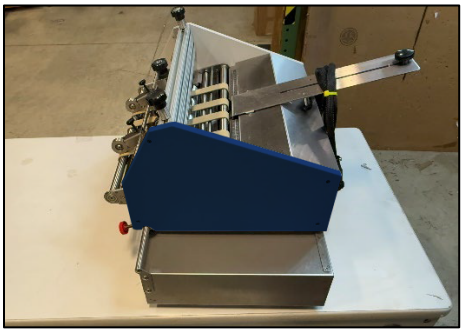
Feeder Carton and Components

1. Cut the straps and remove the top of the shipping carton from the pallet. Then remove the top foam mold.



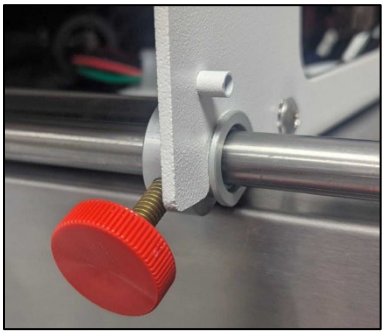
2. Remove the accessories box.

3. Remove the feeder and riser stand from the pallet and place them on a sturdy table. Position feeder and riser stand at right-hand side of table.

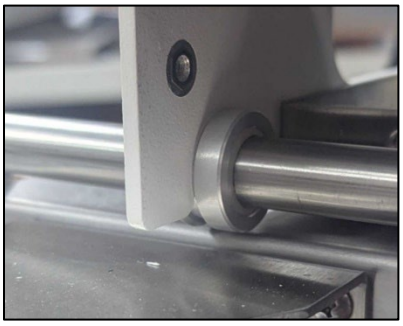



CAUTION: Use proper lifting techniques as the Feeder weighs ~50 lbs.

4. Open the accessory box and verify that all the items are included.
   See “Contents of Feeder Packaging” for details.
5. Retain all shipping materials for further use.
6. Inspect the feeder, riser stand and accessories to verify that no items were damaged during transit.
   Report damage to carrier immediately.
   Report missing contents to distributor immediately.
7. Ensure that the feeder frame cutouts are placed in the sliding collars as shown in the images below.



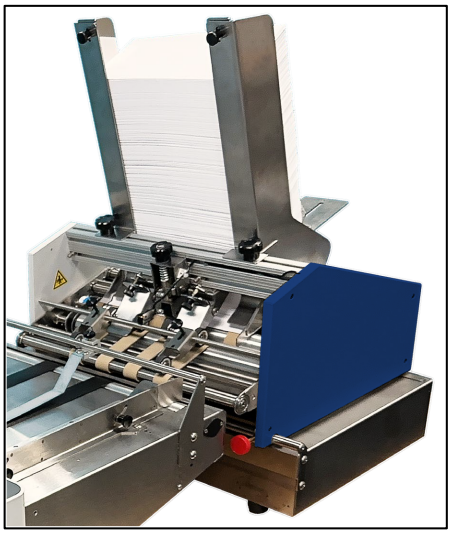
Operator Side



Non-Operator Side

Contents of Feeder Packaging

Packaging Includes: Feeder, 110V or 230V Power Cord, Left and Right Media Side Guides, Rear Media Support Wedge and Glide Riser Stand (feeder stand).



CAUTION: Use proper lifting techniques as the Feeder weighs approximately ~50 lbs.

Printer Carton and Components

1. Cut the straps and remove the top of the shipping carton from the pallet. Then remove the top foam mold.



2. Remove the accessories box.

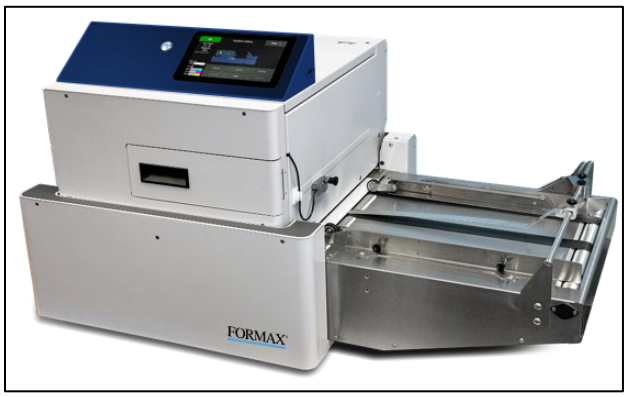
3. Remove the printer from the pallet (two people required) and place it at the left side of a sturdy table.

CAUTION: Use proper lifting techniques as the Printer weighs ~145 lbs.

4. Open the accessory box and verify that all items are included.
   See “Contents of Printer Packaging” for details.
5. Retain all shipping materials for further use.
6. Inspect the printer, registration table and accessories to verify that no items were damaged during transit.
   Report damage to carrier immediately.
   Report missing contents to distributor immediately.

Contents of Printer Packaging

Packaging Includes: Printer, 110V or 230V Power Cord, Ink Cartridges (CMYK), USB Cable, Ethernet Cable, Purge Tray with absorbent pad, USB Flash Drive (contains manuals and drivers). In some cases, a printed User Guide may also be included.



CAUTION: Use proper lifting techniques as the Printer weighs approximately ~145 lbs.

Removal of Shipping Materials & Assembly

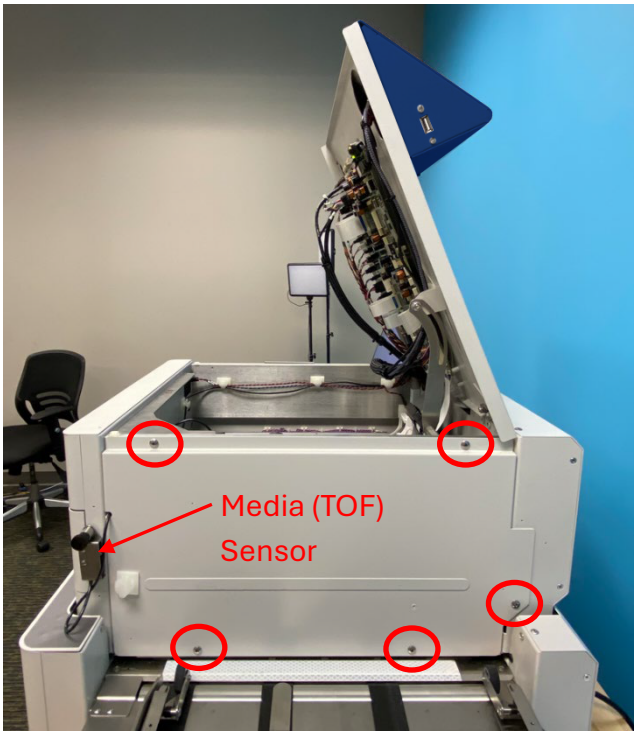
Tools Needed: Box Cutter, Side Cutters, #2 Philips Screwdriver.

NOTE: This process assumes you have received a printer that has already been primed with ink.
If you received a printer that has not been primed, please contact our Dealer support team for assistance.
After installing all cartridges and powering up the printer, if the ink cartridge levels (%) are displayed, then your printer was shipped pre-primed.
If all ink cartridge positions show as “chip error” it is likely that your printer was shipped un-primed.

1) Before powering up the printer you must remove the orange shipping clips that are used to secure the Service Tray during shipment.
   NOTE: Be sure to save shipping materials for possible future use.

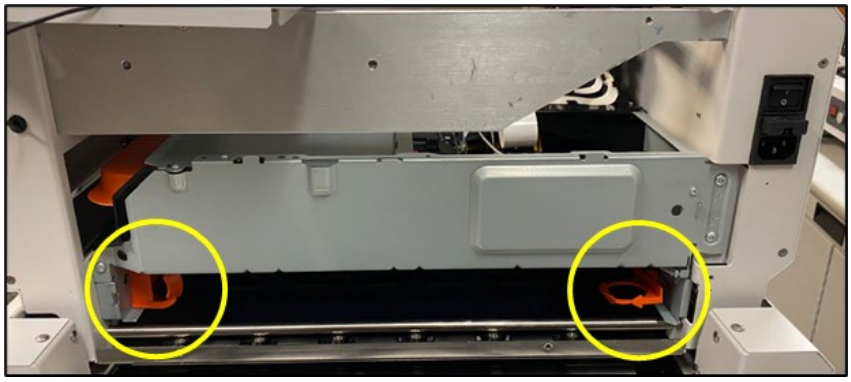
   a) Open Top Cover, held closed by strong magnets. There is a recessed handle located on the back side of the touchscreen area (see page 13).

   b) Remove Entry Side Panel.
   Remove the five screws, used to secure the entry side panel.
   NOTE: You can temporarily move the Media Sensor (TOF Sensor) to the frame of the printer, as shown below. It is magnetically attached.



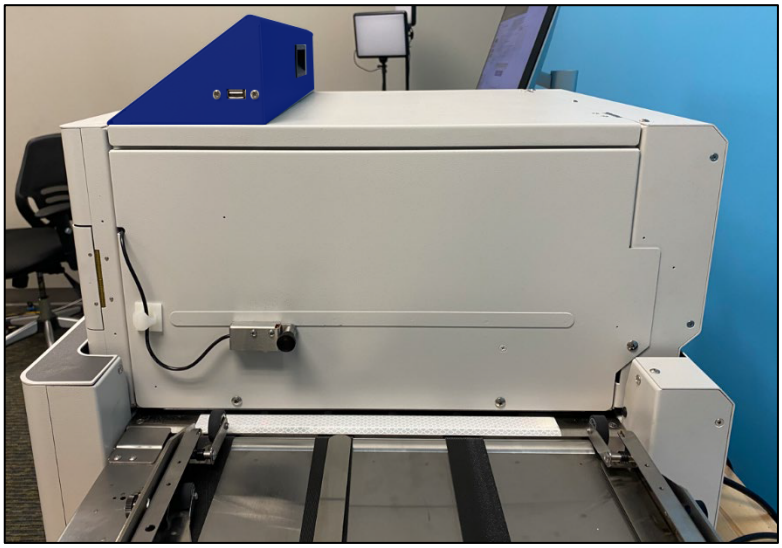
c) Remove the two orange Service Tray Securing Clips.
NOTE: Before removing clips, take a good look at how these clips are installed, in case you need to reinstall them in the future.

To remove, pull the orange clip inward a little and then straight out.



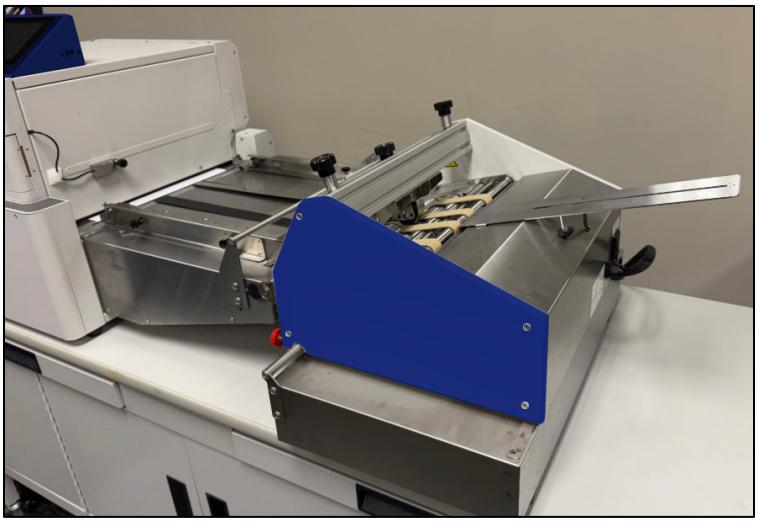
d) Reinstall Entry Side Panel and carefully close the Top Cover.
IMPORTANT: Make sure the TOF Sensor wire is positioned in the cutout at the left side of the Entry Side Panel and is not pinched by the panel. Make sure all screws are installed and secure as the Service Tray uses this plate as a mechanical stop to identify the “home” position. If plate is not secure the Service Tray motor may give an error.

2) Position Media Sensor (Time of Flight Sensor).
Sensor is magnetically attached.
Sensor assembly should be positioned as shown in the image below. It should be located along the bottom edge of raised area on the Entry Side Panel.
Be sure to place the sensor over the path that you plan to feed media.
NOTE: The sensor should be positioned so the red beam from the sensor sees the full (max) length of the media and avoids holes or windows in media.

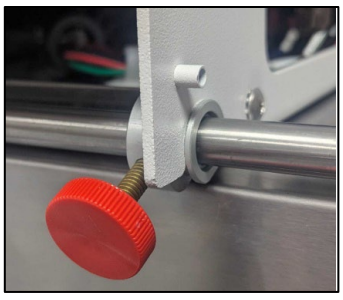


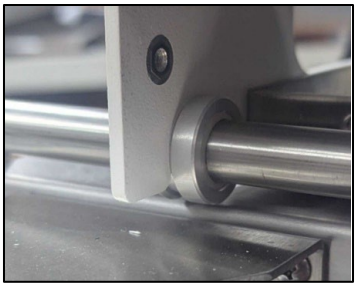
3) Remove orange shipping insert from Ink Station area.
Open Ink Door and remove orange shipping insert. Pull it straight out.
NOTE: Be sure to save shipping materials for possible future use.

4) Position Feeder on the Glide Riser Stand at the entry end of the Printer.



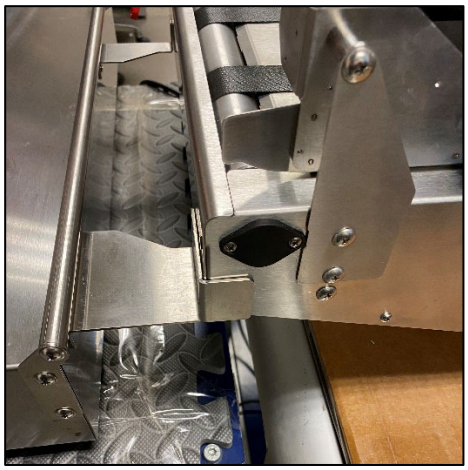
NOTE: Make sure exit end of feeder engages with both bushings on Stand shaft. You will need to manually position bushings, so the side of the feeder falls into the corresponding bushing slot at each side of the feeder.

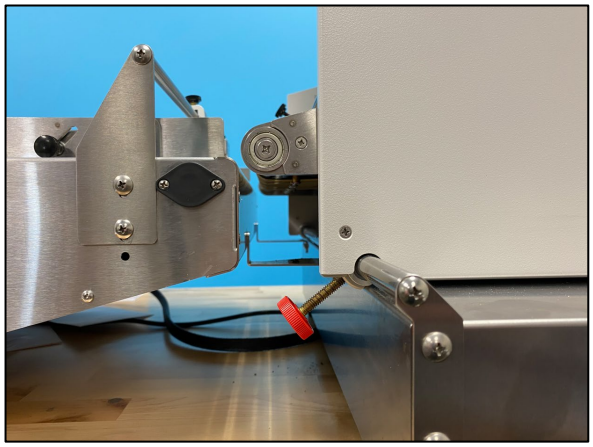




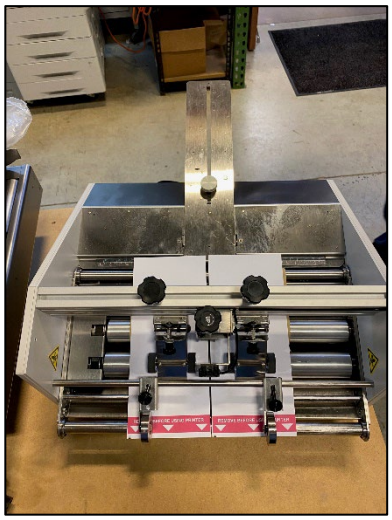
The extensions (stand-offs) at the exit end of the Glide Riser Stand should rest against the printer frame to keep the feeder at the correct distance from the printer and square to the printer frame.

Move the Glide Riser Stand against the printer body as shown in the images below.
The L-shaped stand-off, at the non-operator side of the Glide Riser Stand, should rest against the non-operator side of the printer body as shown in the image below.

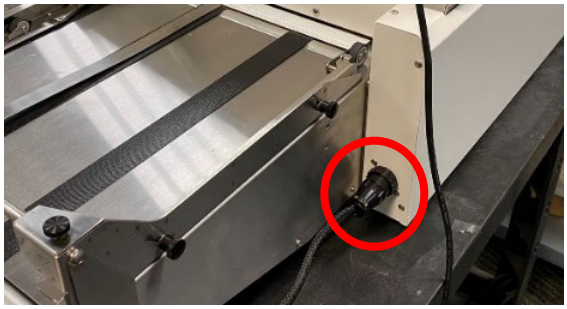




6) Remove the shipping materials from the feeder.
TIP: You can release the pull-out roller pressure, on the shipping materials (card stock), by turning the Pull-out Roller Pressure Adjustment Knobs (thumb screws) clockwise until the rollers are lifted off the card stock. After doing this please readjust the knobs so the pull-out pressure rollers are fully engaged on the belts.



7) Connect Feeder Interface Cable to Printer. Be sure to fully insert and secure by tightening outer ring.



8) Install Media Side Guides and Rear Support Wedge on Feeder.

9) Connect Power Cord to Feeder and turn Feeder Power Switch ON.

10) Open the Ink Door.

11) Install the Ink cartridges into Printer and close Ink Door.

NOTE: If your printer came pre-primed with ink, the ink cartridges included with the printer were used to prime the system. In this case the Cyan, Magenta and Yellow ink cartridges will commonly display an ink level of 50 to 60%. The Black (K) ink cartridge will commonly show an ink level of 70 to 80%.

NOTICE: An HP ink safety feature will make ink cartridges unusable if they are installed in more than three different printers.

12) Connect Power Cord to Printer and turn Printer's Main Power Switch ON.

13) Power-up the Printer.

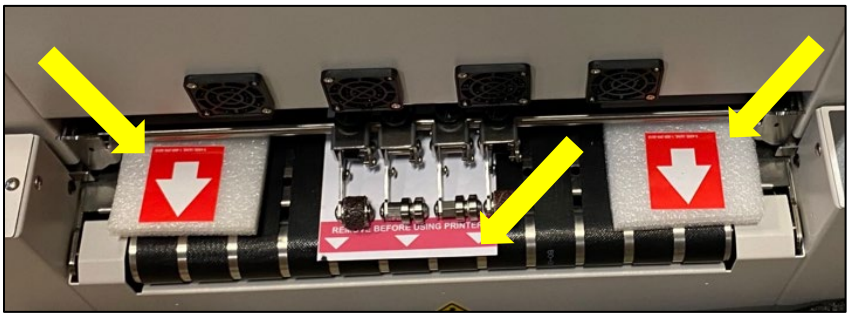
Press Soft-Power Button to power-up Printer (see page 11)

NOTE: It will take a few minutes to power up. The touchscreen will be grayed out during the power-up process.

14) Remove shipping materials (foam strips) located under the Print area.

a) Set Print Height to max (12.5 mm). The Print Height feature can be accessed via Menu, Media Setup on Printers touchscreen.
NOTE: With current firmware; if the exit sensor is interrupted during power up (i.e. white foam shipping material over exit sensor), the Print Height will automatically raise to and stay at 12.5 mm.

b) Remove shipping material (foam strips) that is located within the printer. Save for possible future use.



Install Printer Driver

The **ColorMax9 Printer Driver Software** allows your computer to communicate with the printer. Use the following instructions to download and install the printer driver on your PC.

The printer driver can be found on the USB Flash drive that was included with the printer.

1. Click on Addressing Systems.
2. Click on Digital Color Inkjet Printers.
3. Click on ColorMax9
4. Click on Software and Drivers.

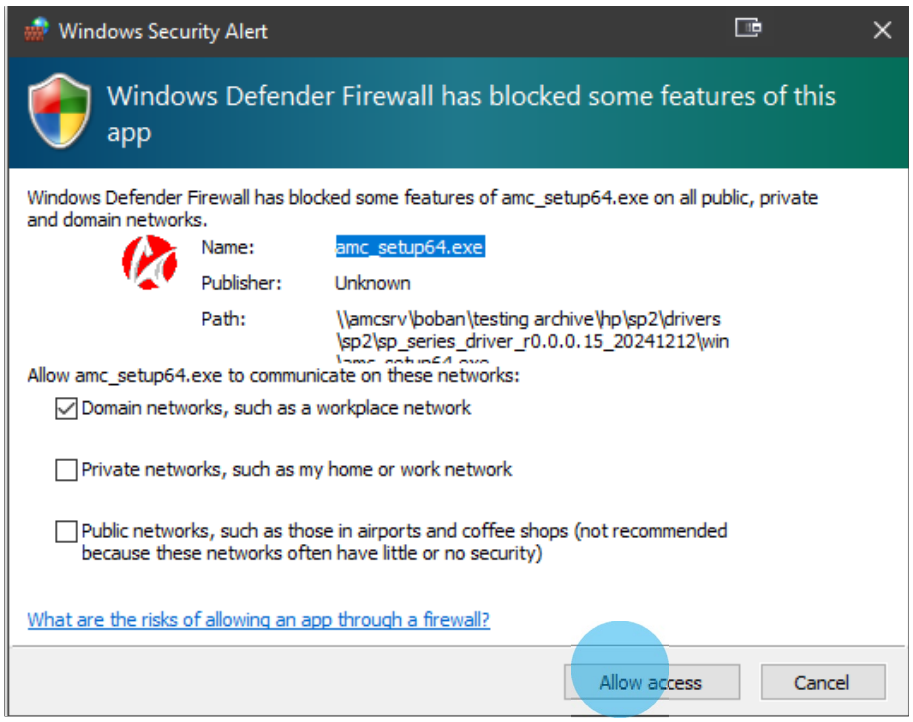
   You will find a link to the ColorMax9 SP Series Driver here.

Install over USB Connection

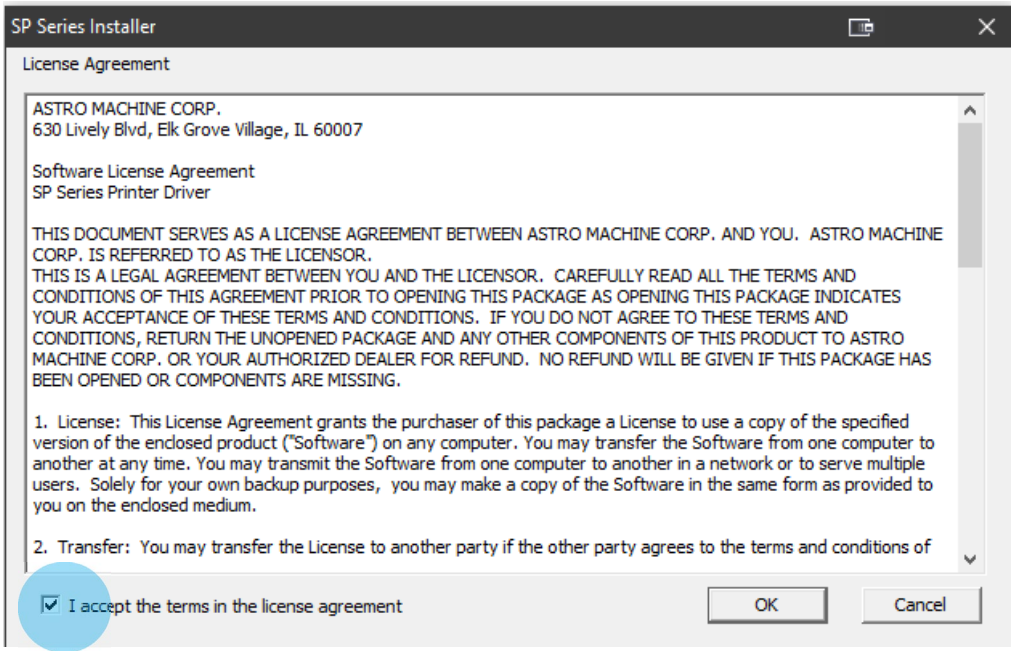
NOTE: Do NOT connect USB cable until prompted to do so.

1. Ensure that the printer is powered-up and ready (idle).
2. Locate and run the driver installer (Winsetup.exe).
3. Allow WinSetup.exe to make changes to your device.
   Note that this requires administrative rights in Windows.

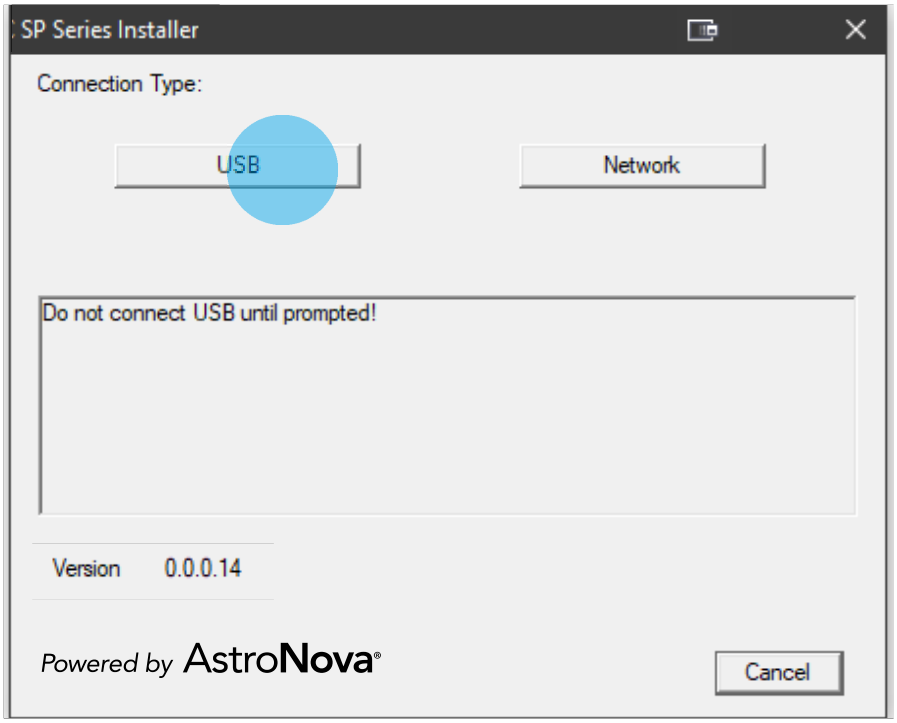
4. Allow amc_setup64.exe to have access to domain networks.



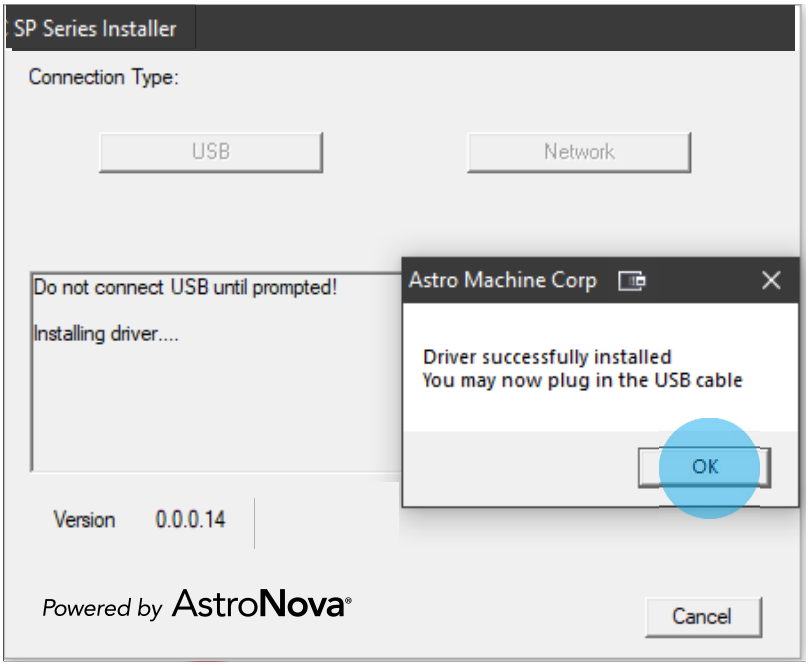
5. Read the license agreement and accept the terms and conditions.



6. Select the **USB Connection Type**. Driver Installation will begin.



7. When the printer driver has been successfully installed on your PC, you will be prompted to plug the USB Cable into the printer.



8. Select **Finish**. The installer software closes.
9. Connect the printer to the PC using the USB cable. The PC will automatically detect the printer and install a new printer instance.
10. Please reboot the PC after finishing the driver installation process.

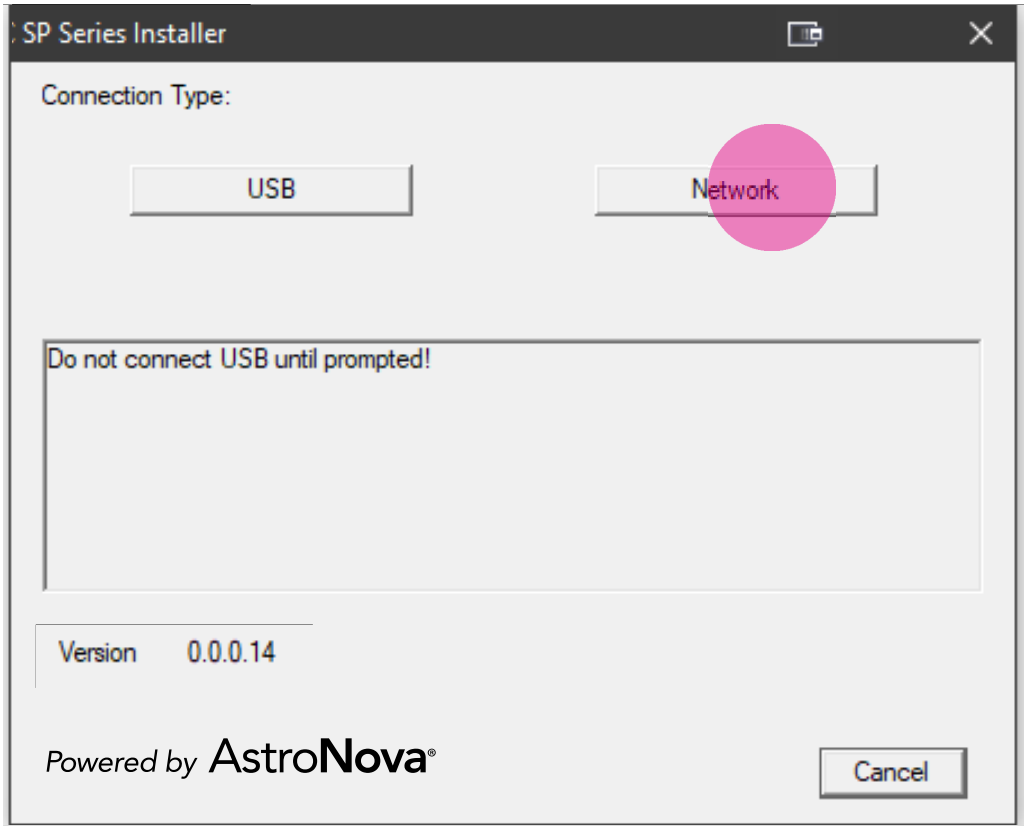
Install over Network Connection

1. Ensure that the unit is powered on and ready (idle).
2. Connect the network cabling before proceeding to the next step.
3. From printer's touchscreen, select Menu, Network Settings.
4. Configure network values as directed by customers IT department.

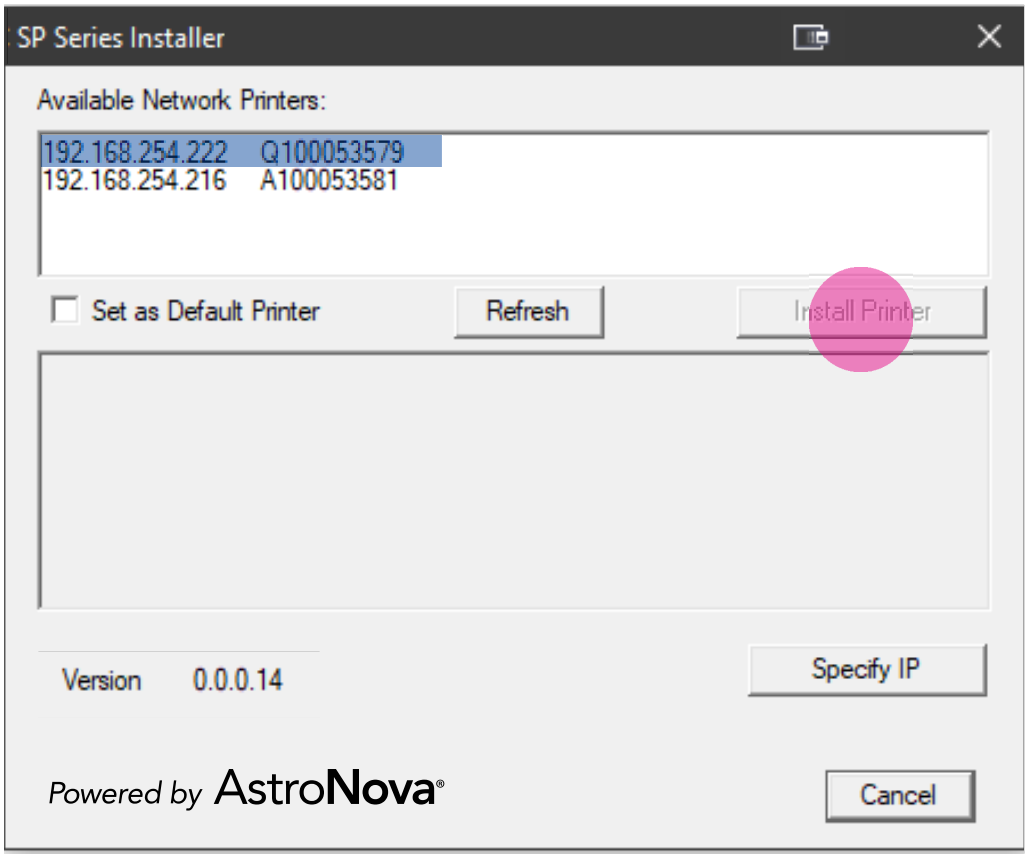
   TIP: If using DHCP you may need to power cycle printer to get network to automatically assign IP address and other network settings to printer.

   NOTE: It is strongly suggested to uncheck DHCP and use static IP address. If not, the printers IP address may change when the printer's power is cycled, and you will lose connection to the printer.

5. Locate and run the driver installer (**WinSetup.exe).**
   Note that this requires administrative rights in Windows.
6. Select **the Network Connection** type.

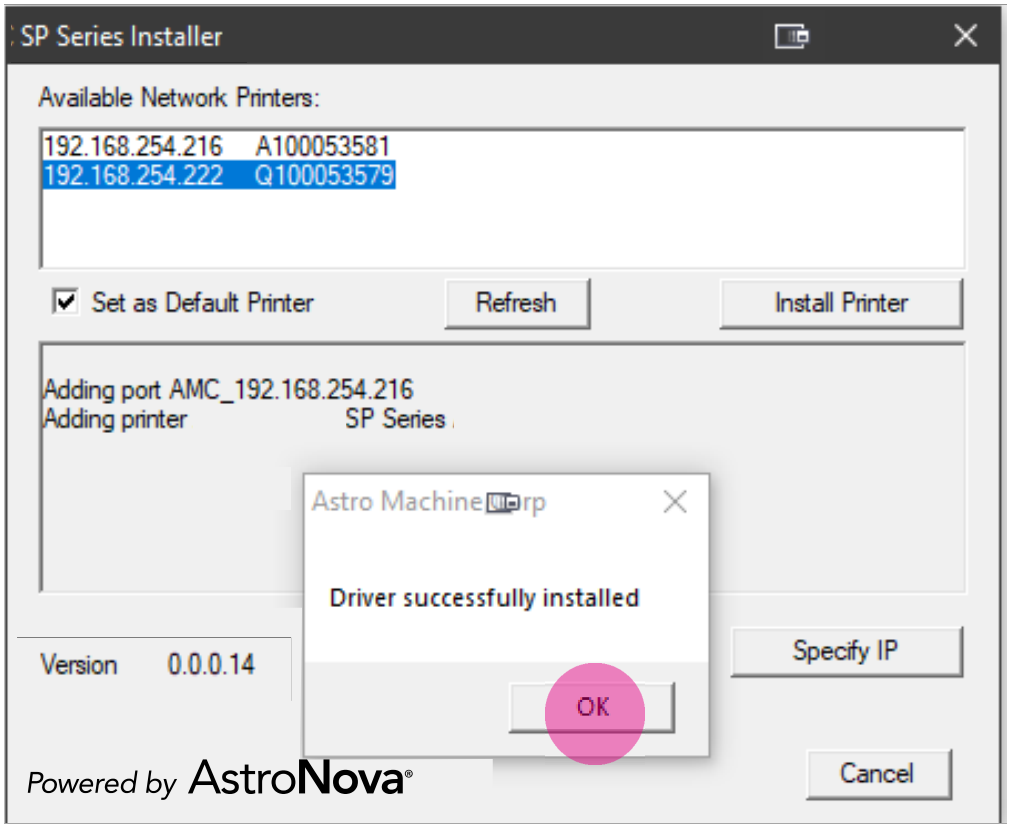


7. A list of printers available on the network is displayed. Select your printer from the list. Check **Set as Default Printer** as you please, then select **Install Printer**.



If your printer is not shown in the list, select refresh. If the printer you want to connect is still not displayed in the list, select **Specify IP** and enter the IP Address for the printer you require. Once it appears in this list on the screen, select it, then select **Install Printer**.

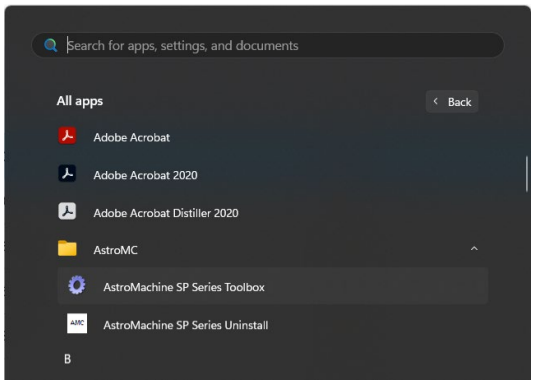
8. The driver will install on the PC and a notification of successful installation will be displayed when installation has completed.

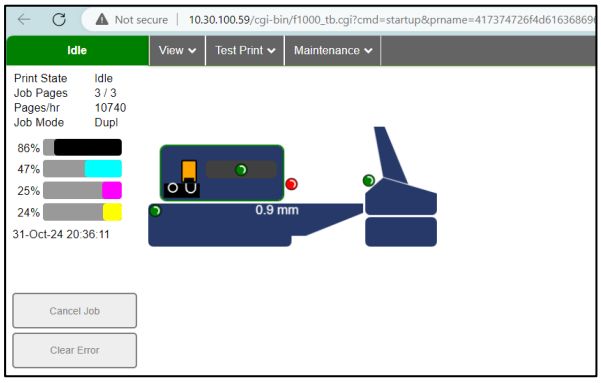


9. Please reboot the PC after finishing the driver installation process.

Open and Verify Toolbox Connection

1. Click on Start, All apps. Located and click on AstroMC.
2. Click on “AstroMachine SP Series Toolbox” and the Toolbox will open.
   TIP: If you right-click on “AstroMachine SP Series Toolbox”, then point to “More” and choose “Pin to taskbar” you will be able to open the toolbox in one click, from the taskbar, the next time.

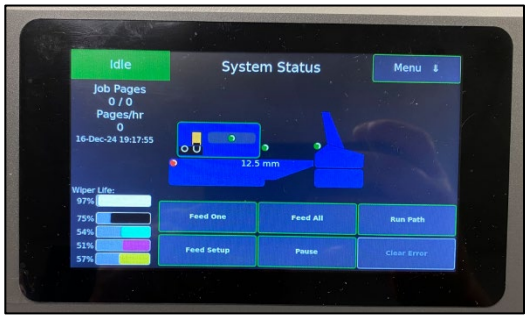




Identify if printer is or is <u>not</u> primed with ink

From the printer’s Touchscreen, check the printer Status (upper left corner of screen) and Ink levels.

- If the Status shows “Idle” and all ink cartridge levels (%) are displayed, then your printer was shipped pre-primed.
  In this case, the printer is ready for setup and use.



- If the Status shows as “Mfg Mode” it is likely that your printer was shipped un-primed.
  In this case, please contact our DPG support team for assistance in priming the printer.

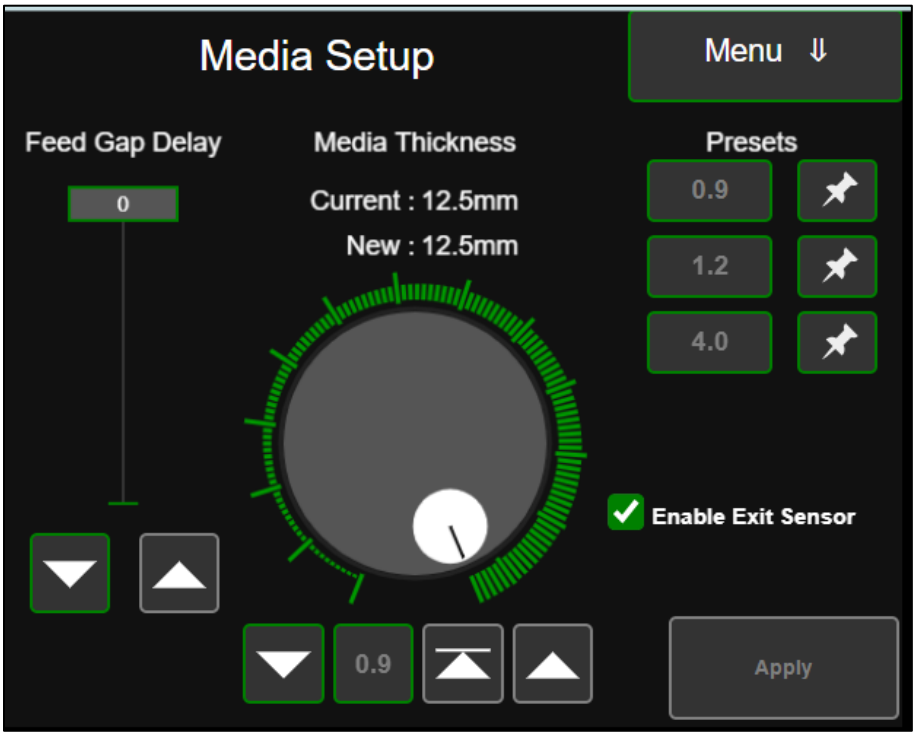
  NOTE: When the printer is in Manufacturing Mode (Mfg Mode) it is normal for all ink cartridge levels will show “Missing”, even if they are installed.

Section 3: Operating Printer

Adjust Media Thickness

Based on the media thickness, check and adjust (if necessary, the media thickness setting in the touchscreen / toolbox on the Media Setup Page.

1. From the Touchscreen, select **Media Setup** from the dropdown menu.
2. Use the dial to adjust **Media Thickness** to your desired media.
3. Press Apply.
4. See section titled “Media Setup” for more information on using the Media Setup menu features.



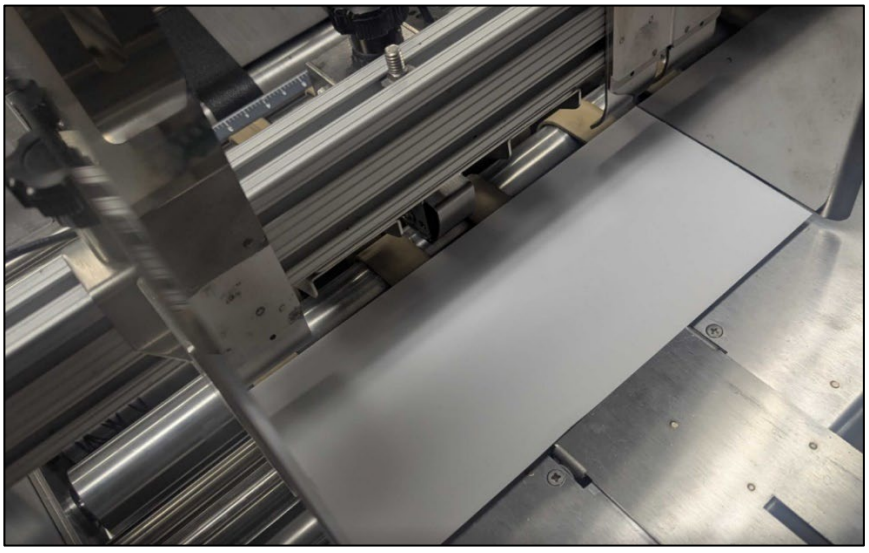
Set Up the Feed

Check the positioning of the feeder for the job, and align it with the registration table, adjusting rollers as required. Load the media into the feeder.

1. Raise the separator by turning the **separator knob** clockwise.

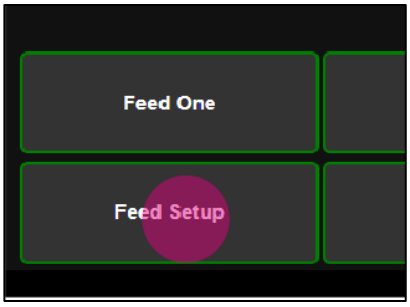
2. Insert one piece of media in the middle of the hopper. Make sure that the media is centered.

3. Bring the side guides to the edge of the media without interrupting media movement.
   Note: *Be sure to leave a small space between the media and side guides to allow the media stack to dop and feed properly.*



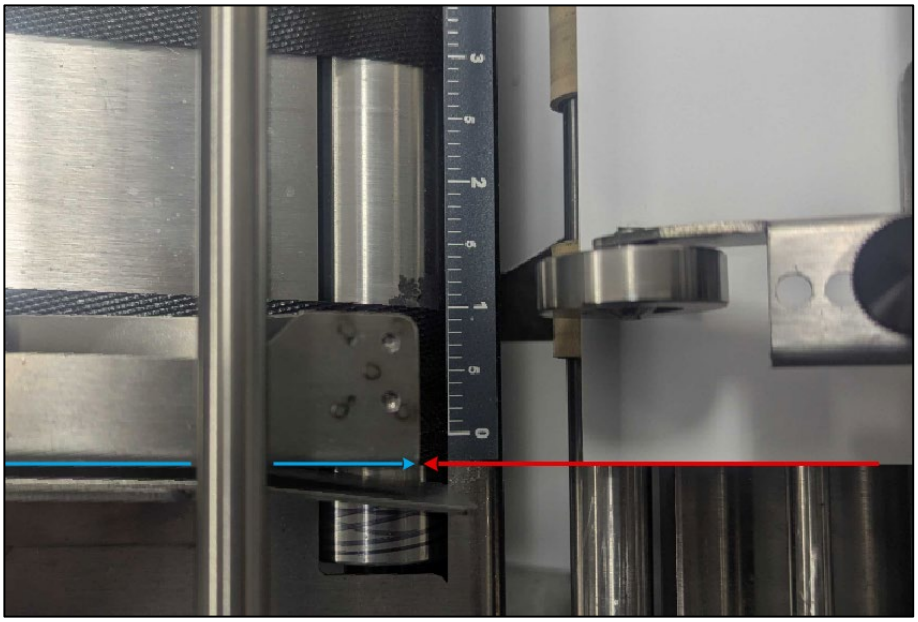
4. Secure side guides in position.

5. Press the **Feeder Setup** button from the printer UI. The media will move forward and stop.

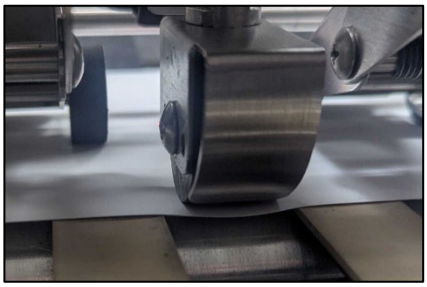


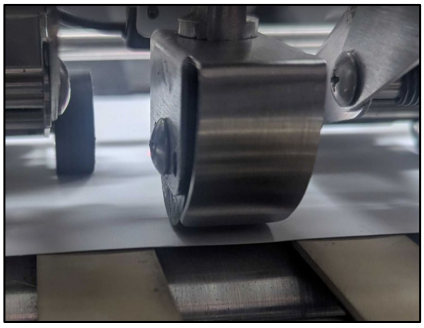
6. Loosen the red thumb screw on the Glide Riser Stand

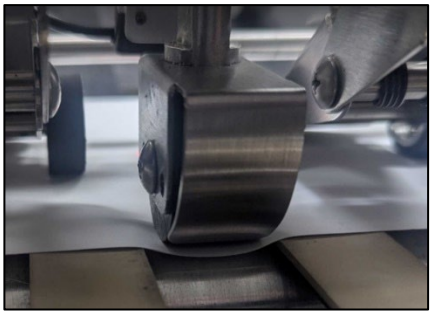
7. Slide the Feeder to align the edge of the media with the Registration Rail in the printer, as shown below. Then, secure the red thumb screw.



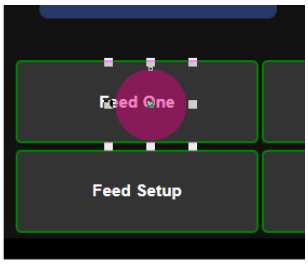
8. Turn the Separator Knobe counterclockwise to lower the separator until it makes contact with the media. Continue lowering the separator another half turn from this point, to create a slight bow in the media.

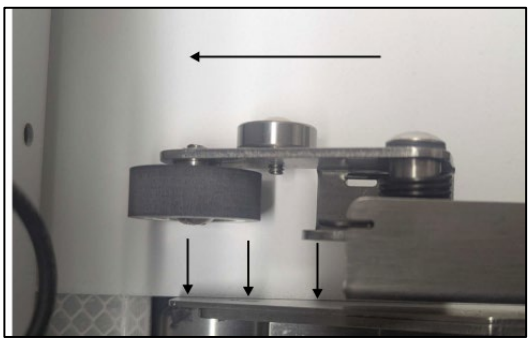






9. Adjust the Media Thickness and Registration Roller Height.
   See “Adjust Media Thickness”
10. Press **Feed One** and watch the media as it exits the registration area and enters the print area. Make sure media is being held tight against the registration rail before entering under the clamshell, into the printzone.

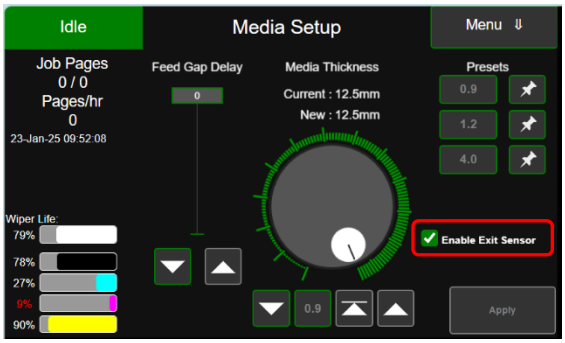




Enable or Disable Exit Sensor

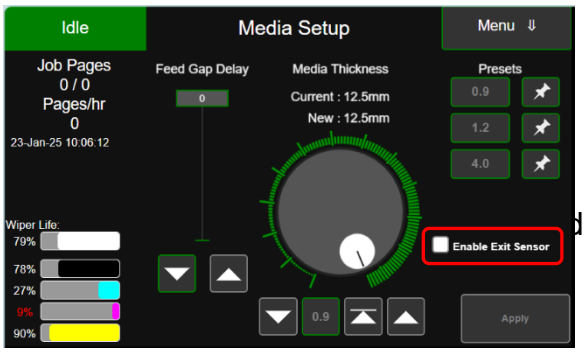
Printer is equipped with an Exit Sensor that is used to help detect Media feeding issues. The Exit Sensor is a reflective sensor, which looks up at the underside of the media. From the printer's Touchscreen, select the appropriate choice for your application. Please see section titled "Media Setup for additional details.

If the Media and media feed position meets all of the following points, "Enable Exit Sensor" should be selected:



- Media is positioned so the entire length of the Media is passing over Exit Sensor.
- Underside of the Media is white or light in color (reflective to Exit Sensor).
- Media doesn't have any holes, cutouts or dark colors that pass over Exit Sensor.
- Exit Sensor is clean and functioning properly.

In the following cases the Exit Sensor should be disabled (uncheck Enable Exit Sensor).



- Media is positioned so it does not pass over Exit Sensor.
- Entire length of Media does not pass over Exit Sensor. Feeding Media that is not square or not rectangular in shape.
- Underside of Media has dark colors that pass over Exit Sensor.
- Media has hole or cutout that passes over Exit Sensor.
- Exit Sensor is dirty or not functioning properly. Sensor being affected by external light source.

NOTICE: By unchecking "Enable Exit Sensor" you are reducing the printer's ability to detect a media feed issue. Therefore, printer transport may continue to run when a paper jam occurs.

Printer Driver Properties

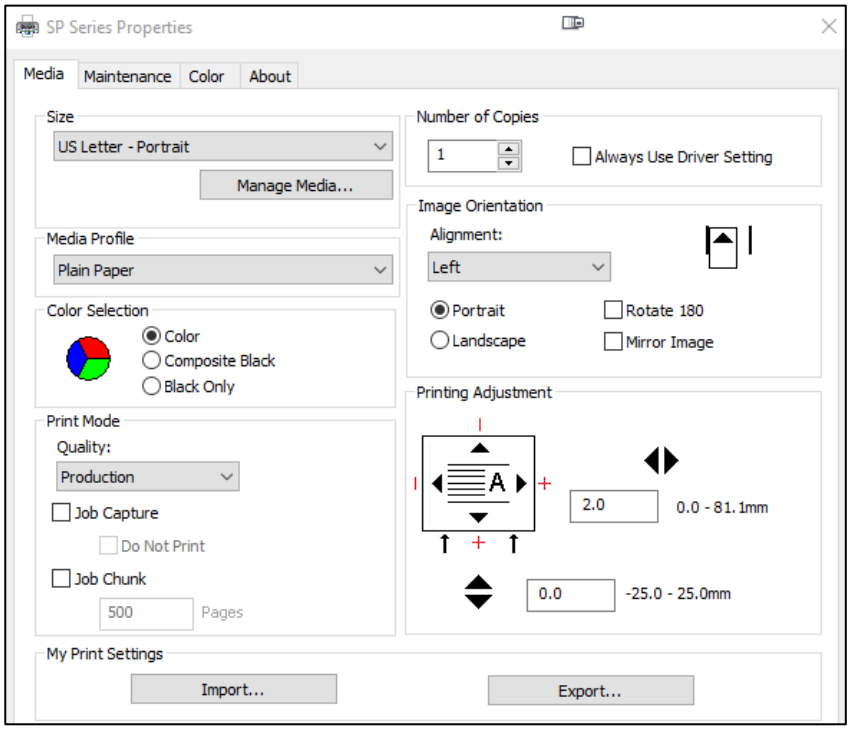
The following section outlines how to operate the printer via the Printer Driver on your PC.

Depending on the format of the print job, choose an appropriate application that can print via the standard Windows driver. For example, any PDF viewer will be able to print a PDF file using the provided printer driver. Within the application's print interface, ensure that the installed ColorMax9 printer is selected.

Once this is done, select Printer Preferences to set up the printer to match the required settings and loaded media. The available settings are arranged into three tabs: Media, Maintenance, and Color.

Media Tab

The following fields are available on the **Media** tab.

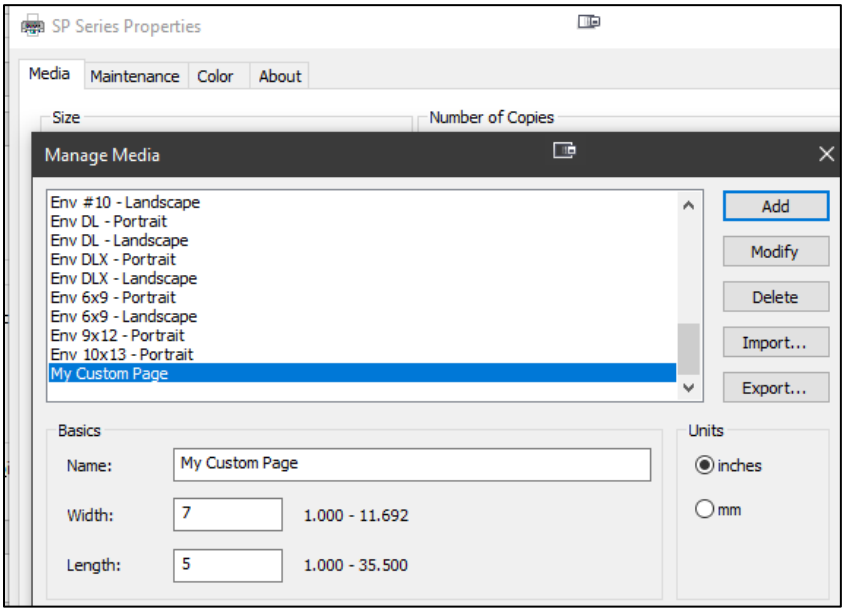


Size

Select the size of media from the dropdown list to match the physically loaded media. A predefined list of standard media is preloaded during driver installation.

Note: *Most media can be physically loaded either lengthways / portrait or perpendicular / landscape to the direction of printing. This must be specified for the application so it understands how the data should be arranged on the page.*

The predefined list includes both options for media, which can be loaded either way. When you change the orientation, you can see the icon in the **Image Orientation** section change to match the physical loading of the media. If the required media is not on the list, then the user can use the **Manage Media** button to define a custom media size.



Media Profile

Select the type of media for the job from the dropdown list of available profiles. These include Plain Paper, Kraft Economy, Matte Coated, Matte white Kimdura, Premium Envelope, Standard Envelope, and Virgin Kraft

Color Selection

Select the desired color mode:

- **Color**: Uses all available CMYK
- **Composite Black**: Uses CMYK ink to print in grayscale black and white.
- **Black Only**: Uses only black (K) ink.

Print Mode

Quality: Select the required print job resolution which also determines the printing speed.

- **Production**: Select **Production** to input images of 300dpi that will print at a nominal 18IPS.
- **Best:** Select **Best** to input images of 600dpi that will print at a nominal 18IPS

Note: *All printing is at 1200dpi with the input resolution scaled up within the printer. Lowering the job resolution reduces the amount of data that needs to be processed, which allows for faster printing.*

- **Job Capture / Do Not Print**: For jobs that are likely to be printed again in the future, select **Job Capture** to save the file to the printer's library. Check the **Do Not Print** box if you wish to print the job later. Once captured, the jobs can be accessed via the touchscreen's **Stored Jobs** interface.
- **Job Chunk / Pages**: For large jobs, instead of waiting for the whole job to load, you can break down the job into chunks of fewer pages that will start printing immediately. Check this box and enter the number of pages to include in each chunk. The default is 500 pages.

Number of Copies

This option is provided for legacy applications that do not have the ability to define the number of copies. It can also be used to override the setting from applications that can provide this value.

If needed, enter the number of pages to be printed for this job. Select the **Always Use Driver Setting** checkbox if you need to override the copies provided by an application.

Image Orientation

- **Alignment**: This setting changes the alignment of the image across the print width. By default, it is set to **Left** to match the left alignment of the AccuTrak table**. Center** and **Right** alignment can also be used for specialized printer configurations.
- **Portrait / Landscape**: This setting is provided for legacy applications that rely on the printer to define how the image should be oriented on the page. Most modern applications will either ignore this setting or use it as initial guidance only.
- **Rotate 180**: This setting tells the driver to rotate the image 180 degrees for printing. Switches from top first to bottom first printing or vice versa.
- **Mirror Image**: This setting mirrors the image in the direction of printing.

Printing Adjustment

Use the **width and length alignment** setting to achieve fine adjustment of where the image starts printing in both the direction of printing and across the print width. The arrows indicate which axis is being changed with the icon showing the printing direction for reference.

The adjustment range across the print width is automatically set according to the selected alignment and media size. If not valid, the user will be prompted to correct when leaving the tab. The default width adjustment is 2.0mm to allow for full-bleed printing configuration.

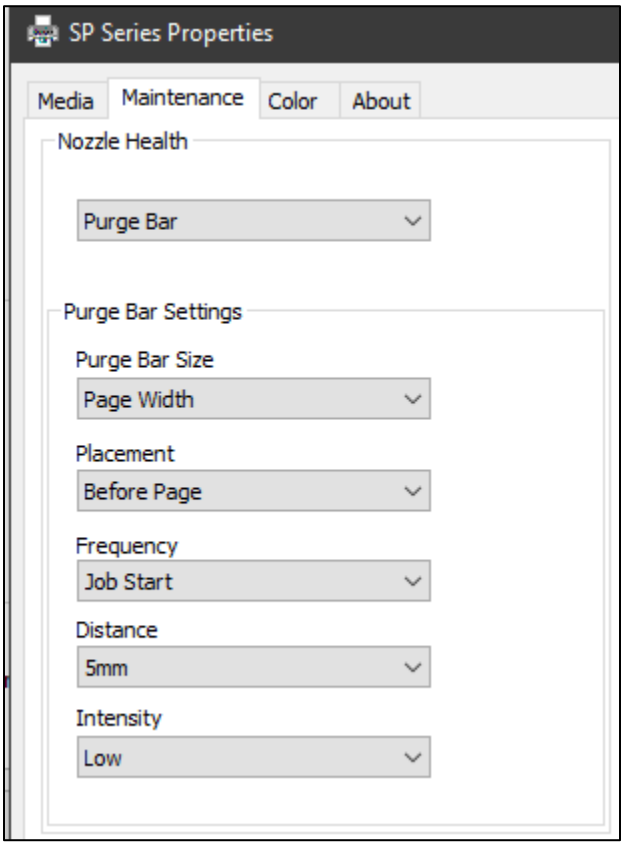
If the application is configured to select the media size and ignores the media size configured in the driver, then any invalid offset will be adjusted to ensure that the printing region is valid.

My Print Settings

- **Export**: Select this button to save the current printer settings to a user-named file. This allows common settings to be saved so that they can be easily restored for other print jobs. It allows settings to be saved so that they can be retained after driver upgrades and transferred to other PCs.
- **Import**: Select this button to load a preset settings file saved using the Export functionality.

Maintenance Tab

The **Maintenance** Tab lets you define the printhead maintenance activities for the print job, as required by the graphics in the job.



Nozzle Health

This option allows the user to select between:

- **None:** No additional printhead maintenance will be performed during the job.
- **Purge Bar:** Nozzles are ejected in a line (bar) either before or after the page. See below for further details.
- **Keep Nozzles Alive:** Nozzles are kept healthy by printing a very light random pattern in the background of the image.

Purge Bar Settings

The Purge Bar is defined by a number of parameters which define the intensity, frequency, and location of the purge. These are provided to allow the user to optimize the purge bar to the job, environment, and media being used.

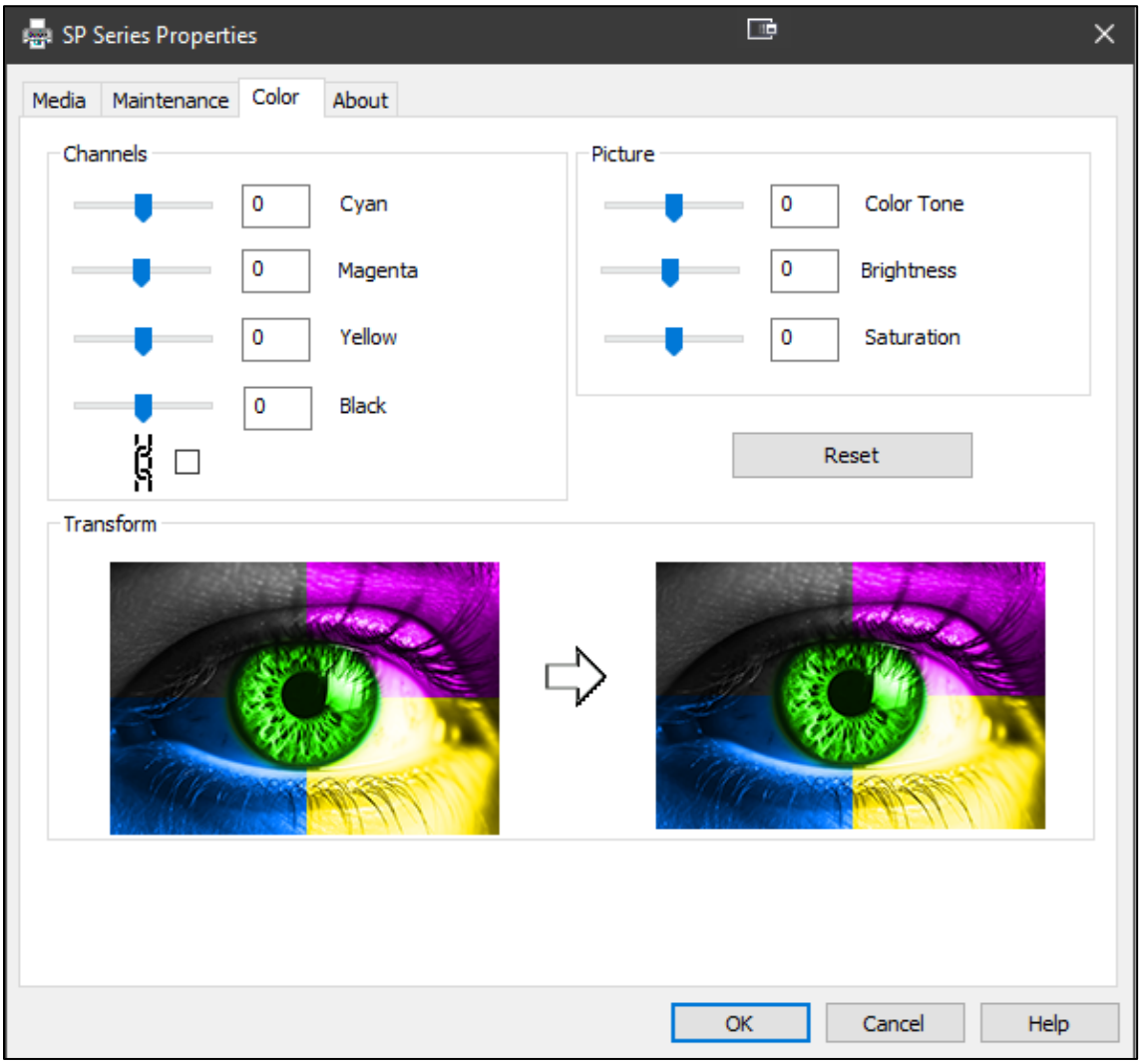
- **Purge Bar Size:** This parameter allows the user to define whether the purge bar should exercise all nozzles across the printhead, or just those being used by the current job print width. **Full Width** creates a full print width job resulting in longer processing times and potentially slower printing rates.
- **Placement:** The purge can occur before or after printing a page. In situations such as thick media, it may be advantageous to purge after the page to avoid any ink residue from the purge (aerosol) ending up on the media.
- **Frequency:** Frequency defines how often, in terms of page count, the purge bar should be printed. It may be required only on the first page of a job or periodically after a given page count.
- **Distance:** This parameter defines how far before or after the page the purge bar should be printed. In cases where aerosol may end up on the media, the distance may want to be greater. Note that adding the purge bar increases the page size, leading to an overall slower rate of printing.

My Print Settings

- **Import**: Select to call up existing saved driver presets for this print job based on the settings of previous print jobs.
- **Export**: Select to send this print job file to a selected folder, saving printer presets.

Color Tab

The **Color Tab** lets you modify the ink color channels and the picture values by using slider bars.



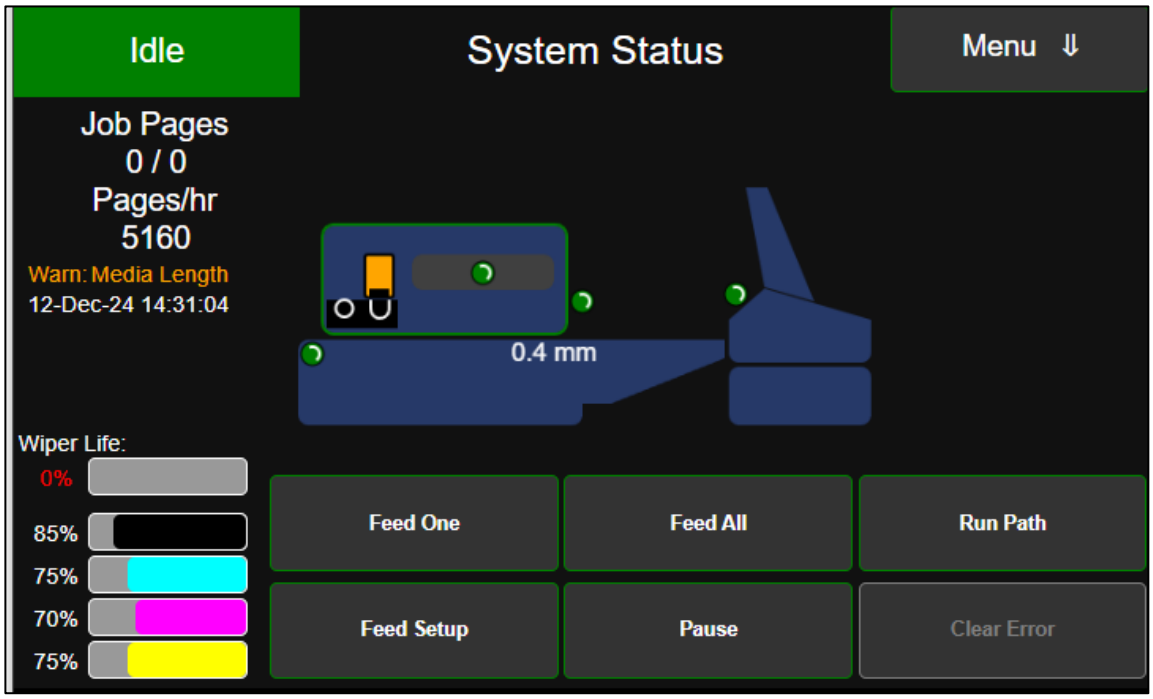
Values can be locked in place by checking the following icon:

A **reset** button sets the values back to 0.

The **Transform** section illustrates the before and after impact of changing the Channels and Picture values.

Using the Printer Touchscreen

After a printer has been set up and loaded to the printer, it can be controlled through the printer's touchscreen.

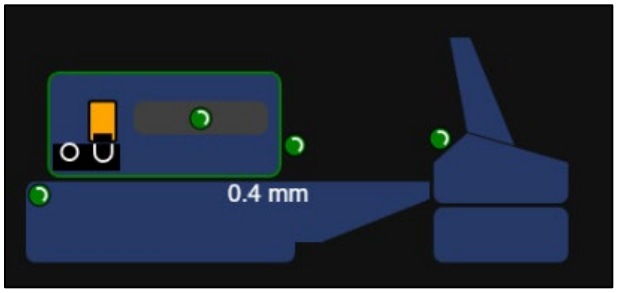


The printer's touchscreen displays system status information along with a list of menu options for setting up and adjusting the performance of a print job. The touchscreen shows the following:

- **Printer State**:
  - **Green** indicates an operable printer.
  - **Blue** indicates a paused job.
  - **Orange** indicates operational states such as system updates and feed testing.
  - **Red** indicates an issue that requires attention.
- **Job Details**: Shows job details such as the number of pages that have already been printed, the total pages in a print job, the number of pages printed per hour, and the date and time.
- **Printer Diagram**: Shows the state of the printer's sensors, the printhead's position relative to the wiper and print positions, the media space allowance, and the clamshell's position (closed or open).

Sensor Condition Indicators

You can use the sensor indicators to verify the condition of the sensors.
There are four sensor condition indicators.
From right to left (Feeder Sensor, Media (TOF) Sensor, Ink Door Switch, Exit Sensor).
Indicators show as **green** when no paper is present (unblocked), or door is shut.
Indicators show as **red** when paper is present (blocked), or door is open.



NOTICE: A green feeder sensor does not indicate that the feeder is ON. The feeder sensor is driven by the printer, therefore it will function (show green/red), even if the feeder's power is turned OFF.

- **Wiper Life and Ink**: Shows the percentage of available wiper life and ink. When these percentages get below the threshold or are missing, the printer status indicator in the upper left corner will change color and indicate that action is required.

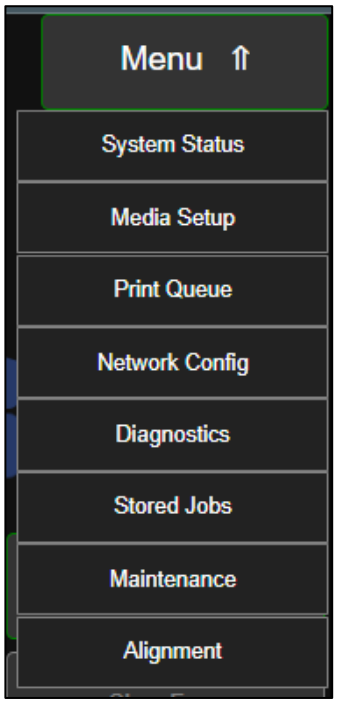
The **System Status** screen includes common commands used to set up the printer and run the job:

- Feed One
- Feed All
- Run Path
- Pause
- Feeder Setup

Buttons that are currently available and functioning are rimmed in **green**. Unavailable buttons (for example, no job is running so it cannot be cancelled) are greyed out. A button rimmed in **red** indicated an issue that needs attention, or a sensor that is currently in use.

Drop-down Menu Options

Options on the **Menu** drop-down in the upper right corner include those explained in the sections below:



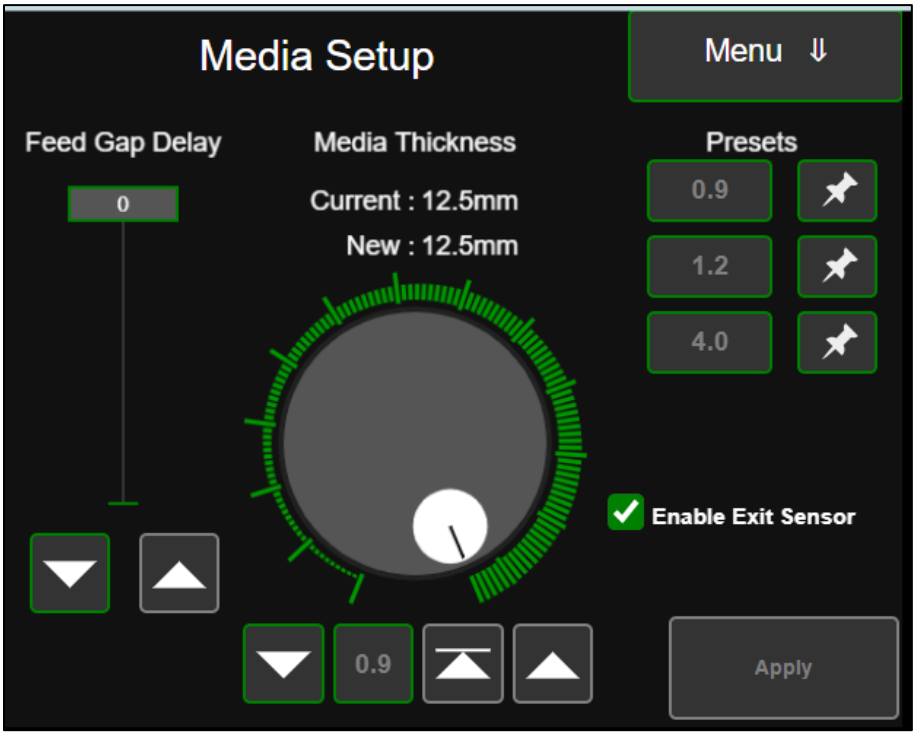
System Status

System Status is the default screen (as pictured on the touchscreen above), showing status and details of the current print job in the upper left corner.

Sensors show either **green** (operable) or **red** (error or active).

Buttons that are operable for the current state of the printer are highlighted in the lower part of the screen. Others that are not currently operable are dimmed.

Media Setup



The **Media Setup** page on the touchscreen lets you:

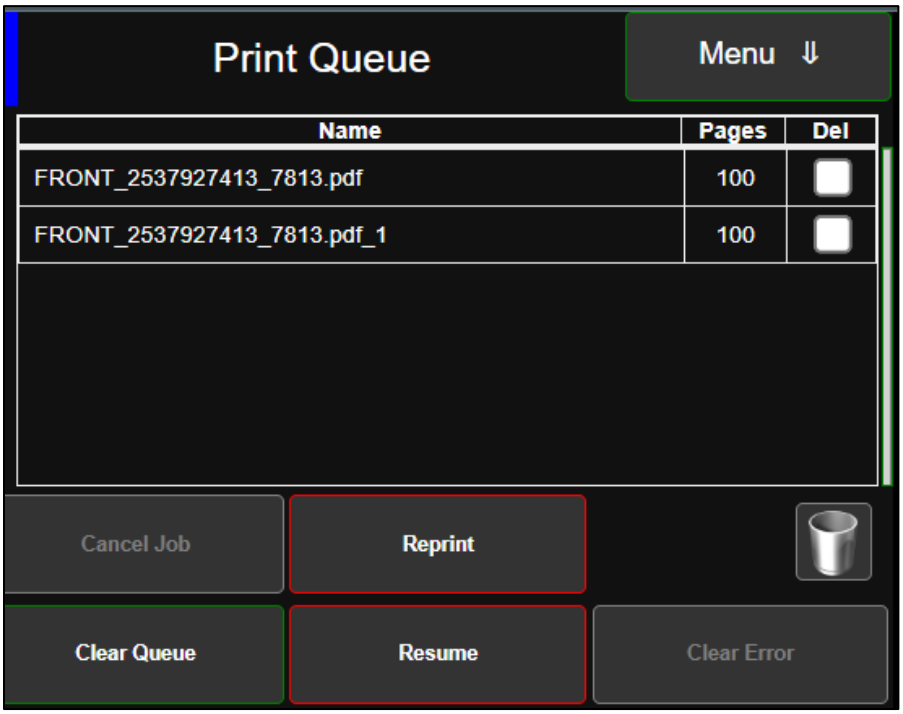
- Define **Media Thickness** by using the arrow buttons to increase or decrease the thickness height of the printhead above the media.
- Define a **Feed Gap Delay** to adjust the space (gap) between individual pieces of media in the paper path.

  Note: *A larger gap between pages may be needed to allow the printer enough time to get the next page ready to print and avoid a skipped page.*
- Select **Enable Exit Sensor** to enable the Exist Sensor. Unselect Enable Exit Sensor to disable (ignore) the Exit Sensor, in cases where the underside of the media is dark in color, or media is oddly shaped, or the entire media length does not pass over the sensor or sensor is being affected by external light.

Once you have made selections for the media for a print job, select the **Apply** button.

You can store up to three presets for use with future jobs that use the same media.

Print Queue



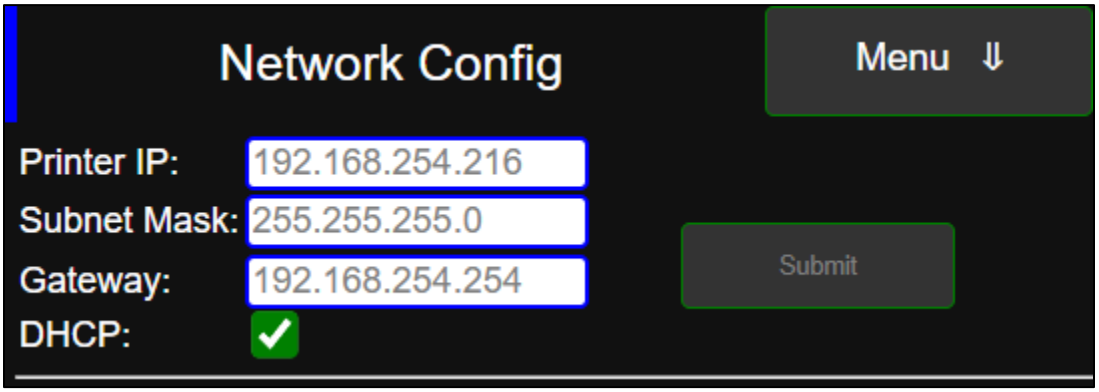
The Print Queue page lists the jobs that are currently in the queue for printing. Use the buttons to:

- Pause a job that is currently running, for example, to adjust media that has gotten out of line and caused an error.
- **Clear Error** when an error has occurred but now has been fixed.

  Tip: *Error conditions can also be cleared by pressing the* ***ERROR*** *status located at the upper left-hand corner of the screen. This is helpful when you are in a screen that does not have the* ***Clear Error*** *button*
- **Clear Queue** to remove any remaining jobs from the print queue.
- **Cancel Job** to stop a job from completing.
- **Reprint** to reprint one or more pages.

Individual jobs can be removed from the queue by checking the **Delete** Box next to the job's name and selecting the following icon:

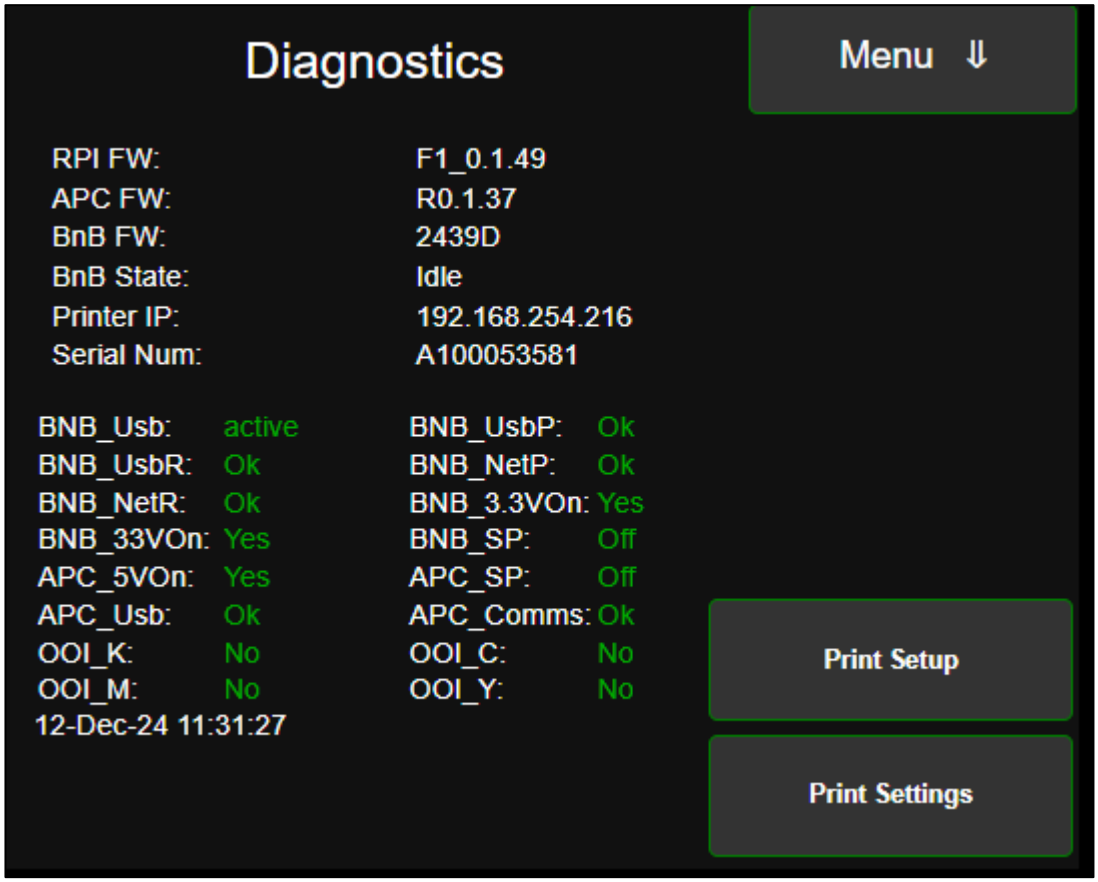
Network Configuration



The **Network Configuration** page shows the IP address of the printer and other details of the Network. This page is only used for reference, but it can be adjusted if the configuration changes.

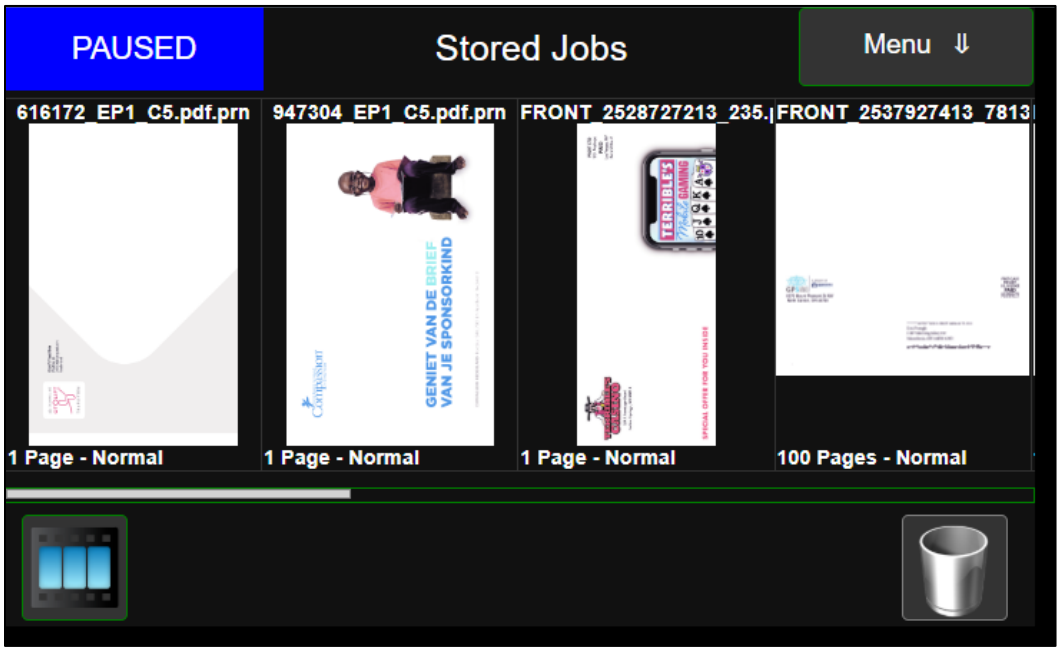
Diagnostics

The diagnostics page shows the following:



Stored Jobs

The **Stored Jobs** option allows you to view jobs you have previously stored on the printer. From this page.

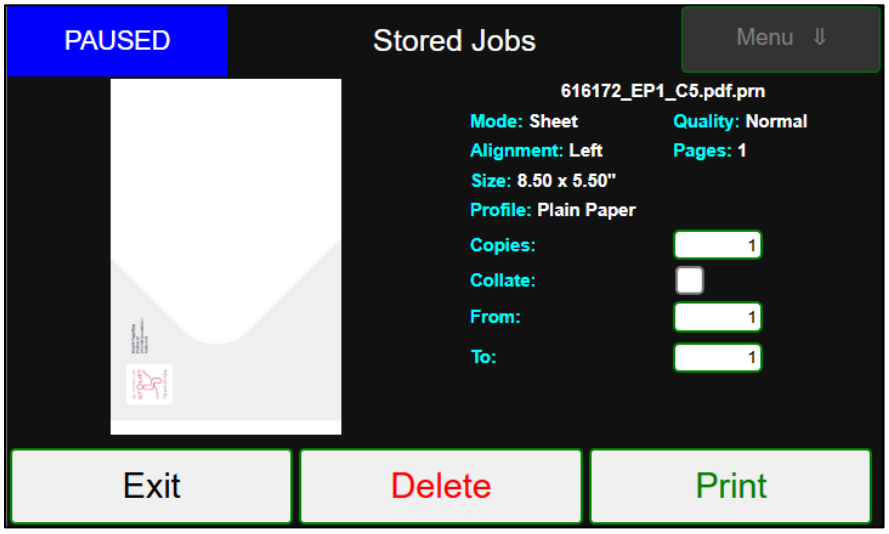


The button on the bottom left allows you to view a list view of stored jobs.

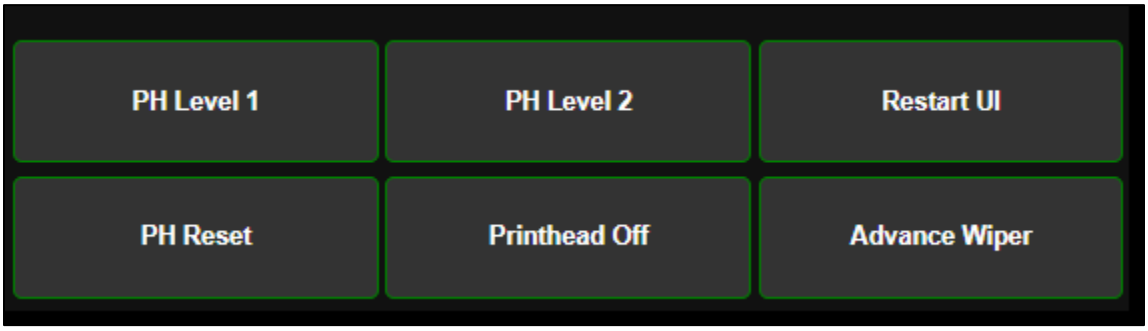
The button in the bottom right allows you to delete a selected job.

Selecting a job allows you to see information about a stored job, such as the example below. You may print or delete a stored job from this screen.

Note: *The page orientation in the preview screen shows ow media should be loaded into the feeder.*



Maintenance



The **Maintenance** page provides selection buttons for maintaining the printhead and wiper.

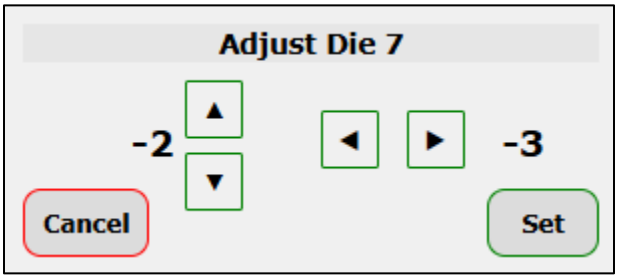
- **PH Level 1**: The initial maintenance to try when the printer indicates that the printhead needs cleaning. This option provides a basic printhead clean and should be tried before any other maintenance is completed.
- **PH Level 2**: The secondary maintenance to use if PH Level 1 was unsuccessful. This option provides a more intense printhead cleaning.
- **PH Reset**: Rests the printhead after the printer has stopped from an error that has been fixed without having to restart the job.
- **Printhead Off**: Turns the printhead off and on.
- **Advance Wiper**: Moves the maintenance wiper forward 0.24” (6mm). It may require multiple advanced to het the clean section of the wiper under the printhead.

Alignment

The **Alignment** option is used to view and adjust the settings for printhead alignment.

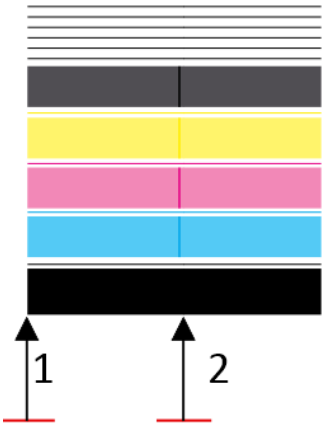
Print a preloaded alignment page to check your alignment. Use A4 or Letter paper in landscape format and ensure that your media thickness is adjusted accordingly.

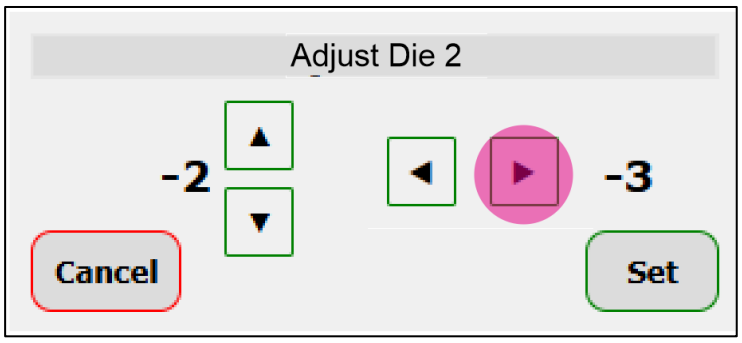
Select a die and use the arrows to adjust vertically and/or horizontally. Select **Set** from the **Adjust Die** screen to make the change to this die. Once all dies are set, select **Apply** to apply changes to the printer engine.



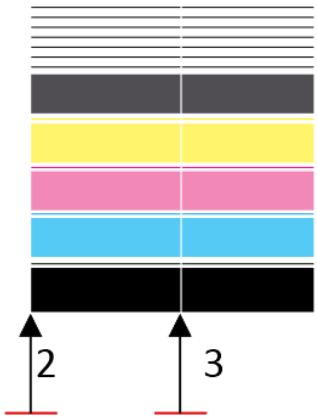
Note: *Always adjust the die that is to the right from the artifact that you are trying to fix. For example:*

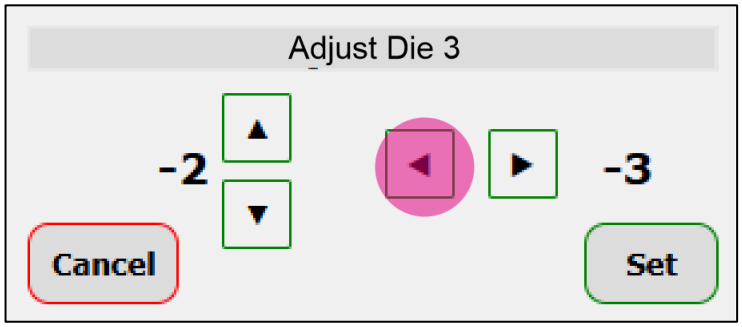
Overlap: Adjust Die #2 using the right arrow



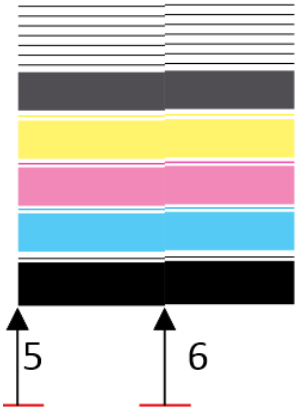


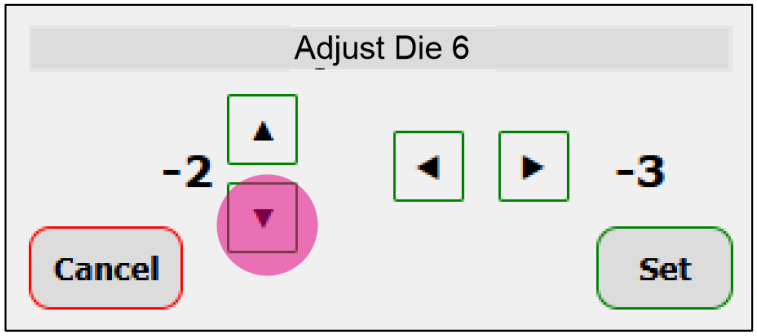
Gap: Adjust Die #3 using the Left Arrow.





Vertical Misalignment: Adjust die #6 using the down arrow



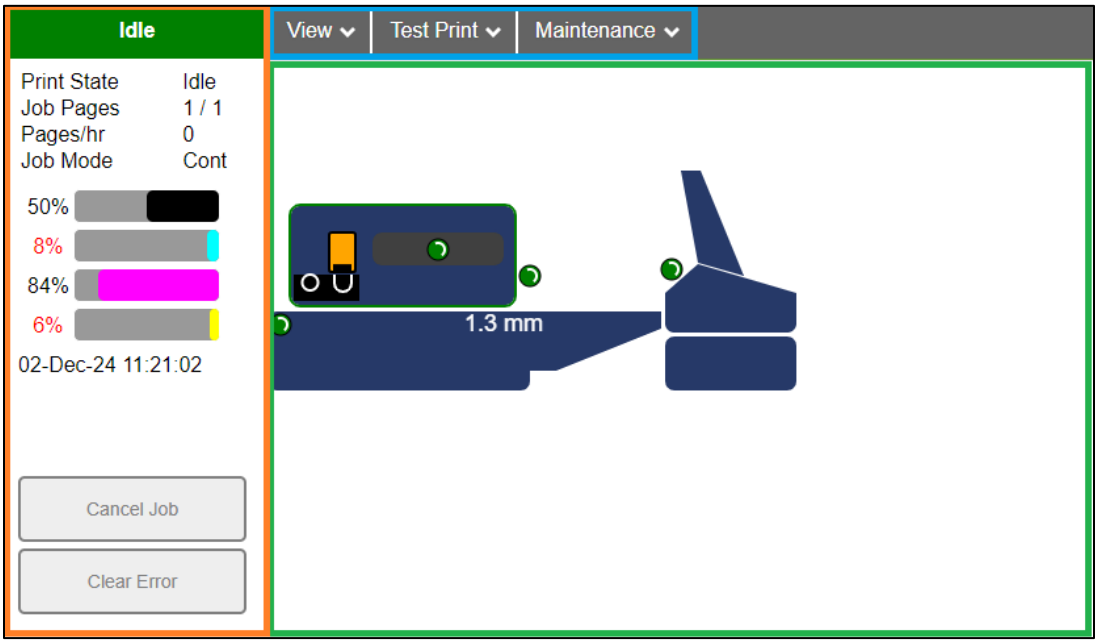


Using the Printer Toolbox

The **Toolbox** on the PC provides an interface for managing the printer using a Web Browser. It is launched using the **Toolbox** option in the **Windows Start Menu**. If only one printer is installed, the user will be taken directly to the printer. If there are multiple printers, then a list of available printers is provided allowing the user to select the desired printer. The Toolbox for that printer is then launched in a new browser tab.

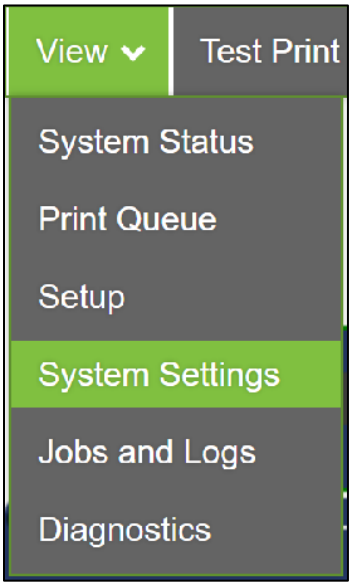
The Toolbox is arranged into three main sections as shown below:

- **Drop-Down Menus**: These menus provide access to a range of functions that are always accessible irrespective of the current view. The main one, being the **View** menu, determines what information is displayed in the current view area.
- **Current View:** This are shows information based on the current View menu selection
- **System Status**: This area shows a high-level current status of the printer. This includes Ink Tank information as well as any warnings or errors that may occur.
  The **Cancel Jo**b and **Clear Error** buttons are provided so that they are always accessible. The system clock should always be updating and can be used to determine if the printer has stopped responding. If this occurs, use the touchscreen to determine the state of the printer.



View

The **View** menu lets you see and adjust details of the printer's operation, including **System Status**, **Print Queue**, **Setup**, **System Settings**, **Jobs** and **Logs**, and **Diagnostics**.

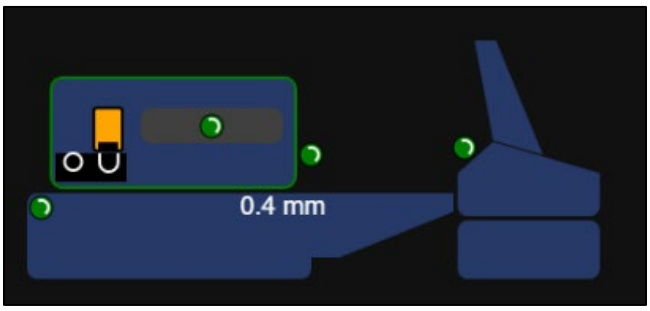


System Status

The **System Status** view in the Toolbox provides a graphic status of the printer and its various sensors and components. Hover-Over functionality is provided to allow users to identify parts plus determine the remaining life of the wiper module.

Sensor Condition Indicators

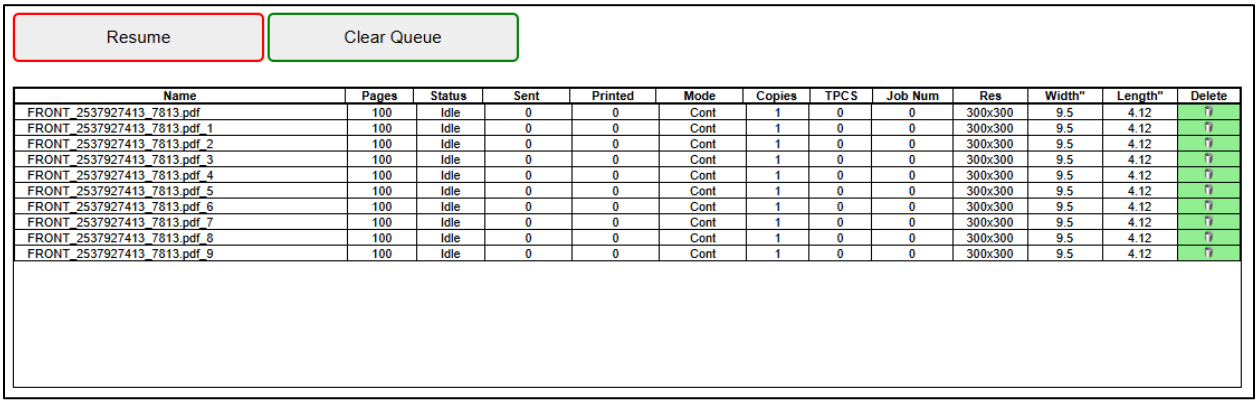
You can use the sensor indicators to verify the condition of the sensors.
There are four sensor condition indicators.
From right to left (Feeder Sensor, Media (TOF) Sensor, Ink Door Switch, Exit Sensor).
Indicators show as **green** when no paper is present (unblocked), or door is shut.
Indicators show as **red** when paper is present (blocked), or door is open.



NOTICE: A green feeder sensor does not indicate that the feeder is ON. The feeder sensor is driven by the printer, therefore it will function (show green/red), even if the feeder's power is turned OFF.

Print Queue

The **Print Queue** shows the current status of the internal print queue. It provides basic functionality for pause control and clearing jobs out of the queue. More extensive control is available on the touchscreen.

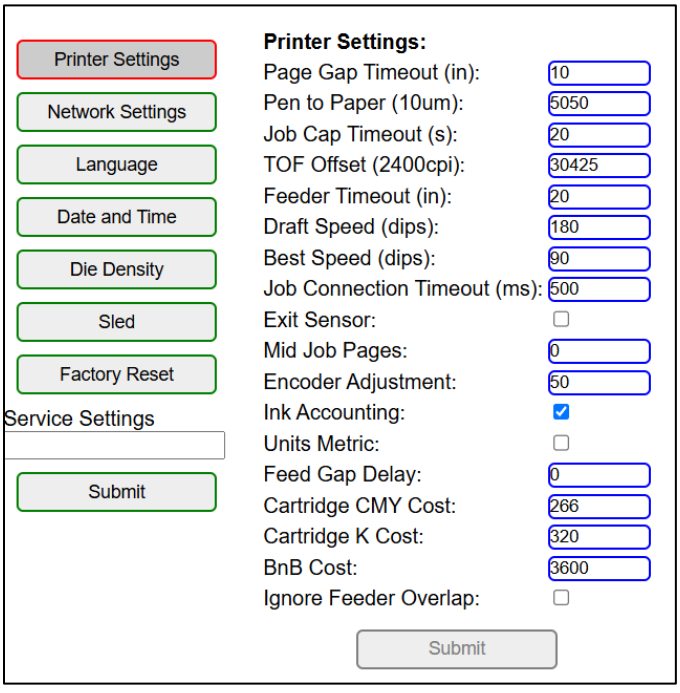


Name	Pages	Status	Sent	Printed	Mode	Copies	TPCS	Job Num	Res	Width"	Length"	Delete
FRONT_2537927413_7813.pdf	100	Idle	0	0	Cont	1	0	0	300x300	9.5	4.12	
FRONT_2537927413_7813.pdf_1	100	Idle	0	0	Cont	1	0	0	300x300	9.5	4.12	
FRONT_2537927413_7813.pdf_2	100	Idle	0	0	Cont	1	0	0	300x300	9.5	4.12	
FRONT_2537927413_7813.pdf_3	100	Idle	0	0	Cont	1	0	0	300x300	9.5	4.12	
FRONT_2537927413_7813.pdf_4	100	Idle	0	0	Cont	1	0	0	300x300	9.5	4.12	
FRONT_2537927413_7813.pdf_5	100	Idle	0	0	Cont	1	0	0	300x300	9.5	4.12	
FRONT_2537927413_7813.pdf_6	100	Idle	0	0	Cont	1	0	0	300x300	9.5	4.12	
FRONT_2537927413_7813.pdf_7	100	Idle	0	0	Cont	1	0	0	300x300	9.5	4.12	
FRONT_2537927413_7813.pdf_8	100	Idle	0	0	Cont	1	0	0	300x300	9.5	4.12	
FRONT_2537927413_7813.pdf_9	100	Idle	0	0	Cont	1	0	0	300x300	9.5	4.12	

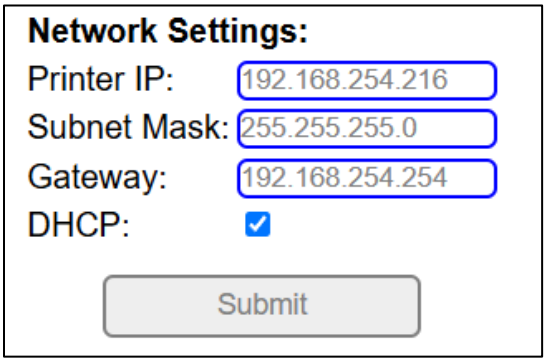
Setup

Various printer setup details and settings can be accessed on the **Setup** page. As illustrated below, the settings are organized into a variety of sections which are accessed via the Setup Section buttons.

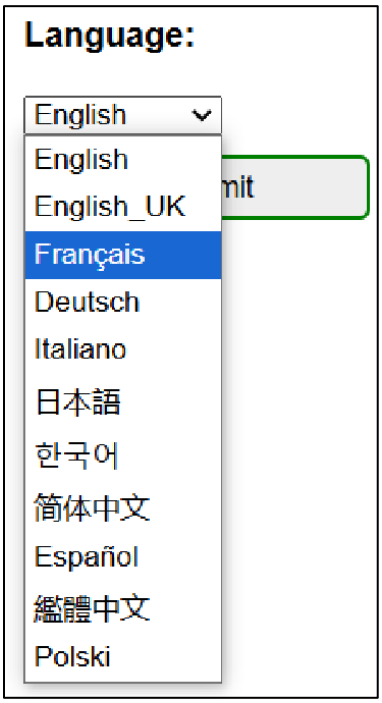
- **Printer Settings**: Allows for the setup of certain printer settings and cost analysis tools.



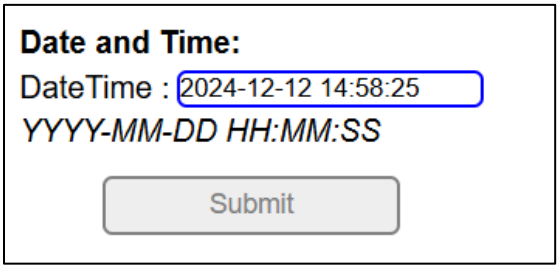
- **Network Settings**: Allows for the setup and adjustment of the printer's Network Settings.



- **Language**: Selects the language that the Toolbox and the Touchscreen will display. Click **Submit** after selecting a language from the drop-down menu.

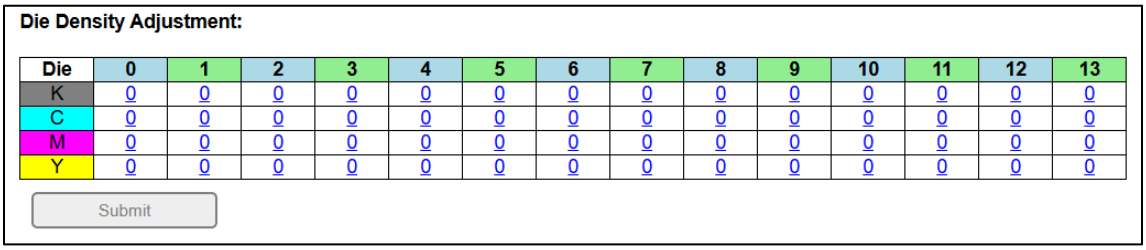


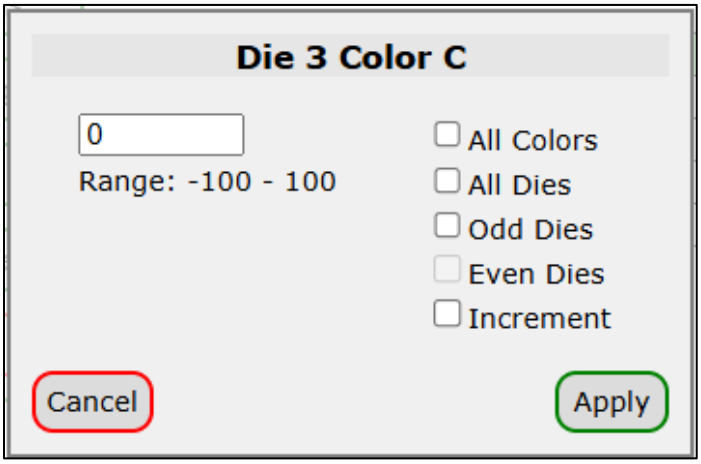
- **Date and Time**: Selects the date and time that the Toolbox and Touchscreen will display.



- **Die Density**: Allows modification of the ink droplet size within a die for each ink channel separately, CMYK. This may be used to compensate for worn out dies that may give washed out printouts over time.

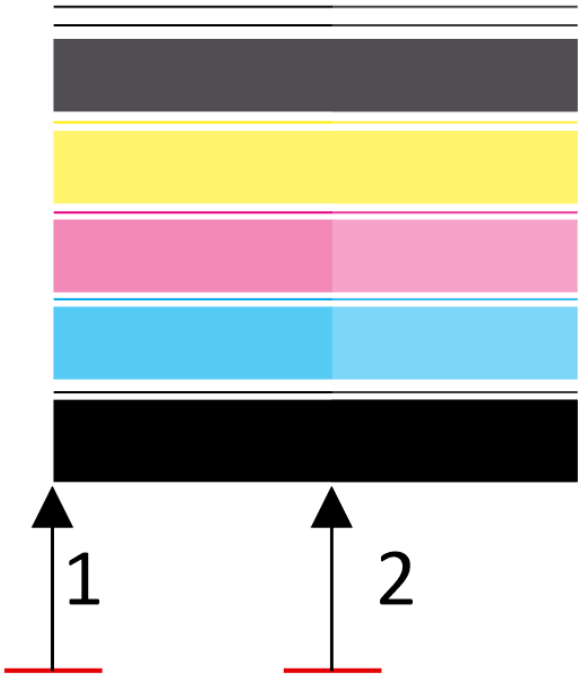
  Use the **Alignment** page to check die density. When doing so, use A4 or Letter paper in landscape format**.**

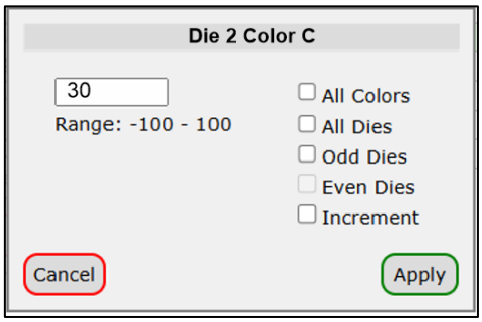


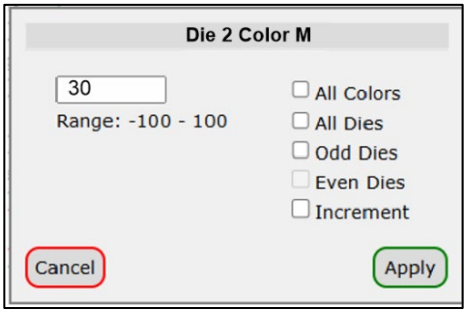


Example:

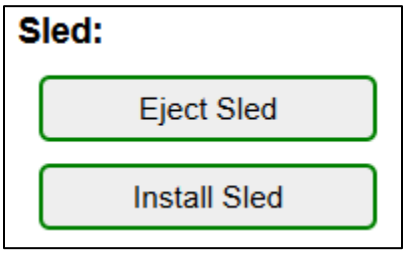
Increase Dies size for C and M in Die #2 for 30% to even out the printout.

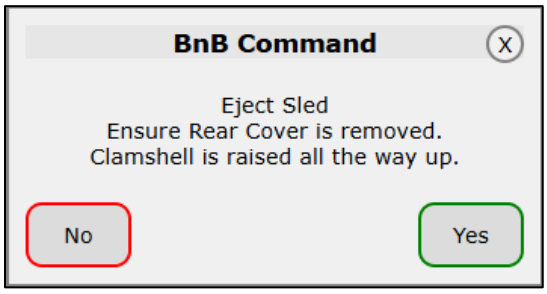




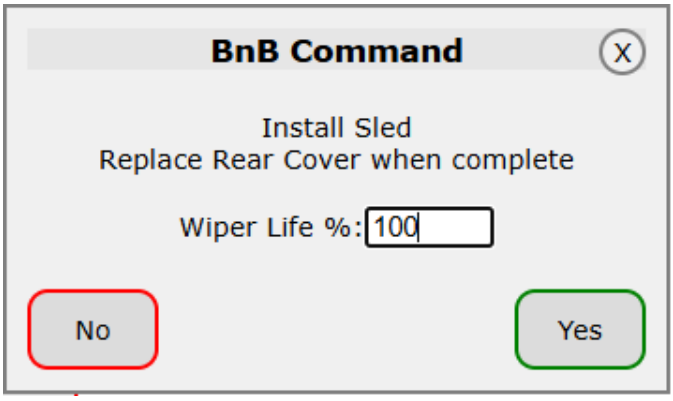


- **Sled**: Allows you to **Eject** and **Install** the **Service Station**. Note that the Sled Access Cover must be removed before the sled is ejected.





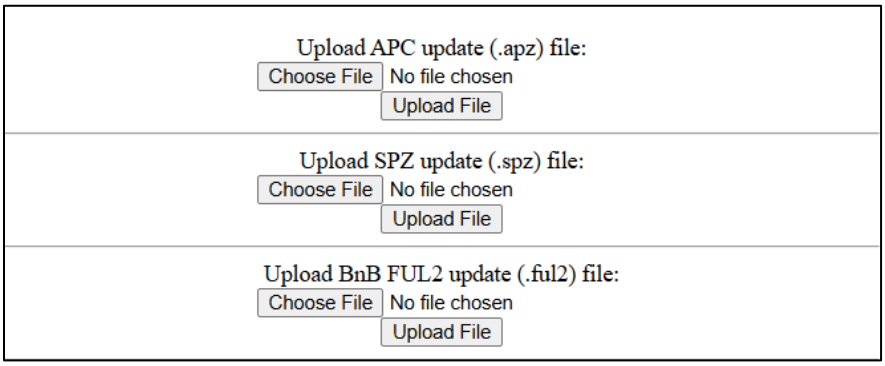
When installing a new sled, ensure that the Wiper Life % is at 100%

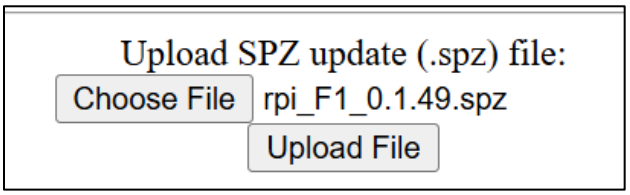


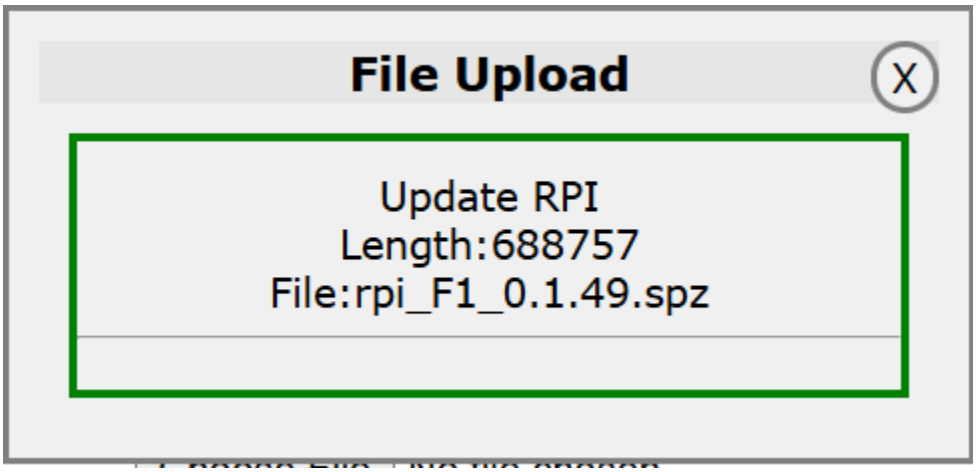
- **Factory Reset**: Resets the printer back to its original factory settings.
- **Service Settings**: Password-protected menu that allows trained service personnel to perform high-level maintenance tasks.

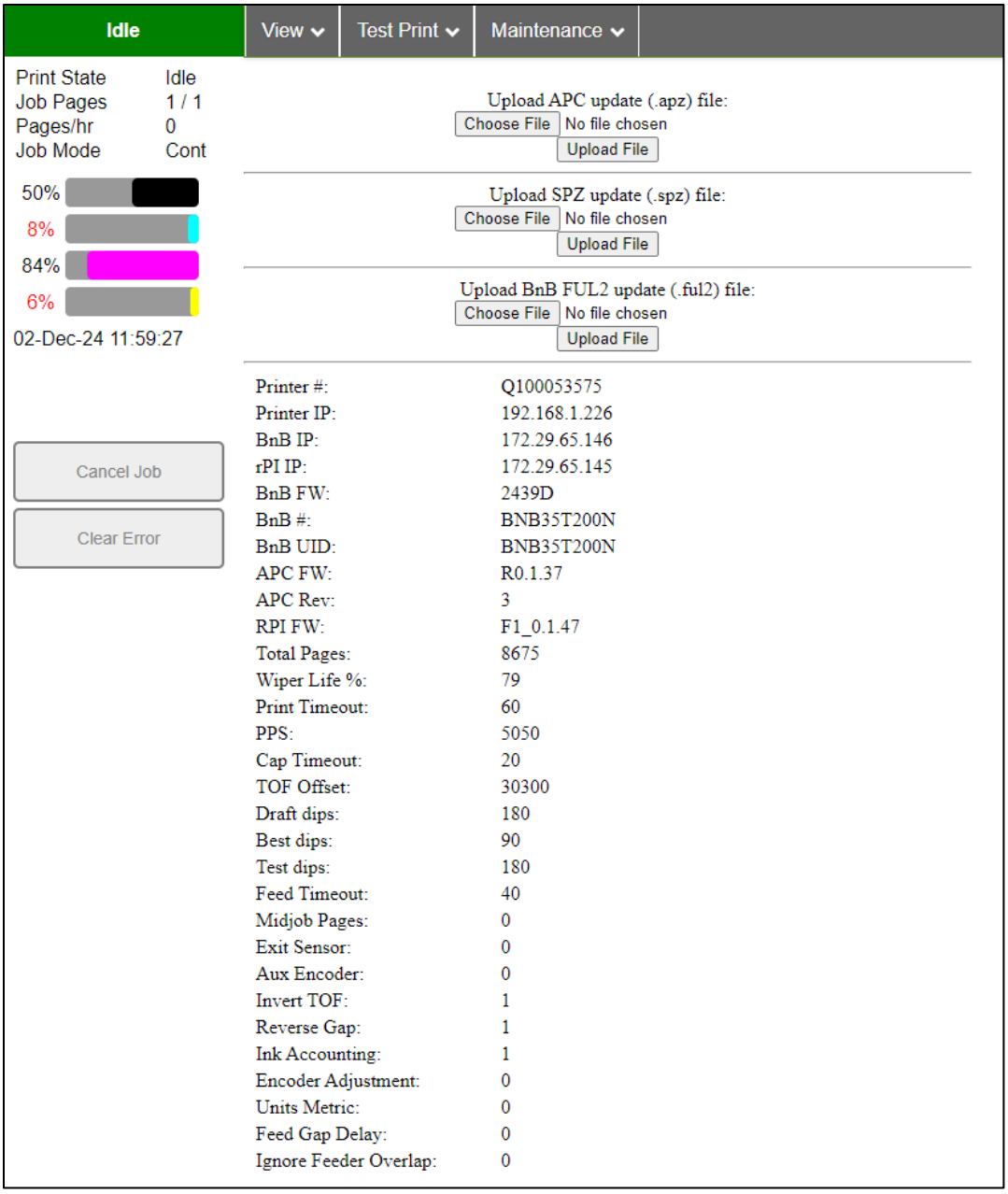
System Settings

The **System Settings** view shows current printer settings. It also provides the interface for uploading any required printer updates. As the printer has various components, different update options are provided depending on which components need updating. If a file copy of the current printer settings is required, then it can be accessed via the **Jobs and Logs** View.



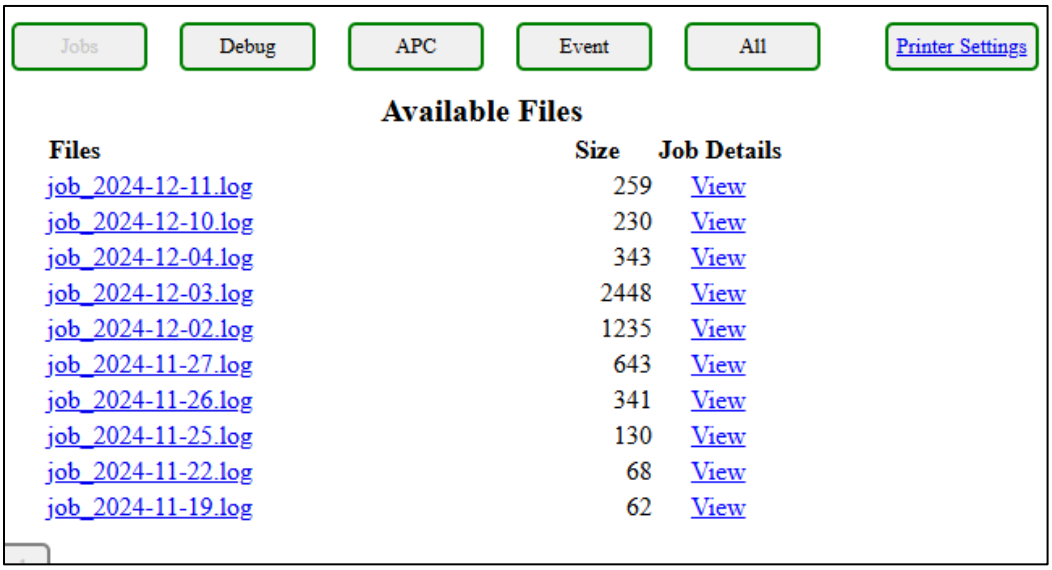




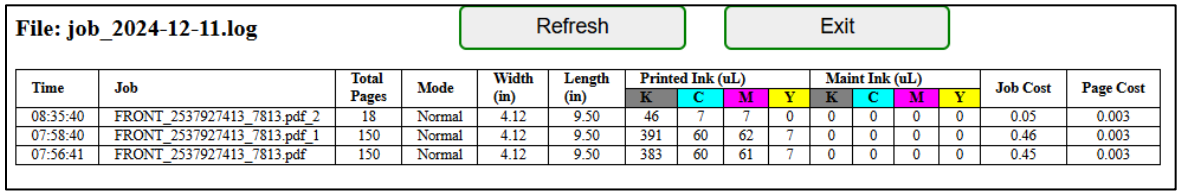

Idle
View
Test Print
Maintenance
Print State Idle
Job Pages 1 / 1
Pages/hr 0
Job Mode Cont
50%
8%
84%
6%
02-Dec-24 11:59:27
Cancel Job
Clear Error
Upload APC update (.apz) file:
Choose File No file chosen
Upload File
Upload SPZ update (.spz) file:
Choose File No file chosen
Upload File
Upload BnB FUL2 update (.ful2) file:
Choose File No file chosen
Upload File
Printer #: Q100053575
Printer IP: 192.168.1.226
BnB IP: 172.29.65.146
rPI IP: 172.29.65.145
BnB FW: 2439D
BnB #: BNB35T200N
BnB UID: BNB35T200N
APC FW: R0.1.37
APC Rev: 3
RPI FW: F1_0.1.47
Total Pages: 8675
Wiper Life %: 79
Print Timeout: 60
PPS: 5050
Cap Timeout: 20
TOF Offset: 30300
Draft dips: 180
Best dips: 90
Test dips: 180
Feed Timeout: 40
Midjob Pages: 0
Exit Sensor: 0
Aux Encoder: 0
Invert TOF: 1
Reverse Gap: 1
Ink Accounting: 1
Encoder Adjustment: 0
Units Metric: 0
Feed Gap Delay: 0
Ignore Feeder Overlap: 0

Jobs and Logs

Available **Job and Log Files** jobs are listed in this view, with most recent files listed first. The four types of files are as follows:



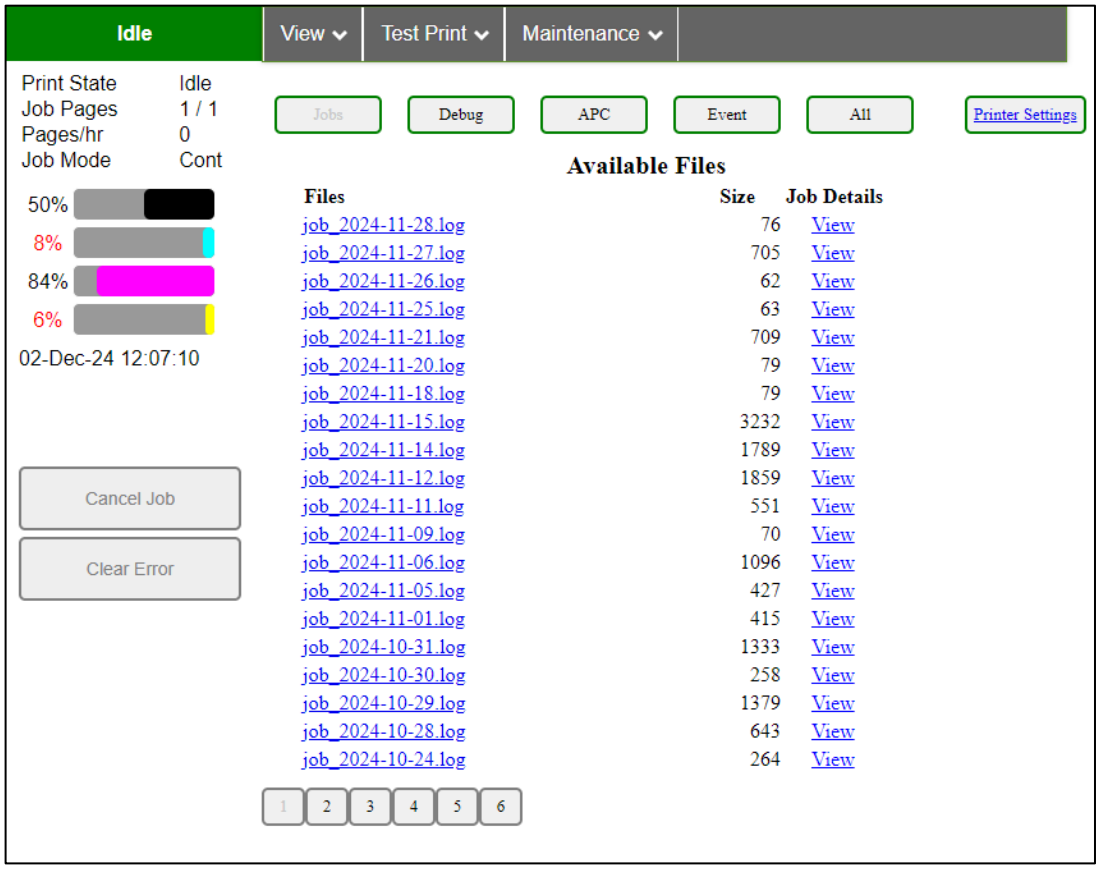
- **Jobs:** List of jobs with statistical data of the size and ink usage of each one. Note that **Ink Statistics** requires **Ink Accounting** to be turned ON (default setting).



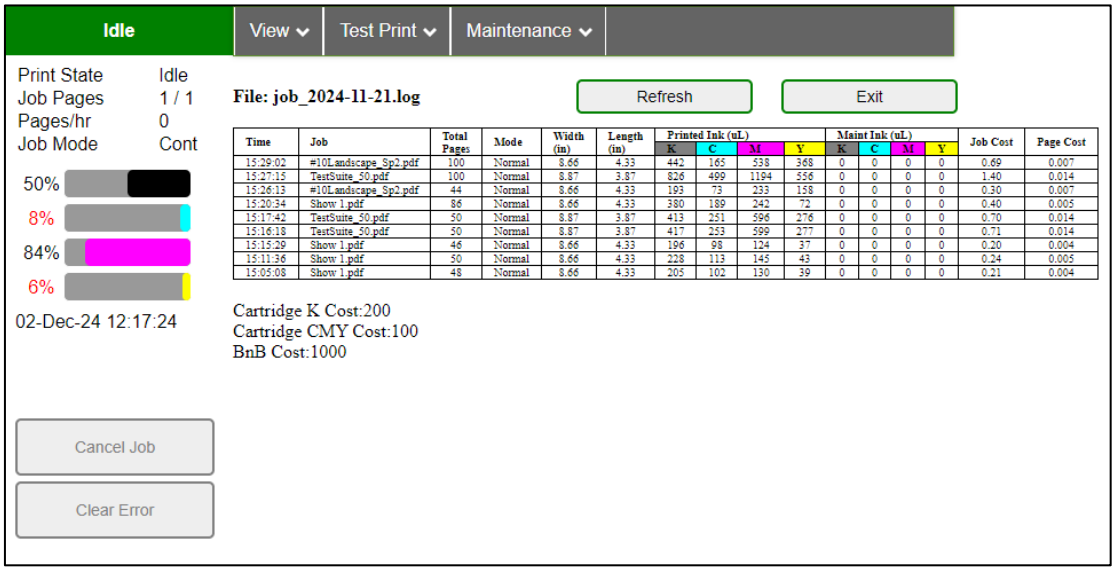
Time	Job	Total Pages	Mode	Width (in)	Length (in)	Printed Ink (uL)				Maint Ink (uL)				Job Cost	Page Cost
						K	C	M	Y	K	C	M	Y		
08:35:40	FRONT_2537927413_7813.pdf_2	18	Normal	4.12	9.50	46	7	7	0	0	0	0	0	0.05	0.003
07:58:40	FRONT_2537927413_7813.pdf_1	150	Normal	4.12	9.50	391	60	62	7	0	0	0	0	0.46	0.003
07:56:41	FRONT_2537927413_7813.pdf	150	Normal	4.12	9.50	383	60	61	7	0	0	0	0	0.45	0.003

- **Debug:** System level debug file. These may be split into multiple files for a single day to avoid files becoming too large
- **APC**: Paper path controller debug file

- **Event**: List of events that have occurred.



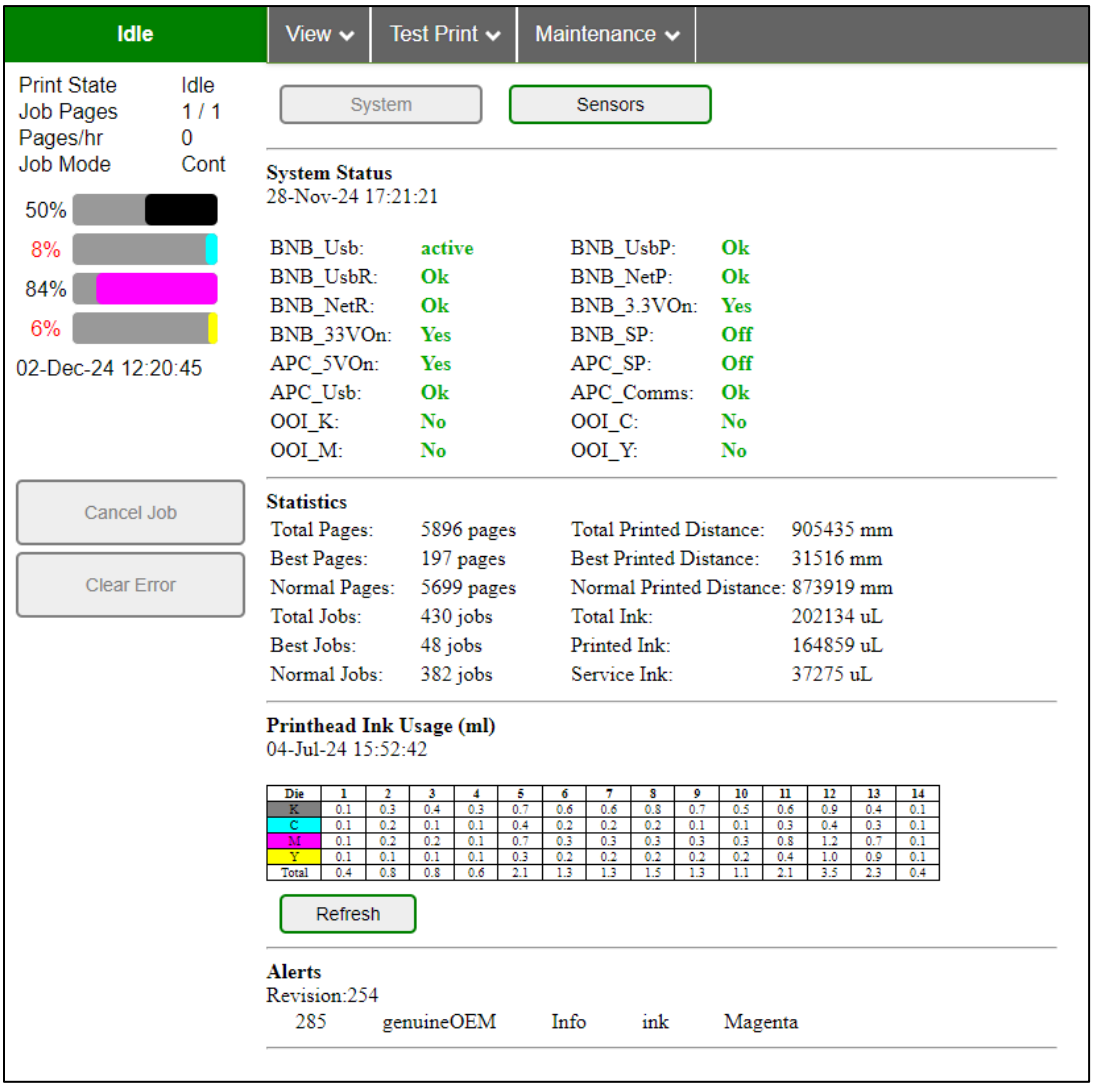
Detailed information on job usage can be displayed by clicking on the **View** link beside each listed job title. Job and Page costs can be estimated and utilize the user-entered consumable costs.



Diagnostics

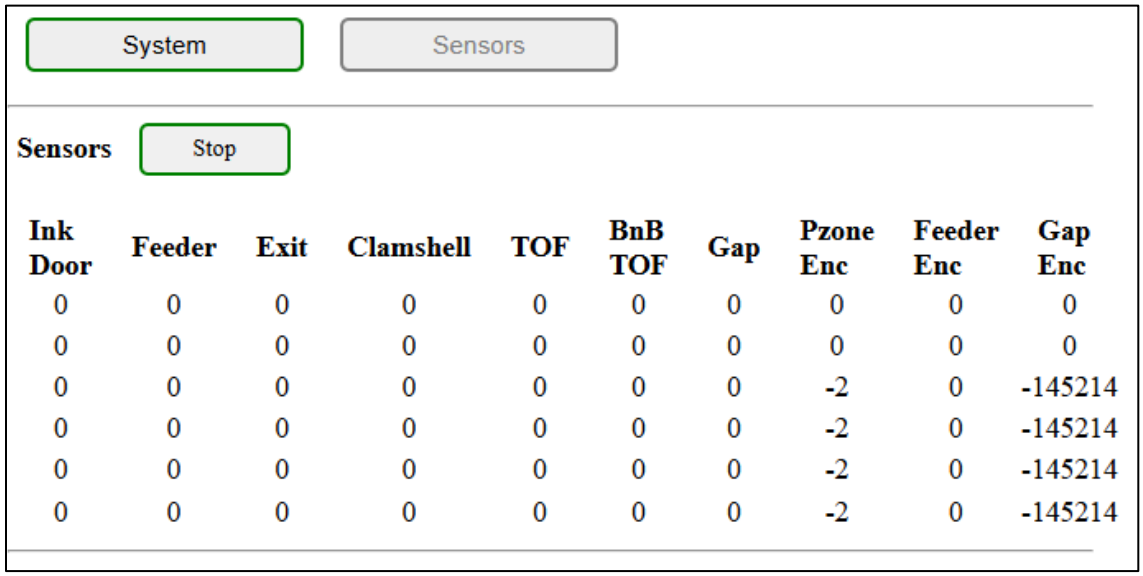
The **Diagnostics** page is organized into two sections – **System** and **Sensors**.

- **System**



  - **System Status**: Shows the states of various system components. When operating correctly, all these components should be **green**.
  - **Statistics**: Printer Statistics are based on the life of the printer.
  - **Printhead Ink Usage**: Provides a detailed view of how printing is being distributed across the printhead.
  - **Alerts**: Show any alerts that the printhead may have raised including errors. Any errors will be cleared by the **Clear Error** button when pressed by the user.

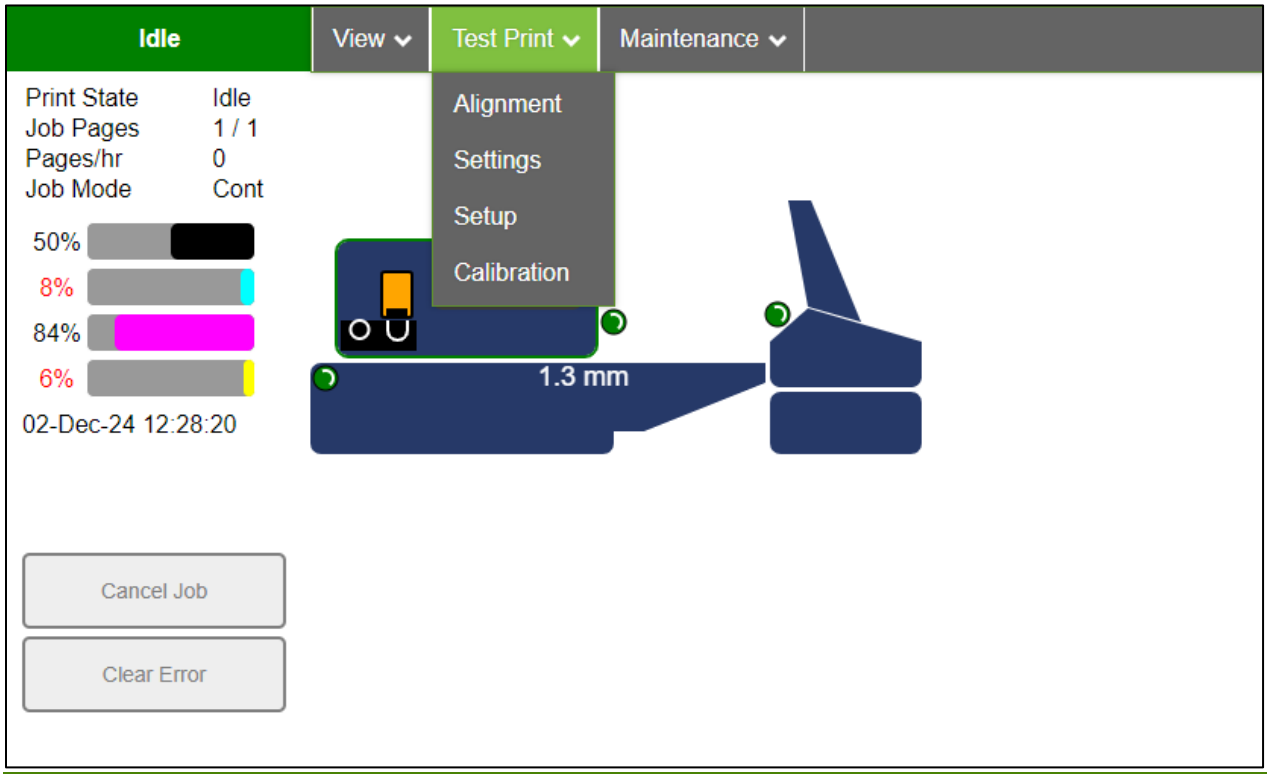
- **Sensors:** Shows the status of the printer's various sensors and collects data on their operation



Ink Door	Feeder	Exit	Clamshell	TOF	BnB TOF	Gap	Pzone Enc	Feeder Enc	Gap Enc
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	-2	0	-145214
0	0	0	0	0	0	0	-2	0	-145214
0	0	0	0	0	0	0	-2	0	-145214
0	0	0	0	0	0	0	-2	0	-145214

Test Print

The **Test Print Menu** provides a list of standard test prints that the user can request. Each print is designed to be printed using the full width of the printer using either A4 – Landscape or US Letter – Landscape media loaded into the feeder.



When a test print is selected, a popup box will appear prompting the user to confirm the selected test print is required.

- **Print Alignment:** Select the **Print Alignment** option from the **Test Print** menu to print out a report showing the print alignment.
- **Settings:** Select **Settings** from the **Test Print** menu to print a **Print Settings Report.**
- **Setup:** Preloaded page for A4/Letter format. It is used to check print quality and adjust TOF or Encoder scaling. Use this page after a new Print Engine Installation or other majors repair.
- **Calibration**

Maintenance

The **maintenance** menu in the Toolbox lets you perform various levels of printhead maintenance:

- **Level 1:** The initial maintenance to try when the printer indicates that the printhead needs cleaning. This option provides basic a printhead clean and should be tried before any other maintenance is completed.
- **Level 2:** The secondary maintenance to use if PH Level 1 was unsuccessful. This option provides a more intense printhead cleaning.
- **PH Reset**: Resets the printhead after the printer has stopped from an error that has been fixed without having to restart the job.
- **Advance Wiper**: Moves the maintenance wiper forward 0.25” (6mm). It may require multiple advances to get to a clean portion of the printhead.

Power Down Process:

You can choose to leave the printer powered-up or to power the printer down when not in use.

- A benefit of leaving the printer powered-up may be to eliminate the power-up wait time, so the printer is ready to use in a shorter period of time.
  NOTE: The printer does NOT perform any head maintenance routines when it is powered-up and sitting idle.
- A benefit of powering the printer down may be to save energy or prevent improper shutdown if AC power is lost to the printer.

If you plan to power-down the printer, please be sure to power-down the printer properly to ensure Print Engine and printbar (printhead) are properly prepared for shutdown.

1. Press the Soft-Power button.
2. The touchscreen will display a Shutdown message and progress bar.
3. Please wait for Soft-Power LED to turn OFF before proceeding.
4. Once the Soft-Power LED turns off, it is safe to turn off Main Power Switch.

NOTICE: Improper shutdown may cause print quality issues (if printhead is not capped at the time of shutdown). Improper shutdown may also corrupt SD Card files. Corrupt SD Card files may cause bootup issues.

Section 4: Maintenance

Periodic maintenance is needed to keep the printer in good working order. Many tasks can be performed by operators with basic supplies, with no special tools needed. Other tasks should only be performed by trained service professionals.

***Note**: High volume usage may require more frequent maintenance.*

Replacing Ink Cartridges

The ink level for each ink cartridge Is displayed on the left side of the touchscreen and in the Toolbox on the PC. Use the following instructions to remove and empty an ink cartridge and install a new one.

1. Open the **Ink Door** to access the ink cartridges.
2. Gently press in on the empty ink cartridge and quickly release. The spring-loaded cartridge will pop out.

3. Gently remove the empty cartridge.

4. Remove the new ink cartridge from its packaging.
   ***Caution**: Do not touch the ink cartridge nozzles or copper contacts. Doing so will result in clogs, ink failure, and bad electrical connections. Do not remove the copper strips – they are required electrical contacts.*

5. Gently place the new cartridge in the empty slot, making sure that the correct side of the cartridge is facing inwards.
   NOTE: The end of the cartridge with the nozzles is inserted into the appropriate slot, as indicated by the color and name on the other end of the cartridge.
6. Once in place, press the cartridge into the Ink slot to activate the spring lock.
7. Close the magnetic Ink Door.
   NOTICE: Give the printer 30 seconds to read the cartridges and update the ink status. If ink tanks are not recognized, open the ink door and keep it open until the status changes to INK DOOR OPEN. Then, close the ink door.

Replace Service Tray

The **Service Tray** is a sled assembly within the print engine that maintains the printhead's health. It contains a cap that is used to seal the printhead when it is not in use. It contains a roll of cloth that is used to wipe and clean the printhead surface.

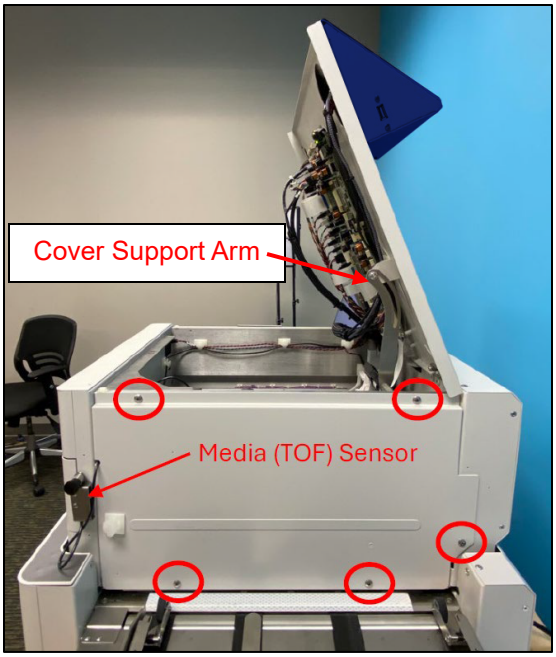
The Service Tray sled is a consumable with the wiper cloth life (Wiper Life) being displayed on the touchscreen. When it nears the end of its Wiper Life, users will need to order a new Service Tray sled and then replace the "used" one with the "new" one using the following procedure.

1. Set the Media Thickness to 12.5 mm and press Apply.

2. Open the Top Cover of the Clamshell. **NOTE:** Use handle located behind the control panel (touchscreen). Cover is held closed by strong magnets.

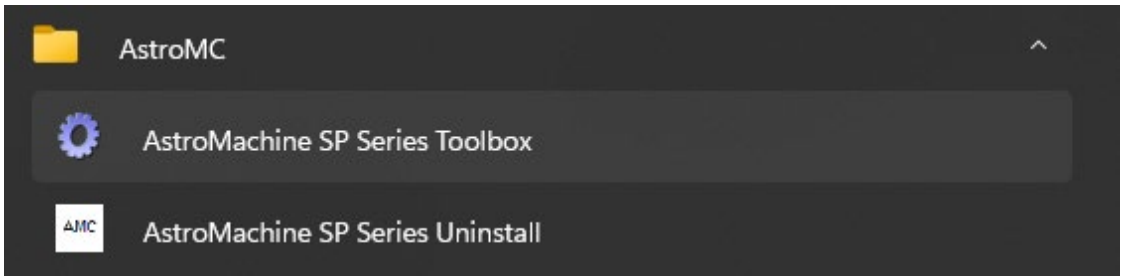
3. Secure Top Cover in the open position using the Cover Support Arm.

4. Move the Media (TOF) Sensor from the Sled Access Cover to a temporary location on the frame of the printer.

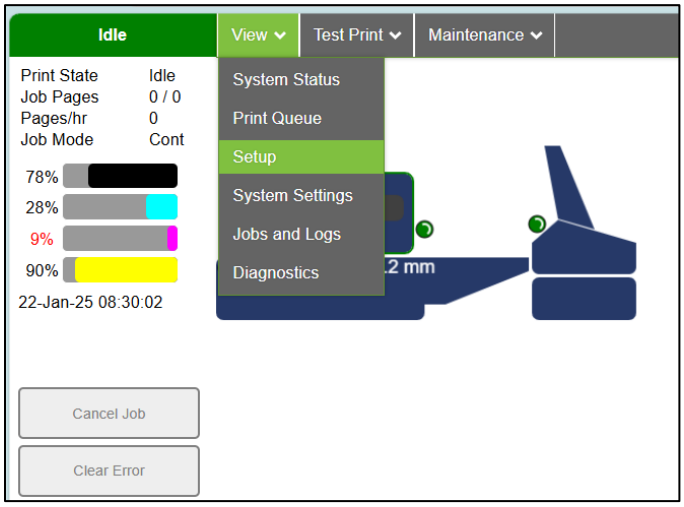


5. Remove the Sled Access Cover, held in place by five Phillips head screws (circled).

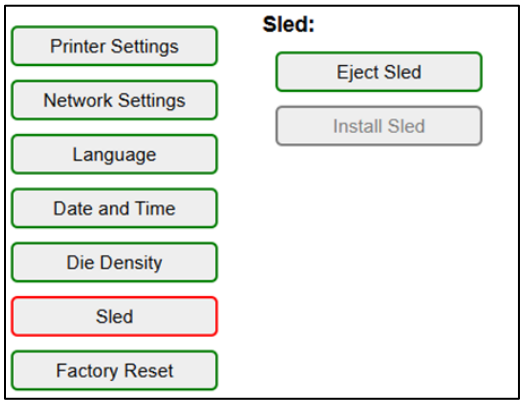
6. From the PC, open the Toolbox.
   Click on Start, All, AstroMC, AstroMachine SP Series Toolbox.



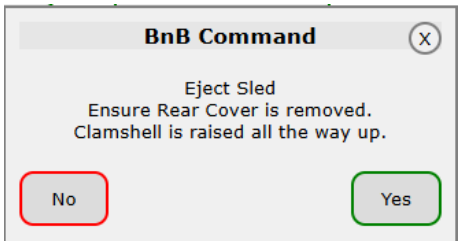
7. From the Toolbox, click on View, then select Setup.



8. From the Setup menu, click on the button labeled “Sled”.
Then click on the button labeled “Eject Sled”.

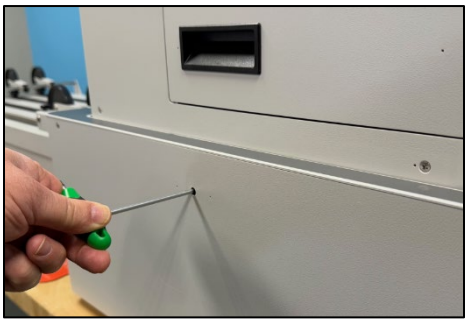


You will be presented with the “BNB” Command”, “Eject Sled” acknowledgement window.

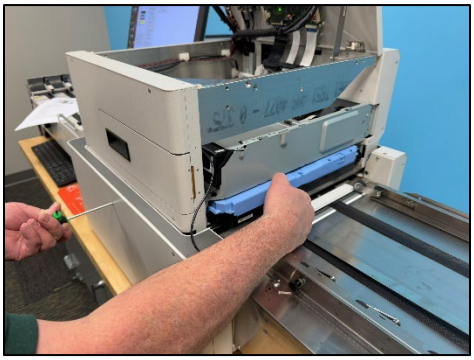


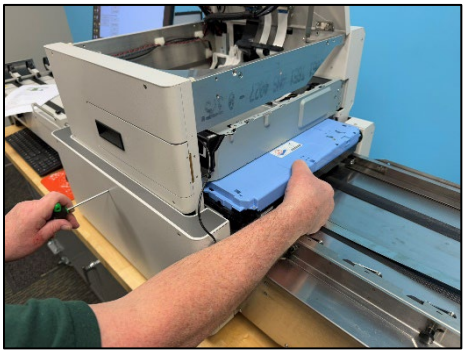
Click on “Yes” to acknowledge that the Sled Access Cover (Rear Cover) is removed, and Clamshell is raised all the way up (12.5mm). The sled will be driven partially out of the print engine, towards the entry end of the printer.

9. Manually remove the Service Tray sled from the print engine.
    a. Insert a T20 Torx screwdriver into the opening at the operator side of the printer.
    TIP: The Torx screw position will not align if you don't have the Media Thickness set to 12.5 mm.

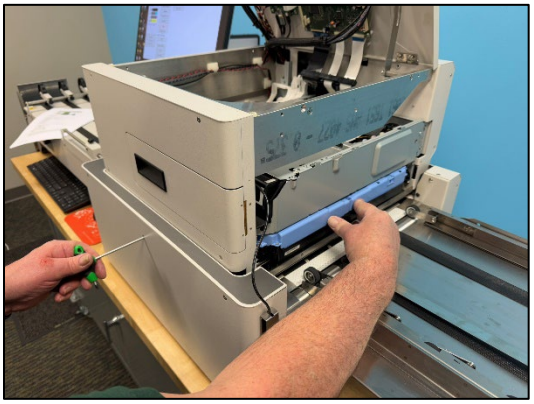


    b. While pulling out on the sled, turn the T20 Torx driver clockwise to drive the sled completely off the sled drive shaft/gears and out of the print engine. This will take some force.





10. Install the "new" Service Tray sled.
    a. Remove all packaging material from the "new" Service Tray sled.
    b. Insert the sled into the Service Tray slot and give it a push, towards the exit end of the printer, until it "pops" into position.
    NOTE: Gear-tracks, located on the bottom of the Service Tray sled, need to make even contact with the sled drive shaft/gears. Sled needs to be sitting square within the print engine.
    c. Insert a T20 Torx screwdriver into the opening at the operator side of the printer.



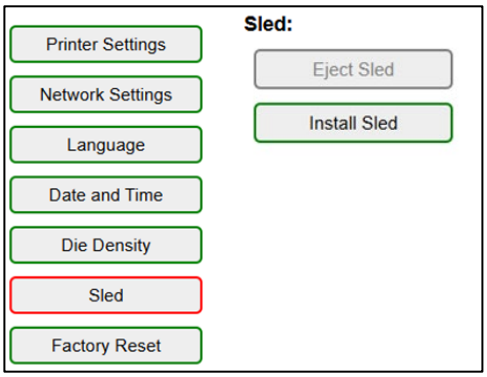
    d. While lightly pushing inward on the sled, to ensure it stays evenly engaged with the drive shaft/gears, turn the T20 Torx screwdriver counter-clockwise to drive the sled into the print engine a small distance. Stop when the trailing edge of the sled is flush with the gray

metal print engine frame.
NOTICE: Do NOT drive the sled in too far. You only need to drive the sled in far enough to allow for the Sled Access Cover (Rear Cover) to be reinstalled.

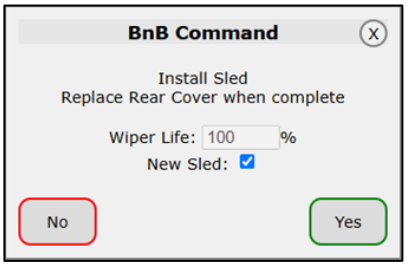
e. Remove the T20 Torx screwdriver from the opening at the front of the printer.

11. Install and secure the Sled Access Cover.
    Make sure the Media (TOF) Sensor wire is properly positioned, within the cutout in the cover, before securing the cover.
    Important: Make sure all five Philips head screws are installed and secure.

12. From the Toolbox, Setup menu, click on the button labeled “Install Sled”.



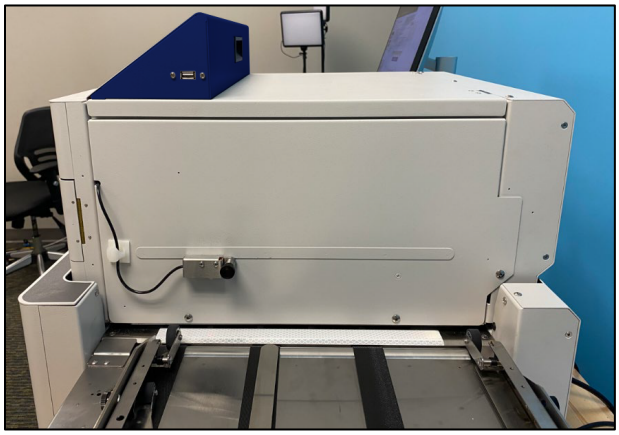
You will be presented with the following “BnB Command”, “Install Sled” window.



- ***If installing a “new” sled***, select the “New Sled” checkbox. In this case the Wiper Life percentage will automatically be set to 100% for the new sled.
- ***If reinstalling the same sled that you just removed***, make sure the “New Sled” check box is NOT selected. In this case the Wiper Life value shown should be the correct value for the sled you just removed and reinstalled.
- ***If installing a “used” sled with a different wiper life value than what is currently displayed,*** make sure the “New Sled” check box is NOT selected. In this case, enter the desired/known Wiper Life value.

13. Click on Yes to accept and close the BnB Command window.
    The Service Tray sled will be pulled into the print engine and after making a few movements (back and forth) the printhead will be capped.
    NOTICE: If a “BnB motor stall” error message is displayed or you notice that the printhead is not properly capped (cap position is misaligned with printhead), please repeat this procedure from the beginning. Pay particular attention to make sure the sled is inserted squarely, and the Sled Access Cover is properly installed. If issue continues, please contact your service support representative.

14. Reposition Media (TOF) Sensor below the “rib” on the Sled Access Cover.



15. Carefully Release and Close the Top Cover of the Clamshell.

16. Readjust Media Thickness to desired value and test printer for proper operation.

Jams in Printer

If a jam occurs, STOP the printer. Some possible causes for a jam are the following:

- Damaged media, such as media that is wrinkled or dog-eared (turned down corners)
- Media that is not per printer specifications.
- Media caught under the flap of an envelope or stuck to one another.

Removing Jammed Media

If your media gets stuck inside the printer, use the following instructions to remove it:

***Caution**: When the media is stuck in the printzone, do not immediately attempt to pull media out by hand, or printer damage may result. Use the procedure in this section to clear media jams.*

1. Raise the clamshell all the way up
2. Open clamshell, clear jam.
3. Close the clamshell.
4. Lower the clamshell to its previous height.

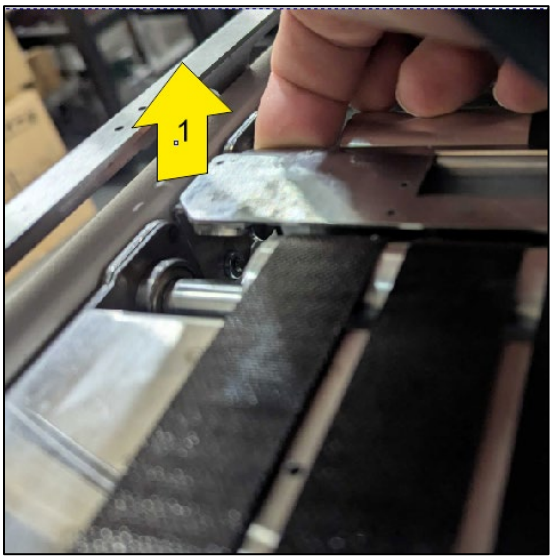
Cleaning

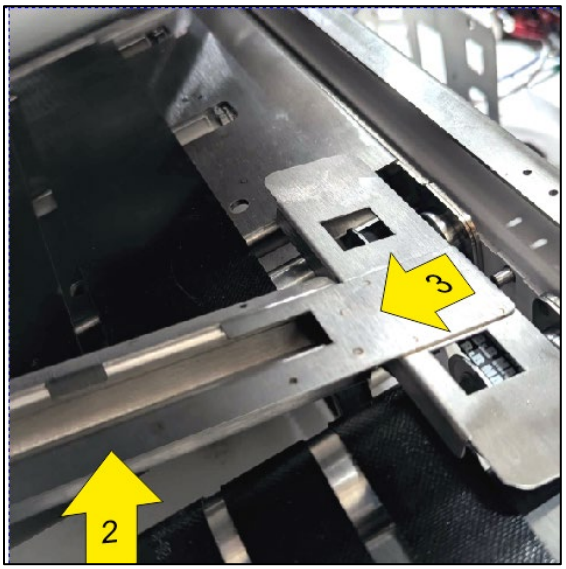
Dust and ink smudges may eventually appear on the printer exterior. Use the following instructions to clean the printer as needed.

1. Ensure that the printer is powered off. If the printer is on, press the soft-power button and then release. Wait until the soft-power LED goes OFF. Then turn off the Main Power Switch and unplug the printer.
2. Dampen a lint-free cloth with distilled water.
3. Gently clean the printer exterior with cloth.
   ***Note:** Do not use household cleaners or detergent to clean the printer exterior, or printer damage may result.*

Empty and Clean Print Platen & Drip Tray Assembly

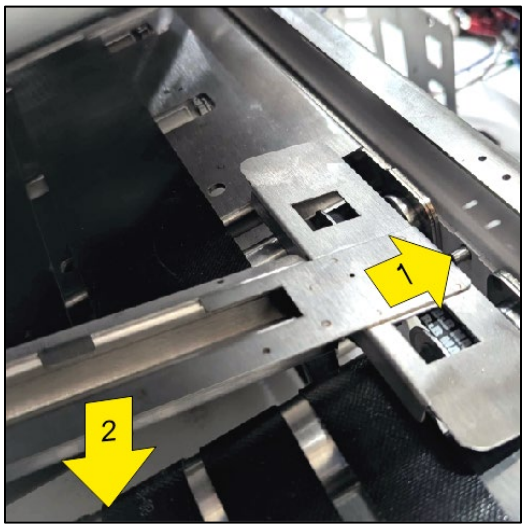
1. Ensure that the printer is powered off. If the printer is on, press the soft-power button and then release. Wait until the soft-power LED goes OFF. Then turn off the Main Power Switch and unplug the printer. Open the clamshell.
2. Remove the **Print Platen & Drip Tray Assembly**. It is held in place, at the non-operator side, by a strong magnet. It is held in place at the operator side by pins. Lift up at operator side to release, then slide assembly towards the non-operator side of printer to release it from the pins. Be careful not to tip the tray in order to avoid spillage.

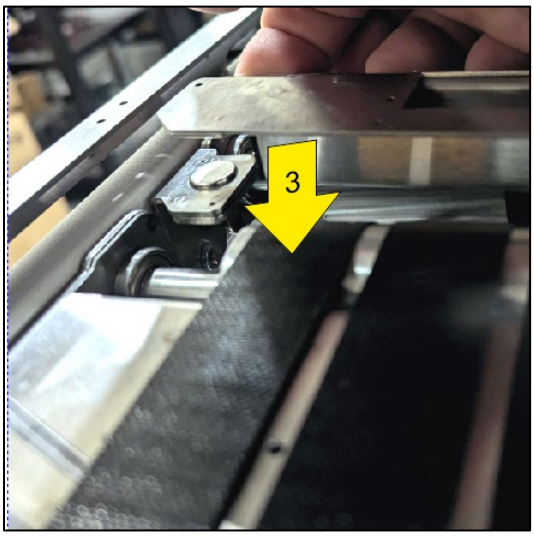


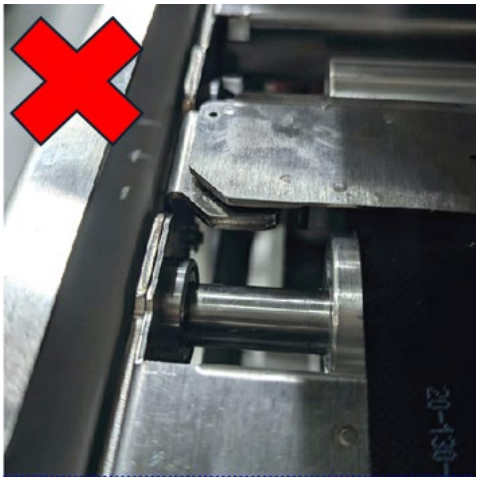


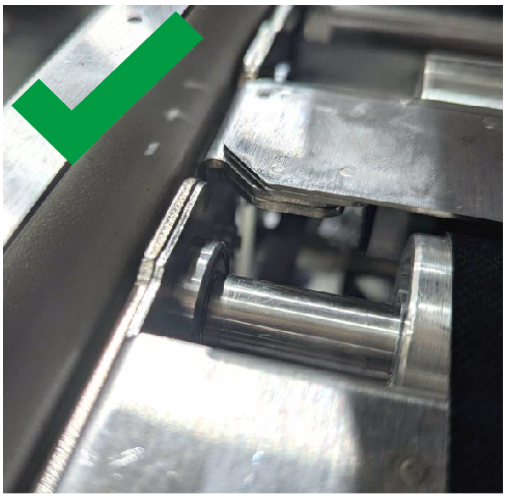
3. Empty the ink and debris from the **Print Platen & Ink Drip Tray** Assembly. Wipe ink from the platen surface. Clean using distilled water and a damp, lint-free cloth.

4. Reinstall the Print Platen & Drip Tray Assembly.









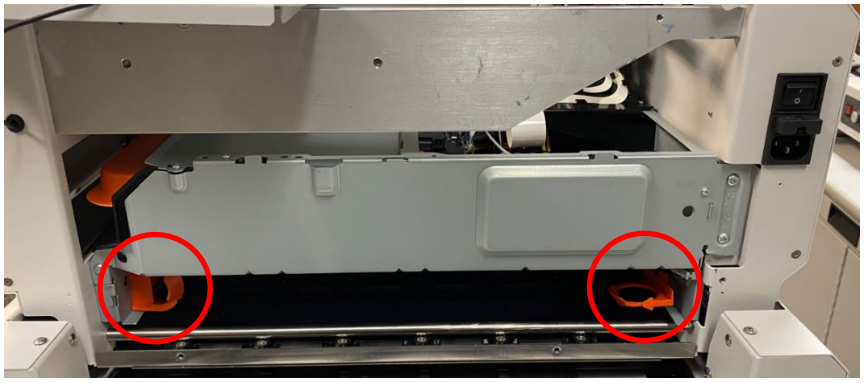
Shipping or Transporting Printer

If you must ship or transport the printer for any reason, the unit will need to be prepared. Once the printer is prepared, carefully package the printer and all of its components in the original packaging.

Tools Needed: #2 Philips Head Screwdriver

1. Raise Media Thickness to 12.5 mm. Install shipping materials (foam strips) under clamshell.
2. Lower Media Thickness to 5 mm.
3. Power-down, power-off and unplug printer.
4. Remove the Ink Tanks
5. Install the orange Transport Inserts

6. Remove the Sled Access Cover.
7. Reinstall the two orange shipping clips.



8. Reinstall the Sled Access Cover.
9. Remove, clean and reinstall the Print Platen & Drip Tray Assembly.

Section 5: Troubleshooting Guide

Printer

This section is arranged by first the condition that may occur and then by possible problems, causes, and recommended solutions.

Power Problems

Condition	Problem	Solution
Power is ON, nothing happens.	No power to printer.	Check that the power cord is plugged in. Check that the power outlet is live. Check the AC Adapter.

Communications Problems

Condition	Problem	Solution
Cannot open Toolbox	Connection problems.	Network: - Make sure that the printer has an assigned. Valid IP address. Ping the printer from your PC to ensure that the printer is accessible. - Refresh your browser (Shift+F5) USB: - Make sure that the printer driver is installed successfully. - Do not use a USB cable longer than 10 ft. - If you must use a longer USB cable, it is recommended to insert powered USB hub between the PC and the printer. Refresh your browser (Shift + F5).

Service Station Problems

Condition	Problem	Solution
Service Sled Motor Error	Service Station is skewed	Eject the service station out back and reinsert it, ensuring that it is entering the engine straight. Check the FFC Cable connecting the Sled Motor with the Control Boar. If the motor is still stalled, replace the motor.
Color Mixing	Ink migration within the printhead. Common when transporting a primed printer.	Print an alignment page to locate the channel / die affected. Print multiple pages in the affected channel to clear it out.

Feeding Problems

Condition	Problem	Solution
Failure to Feed	No power to printer.	Check that power buttons are ON (Control Panel and Main Power) and that the power cord is plugged in.
	Double-Feeding	Make sure that media is within specifications. Separator is not adjusted. Rear support is too far back.
	Motor is running, but the clutch is not engaging	Check that the feeder sensor is not covered. Check that the clutch pin is present. Check the clutch wiring
	Motor is not running	Check connections to and from Speed Control. Ensure that the Green LED is ON. Check Encoder feedback from the toolbox. Check the condition of the Encoder
	Media Path Obstruction	Clear the jam and remove the pieces remaining under the printhead.
	Media not loaded properly	Instruct the operator in the proper loading of media
	Feeder Speed is not matching printer speed	Feeder ERPI is not correct (Advanced Printer Settings

Errors and Warnings

Toolbox System Status Messages

Use the touchscreen or the Toolbox to quickly determine and locate a problem within the printer.

- The status indicator shows ERROR in a red box.
- The printer graphic icon highlights the printer and system affected.
- The system status information displays the basic problem (in red). Ink levels display the ink status.
- Control buttons (at the bottom of the screen) allow you to perform frequently used tasks without leaving the screen.

Listed below are some of the messages that may appear in System Status Messages:

System Status	Source	Solution
ERROR_PZONE_SERVO	Servo Control Loop error. No encoder pulses of error limit reached due to mechanical friction	Confirm Error using the Sensor Diagnostic Chart Check the print zone encoder wiring, extension, and connection to an APC (J10)
ERROR_FEED_TIMEOUT	Media not detected at Feeder Sensor in time. TOF Sensor detected media without feed. Exit Sensor detected media without feed/	Confirm Error using Sensor Diagnostic Chart Check if the feeder sensor has two lights on (amber and green) when not interrupted, and green only when interrupted Check the condition of the reflective tape. Clean it of paper dust. Replace the sensor if necessary.
ERROR_GAP_SERVO	Servo Control Loop error. No encoder pulses of error limit reached due to mechanical friction.	Confirm error using the Sensor Diagnostic chart. Check the Media Gap Motor and Media Gap Encoder wiring and connections (APC J38 and J34)
ERROR_GAP_SYNC	Gap could not home. Motor not turning. Clamshell not moving. GAO Sensor not detecting home position	

ERROR_FEEDER_SERVO	Servo Control Loop error. No encoder pulses of error limit reached due to mechanical friction.	Confirm error using the Sensor diagnostic chart Inspect the encoder reader wiring and connection Inspect the condition and alignment of the encoder wheel. Ensure there are no scuff marks on the wheel.
ERROR_FEED_OVERLAP	Page length mismatch at Feeder Sensor with following pages longer than the first page.	Ensure that all media you load is the same size for each job. Ensure that the separator is adjusted properly Ensure that the feeder sensor is functional Ensure that the clutch is functional
ERROR_FEED_TOF	Excessive TOF detected, indicates pages not being printed. GPIO signaling may have failed on the print engine.	Ensure that the separator is adjusted properly Ensure that the feeder sensor is functional Ensure that the clutch is functional
ERROR_FEED_TABLE	Media error between TOF and feeder indicating that media has stalled on the feeder table	Confirm error using the sensor diagnostic chart or UI Ensure media is interrupting the sensor as it exits the printer. Clear the face of the sensor of all paper dust, if necessary. Ensure there is no directional light source placed above the sensor.
ERROR_PRINTZONE	Media error between TOF and Exit Sensor indicating that media has stalled within the print engine/	Confirm the error using the sensor diagnostic chat or UI Ensure that the media is interrupting the sensor as it exits the printer. Clear the face of the sensor of paper dust, if necessary. Ensure there is no directional light source placed above the sensor.

Appendices

Appendix A: Printer Specifications

The technical specifications for the ColorMax9 operation, supplies, media, and environment are shown in the following tables.

Operation Specs

Operation	
Print Technology	Thermal Inkjet
Ink Type	Pigment-based ink, 4 individual CMYK cartridges. HP TIJ 4.0 Technology.
Print Resolution	1200 dpi x 1200 dpi @ 9 ips (13.5 m/min) 600 dpi x 1200 dpi @ 18 ips (27 m/min)
Print Speed	Up to 6,500 Letter/8.5x11 pages per hour Normal Quality: (1200 x 600 dpi) Up to 10,000 #10 envelopes/hour Up to 5,000 Letter pages/hour Best Quality: (1200 x 1200 dpi) Up to 5,000 #10 envelopes/hour Up to 2,500 Letter pages/hour
Duty Cycle	500,000 Letter/8.5x11 sheets per month
Feeder Capacity	16.0” (406 mm) Feed Hopper
Print Area	Up t 11.7 W x 30” L with full bleed capacity for media under 11.5”
Connectivity	USB 2.0; 802.3 LAN (10/100/100) Ethernet Port
Software	Microsoft Windows® 11, 10, 64/32-bit Driver, with built-in color profiles Digital firmware updates via PC Electronic thickness control via printer touchscreen TrueType or PostScript system fonts RIP Software Available (optional)
Color Matching	ICC Color Profile support for qualified media. Color management: Windows Driver with Color Controls

Supplies Specs

Supplies	
Ink Cartridges	CMYK Aqueous Pigment Inks: C: 238ml M: 233ml Y: 233ml K: 498ml ISO Pages: K: 20,000 pages CMY: 16,000 pages
Maintenance	Replaceable Wiper Service Tray

Media Specs

Media	
Width	3.0” (76 mm) – 14” (355 mm)
Length	3.75 (95 mm) – 15.0” (380 mm)
Thickness	0.004” (0.1 mm) – 0.500” (12.0 mm)

Environmental & Physical Requirements

Environmental & Physical Requirements	
Printer Operating	15º C to 30º C (59º F to 86º F) 30% to 80% Relative Humidity (non-condensing)
Printer Storage	-40º C to 60º C (-40º F to 140º F)
Ink	-40º F to 140º F (-40º C to 60º C), 30% to 80% Relative Humidity (non-condensing)
Power Requirements	Input: 115-240 VAC 50/60Hz
Duty Cycle	500,000 per month
Dimensions	Printer Only" 23" W x 38" L x 22" H With Feeder: 24" W 55" L x 26" H
Weight	Printer Only: 145 lbs. With Feeder: 195 lbs. 110 lbs. (50 kg) 145 lbs. printer only 20 lbs. (9.1 Kg) shipping
What's Included in the Boxes	Larger Box: ColorMax9 printer and registration table, AC Power Cord, USB Cable, Installation Guide. Smaller Box: Media Feeder with Media Guides and media holder, table for media feeder, AC Power Cord.

Appendix B – Supplies

Ink Cartridges (CMYK) & Service Tray

The Service Tray is used to clean the printhead surface and cap the printhead when it is not in use. The service tray must be replaced when the wiper web has been depleted (0%).

NOTE: The Service Tray comes preinstalled in the printer.

The Ink Cartridges (CMYK) are packed in the accessories box that was included with the printer.

NOTICE: If your printer came pre-primed with ink, the ink cartridges included with the printer were used to prime the system. In this case the Cyan, Magenta and Yellow ink cartridges will commonly display an ink level of 50 to 60%. The Black (K) ink cartridge will commonly show an ink level of 70 to 80%.

NOTICE: An HP ink safety feature will make the ink cartridge unusable if it is installed more than three different printers.

WARNING: For safety, keep ink cartridges out of the reach of children. If ink is accidentally ingested, contact a physician immediately.

The following supplies are available from your Dealer. Please use the following information when ordering supplies (consumables)

Item Description	Part Number
ColorMax9 Replacement Print Engine	CK-26
Cyan Ink Cartridge	CKC-21
Yellow Ink Cartridge	CKY-22
Magenta Ink Cartridge	CMK-23
Black Ink Cartridge	CMB24
Print Head Maintenance Cartridge	CK-25

***Caution**: Ink Cartridges are not refillable. Service Tray wiper cloth is not refillable. Do not attempt to modify or refill supplies or printer damage may result. Printer damage caused by modified or refilled supplies is excluded from printer warranty.*

Handling Ink Cartridges

Use the following precautions when handling Ink Cartridges:

- Keep Ink Cartridges out of reach of children. If ink is accidentally ingested, contact a physician immediately.
- Keep ink cartridges in their sealed packages until they are needed. Ink cartridges should be stored at room temperature.
- Do not leave an ink cartridge outside of the printer for over 30 minutes.
- Do not touch the ink cartridge nozzles or copper contacts. Touching these parts can result in clogs, ink failure, and bad electrical connections. Do not remove the copper strips as they are required electrical contacts.

Appendix C – Printer Maintenance Schedule

NOTICE: Power-down, power-off and unplug the printer and feeder before cleaning components.

Part	Action
DAILY MAINTENANCE	
Check Ink Levels	Make sure that you have enough ink for the day of printing.
Print Platen w/ Spittoon	Wipe ink residue from the platen surface.
Media Sensors	Make sure that sensor reflective tape is clean.
BI-WEEKLY	
Print Platen w/ Spittoon	Check waste ink level. If needed, carefully remove, flush, dry and carefully reinstall the ink spittoon.
Print Zone	Clean by removing media fibers and ink residue.
Service Sled	Check the remaining Service Sled Life (Wiper Life).
Sensors	Check the Exit Sensor. Remove debris. Clean with damp Q-tip if needed.
MONTHLY	
Transport	Clean the transport and feeder belts using a cloth lighlty dampened with soap and water.
EVERY SIX MONTHS	
Check Firmware version	Verify that you are using the latest version and update if needed.
Transport	Verify smooth operation. Listen to noise indicating damage or wear.

Please contact your service support representative if you require maintenance beyond what is described above.