



Xerox 8142/8160

Wide Format Color Solution

Printer Reference Guide

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Revision History

Rev. A June 2004

Rev. B May 2005



FCC Statement (U.S.A.)

The United States Federal Communications Commission has specified that the following notice be brought to the attention of users of Xerox printers.

FEDERAL COMMUNICATIONS COMMISSION RADIO AND TELEVISION INTERFERENCE FOR CLASS A DEVICE

Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

User Instructions:

If the equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment on and off, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by Xerox could void the user's authority to operate the equipment.

Note: This product was FCC certified under test conditions that included the use of shielded I/O cables and connectors between system components. To be in compliance with FCC regulations, the user must use shielded cables and connectors and install them properly.



VDE statement

Hiermit wird bescheinigt, daß der Drucker in Übereinstimmung mit den Bestimmungen der BMPT-AmstbIVfg 234/1991 funkentstört ist. Der vorschriftsmäßige Betrieb mancher Geräte (z.B. Meßsender) kann allerdings gewissen Einschränkungen unterliegen. Beachten Sie deshalb die Hinweise in der Bedienungsanleitung.

Dem Zentralamt für Zulassungen im Fernmeldewesen würde den Inverkehrbringen dieses Gerätes angezeigt und die Berechtigung zur Überprüfung der Serie auf die Einhaltung der Bestimmungen eingeräumt.

Die arbeitsplatzbezogene Geräuschemission des Gerätes beträgt 70 dB(A).

Industry Canada

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Material safety data sheet

To obtain information on the proper use, handling, and disposal of any Xerox ink, consult the material safety data sheet included in the ink kit or obtain a copy from Xerox at:

Xerox Corporation

Stamford, CT

International users should contact their local dealer or distributors.

General operating safety



The use of a <HAR> cord set (rated 10A, 250VAC) with the proper plug configuration for the country where the device will be used, is required for continued safety compliance.

Ein harmonisiertes (<HAR>) Netzkabel (min. 10A, 250V~) mit dem vorgeschriebenen Netzstecker für das entsprechende Land in dem das Gerät installiert wird, ist unbedingt notwendig für die elektrische Sicherheit.

El uso de cable poder <marcado HAR> (capacidad de 10A, 250V~), con el enchufe apropiado para el país donde se use el producto, es requerido para acatamiento de seguridad eléctrica.

L'emploi d' un cordon surmoulé <HAR> (estimé 10A, 250V CA) avec la configuration de la fiche convenable pour le pays où l' appareil sera utilisé, est exigé pour la conformité à la sécurité continuée.

For your safety

Always unplug the printer before servicing it.

Manual conventions

- ▶ Indicates a procedure for you to follow in order to perform a specific function.
Read the accompanying explanatory text before following the step-by-step procedure.
- ! Indicates a warning. Ignoring the warning can damage the printer or result in an unsatisfactorily printed image.

Other reference materials

In addition to this guide, the following additional documentation is included with your printer:

Quick Start Guide - Tells you how to attach the printer stand, load media, install cartridges, and connect the printer to your computer.

CD-ROM - contains the following:

Documents

- Quick Reference Guide
- Reference Manual
- Maintenance Guide

Applications

- Xerox 8142/8160 Software Suite
- EFPU
- Windows 98/NT/2000/ME/XP Drivers
- ICC color profiles

Sample Files

This Reference Guide describes the Xerox 8142/8160 Wide Format Color Solution printer and its menu functions. In this chapter you will find an overview of the printer and steps for calibrating the printer after it is installed. Refer to the Quick Start Guide for setup instructions and the Maintenance Guide for maintenance information.

The printer is a wide-format color inkjet printer that gives you professional-quality output on a wide variety of media using either dye or pigment-based Xerox inks. Designed specifically for the needs of graphics professionals who need high productivity, this printer offers six print heads, improved drying technology, and automated ink line fill and cartridge cleaning for "clean hands" operation. The printer is network-ready so that it can be shared by an entire office. Job tracking and cost accounting software provide instantaneous statistics for billing, media and ink status, and project management.



Printing

The printer accepts raster-oriented data in the format of HP RTL. In this mode, printing begins immediately after the first complete line of HP RTL data is received.

There are many Raster Image Processors (RIPs) which convert Postscript or CGM to HP RTL. When choosing a RIP or a file format converter for output to the printer, make sure it has the features you need. (Contact your Xerox distributor or dealer for an up-to-date listing.) If your applications do not support HP RTL, there are several software utilities available to convert various raster file formats (TIFF, GIF, BMP, etc.) into HP RTL.

Obtaining quality results

You have probably seen a demonstration of your printer's capabilities or sample output. If so, you are aware of the superb color graphics which can be obtained. Note, however, that to obtain high-quality results, you must consider several factors. Follow the simple guidelines in the sections that follow to obtain excellent results.

Use the right inks and media

Your printer features six thermal ink cartridges with 640 jets each. Reservoirs hold up to 700 ml of ink. You can print with six colors of ink (CMYK, M_L and C_L) which create a combination of color gamut and smooth tonal gradations for your most challenging applications. Note: in the calibration patterns, the M_L and C_L cartridges are referred to as M1 and C1.

Ink sets for the 8142/8160 include dye and pigment offerings. Xerox ink sets offer optimized, matched and quality ink solutions. Every ink formula is scientifically designed to obtain the best performance possible in the printer for which it is created. Extensive testing under a variety of extreme environmental and production conditions ensures the ink performs consistently.

When Xerox inks are used with Xerox Wide Format Inkjet Media, you receive industry-leading performance guarantees that ensure customer satisfaction.



Caring for your ink and cartridges

- Handle cartridges only on the plastic areas. Touching the copper electrical interconnect or the inkjets can damage the cartridge.
 - Use only dye or pigment ink intended for this printer. Do not mix inks.
 - Do not shake ink refill containers.
 - Store ink and cartridges in the same environment as the printer whenever possible.
 - If you remove a cartridge from the printer, do not leave it exposed to the air for an extended period because the jets may clog. Replace the original tape on the jet plate. Place the cartridge in a cartridge garage or sealed plastic bag and store it in a closed area at room temperature. Keep it out of direct sunlight.
 - Open new cartridges only when you are ready to install them.
 - Use only Xerox-brand ink refills and cartridges.
 - When you receive a "Low Ink" warning, there is approximately 15-20 minutes of printing time remaining before the intermediate reservoir runs out of ink.
- Note:** When an ink bottle is removed, you have 30 seconds to put in another bottle before the printer senses the bottle's absence and places the printer in Pause mode.



Choose the right media



This printer is designed to print on a wide variety of media including photo gloss, backlit film, matte, self-adhesive vinyl, canvas, banner tyvek, and more. Refer to the list of compatible media included with your printer.

Caring for your media

Store media in its original packaging in a cool, dry area until you are ready to use it. The environment should be stable; i.e., no extremes of heat and cold, and non-condensing humidity. If conditions are outside the operating ranges recommended for the printer, allow the media to acclimate in the operating environment for at least 48 hours before using it.

If you remove a roll of media from the printer, be sure to store it in a manner which keeps it clean and dust-free. Ideally, you should return it to its original packaging for storage.

Print on the correct side! Roll media is wound with the printable side out.

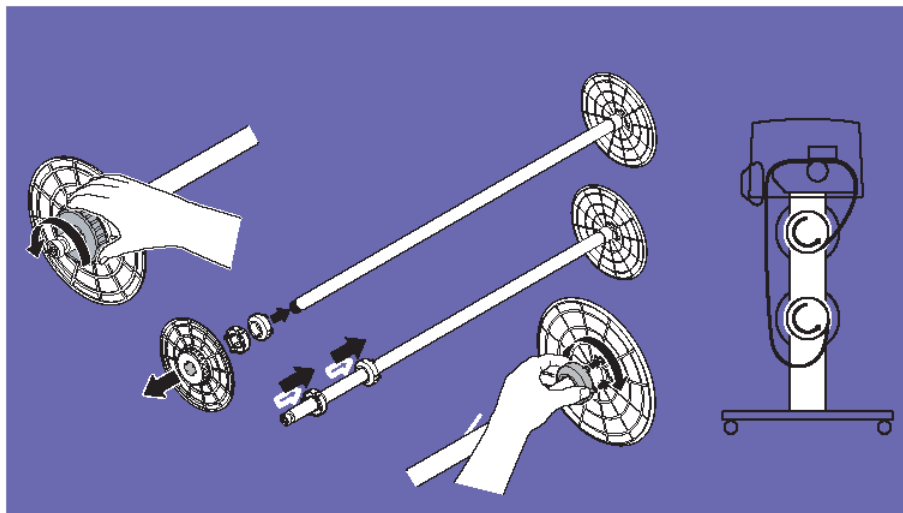
Handle with care! Handle your media carefully to avoid creases, scrapes, and tears. Avoid crushing or damaging roll media edges.

Caution! Some medias use an adhesive to adhere the end of the media to the core. This adhesive can transfer onto rollers in the media feed path. A buildup of this adhesive can cause banding and other imperfections in your printed output. To avoid this, it is recommended that you always cut the media before the end of the roll.



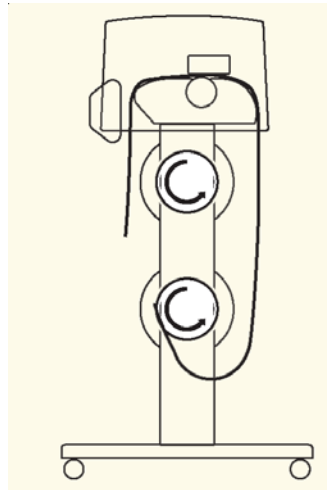
Loading media

The procedure for loading media is shown in the Quick Reference Guide. If you are using paper rolls with a core diameter of 3", it will be necessary to install a core adapter on the roller before installing the roll of media as shown below. Be sure to orient the media as shown below.



Using the second feed roll

The takeup roll can also be used as a feed roll. If you use the takeup roll as a feed roll, you cannot use the takeup system. If you want to use the takeup roll as a feed roll, set the printer to ROLL2 by pressing **Setup Menu/Paper Options Menu/Supply Type/Roll2**.



Loading Roll Media Using Roll2

Caution: When using the ROLL2 option, the media may have a tendency to curl inward under the bottom roller. This could block the media sensor and prevent the feed roller from feeding media. Make sure you keep the media turned outward, away from the media sensor.

Using the takeup roll

The takeup roll allows unattended printing by automatically winding printed media onto a core. In this mode, the automatic cutter is disabled. When using this option, be sure that the media sensor on the printer's right leg is not blocked.

Depending on the ambient humidity, temperature, and amount of ink coverage, you may want to turn on the heater and/or set a dry time as described in Chapter 2.

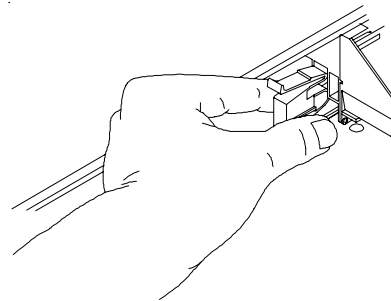
Replacing the cutter

A cutter located in the ink cartridge carriage cuts roll media. The printer is shipped with the cutter installed. Use the following procedure to replace the cutter, when necessary.

- ! **Be careful when handling the cutter to avoid injury.**
- ! **Cutting media with a worn cutter can cause the media to jam and create a ragged cut line. Replace the cutter to avoid this condition. Do not cut media on the printer with an external knife, as you could seriously damage the platen and void the warranty.**

▶ To install the cutter

- 1 Press **Utility Menu/Access Cartridge** to move the carriage out from the service station.
- 2 The cutter fits into the left side of the carriage. To remove a used cutter, push the cutter lever down and pull it out. Install the new cutter by pushing it into the slot until it clicks into place.



- 3 Press **Utility Menu/Access Cartridge** to move the carriage back into the service station. This ensures that the cutter blade is in the home position.

Choose the correct printing mode

By choosing from a variety of color, quality, and resolution modes, you can make choices between drawing quality, colors, and speed. When printing images with large areas of color, always choose one of the enhanced printing modes (High Speed, Productivity, Fine, Enhanced, or Ultrafine).

Use the right software

The quality of the software driver or the RIP can be very important, especially when printing continuous tone images. Error diffusion or stochastic screening algorithms can yield photo-like images, even when these images are scaled to full size. Software without advanced imaging features may produce images which are grainy when enlarged.

Daily operation

Task	Description
Daily operation	<p>Print the prime pattern. If it doesn't look good, run the Clean function (Utility Menu/Prime Menu/Clean). Repeat the prime. Manually bypass any clogged jets.</p> <p>Run a color test. (Service Menu/Diagnostics Menu/Color Test Menu.)</p> <p>Check colors. If colors are fine, start printing.</p> <p>If there is a problem with the colors, run a color test. Verify that the bands print a solid pattern.</p> <p>If there are gaps in the lines, there may be clogged jets. Manually bypass any clogged jets.</p>
Changing Paper Rolls	Run the paper calibration. (Utility Menu/Calibration Menu/Paper Calib Menu/Line Length Test.)
Changing Cartridges	<p>Run the color test and a prime test pattern.</p> <p>Run the color deadband compensation test (Utility Menu/Calibration Menu/Color Db Menu).</p> <p>Run the vertical and horizontal calibrations. (Utility Menu/Calibration Menu/Color Calibration Menu).</p>
Periodic Cleaning	<p>Clean the service station every 25 plot hours.</p> <p>Clean the encoder strip every 20 plot hours.</p> <p>Clean the platen, shaft, and flex driver cables every 75 plot hours.</p> <p>Refer to the Service Guide for instructions.</p>

Procedures for all the tests and calibrations are in the following sections.

Basic and Microbanding Calibration Procedures

Before you start

The calibration procedures in this document are useful for 8142/8160 printers with firmware level 1.5.0 and later. Confirm that you have at least that firmware level before you begin.

Checking firmware level

- 1 At the Control Panel select **Utility/Service Menu/About**.
- 2 Check for version 1.5.0 of the firmware (first line in display).
- 3 If the firmware version is:
 - at least version 1.5.0 – proceed with calibration.
 - prior to version 1.5.0 – update the firmware in the printer before you using these procedures.

Calibration Flowcharts

- *For general calibration* – use flowchart in Figure 1.
- *After removing/installing a print cartridge* – use flowchart in Figure 2.

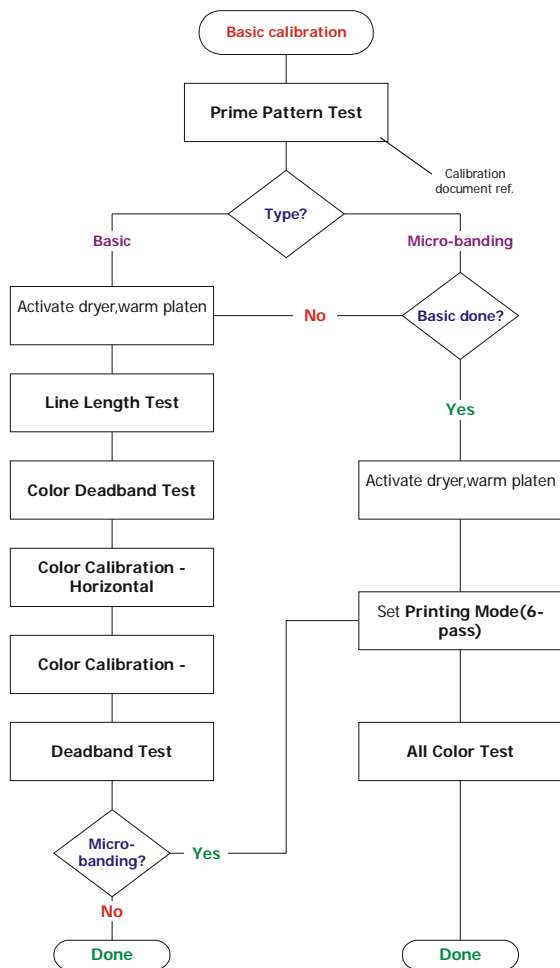


Figure 1. General Calibration Procedure

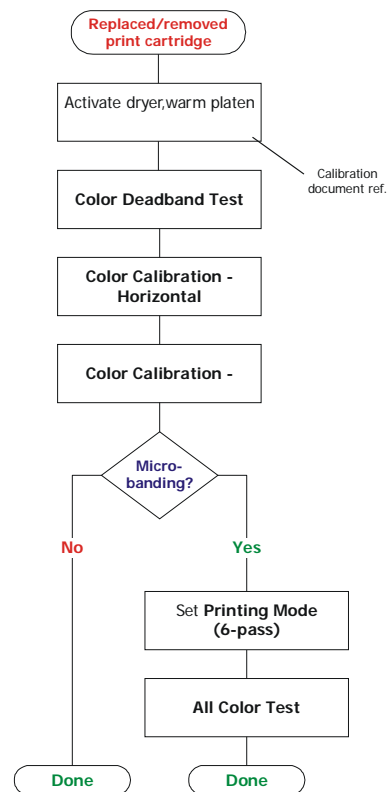


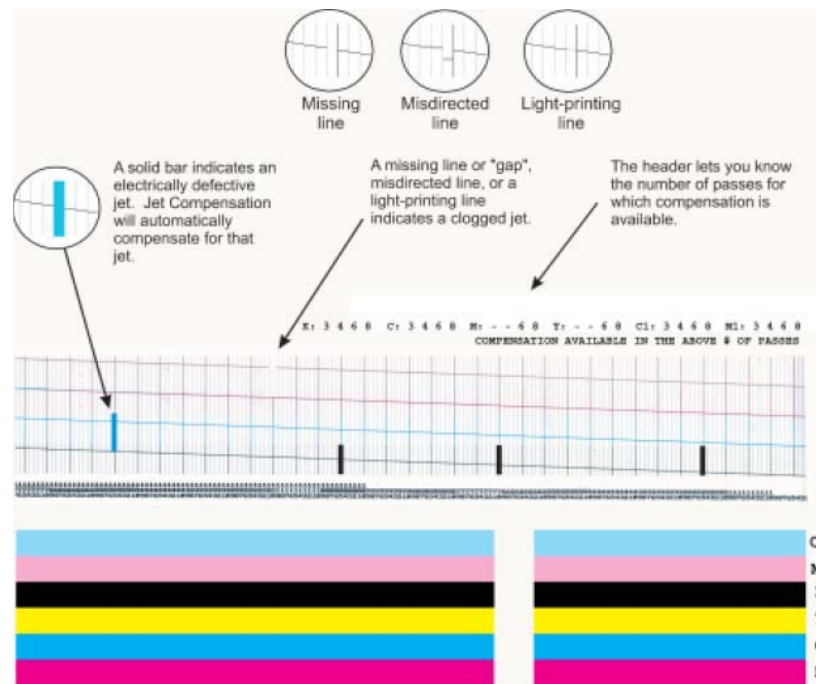
Figure 2. Calibration After Removing/Installing a Cartridge

Prime Pattern

Run the **Prime Pattern** to determine if the cartridges are properly primed and all jets are firing. You must do this before running basic and micro-banding calibration procedures.

Printing the Prime Pattern

- 1 With media loaded, at the Control Panel press: **Utility Menu/Prime Menu/Prime All**.
- 2 A test pattern prints. The prime pattern consists of bands of color for each cartridge and a sloping line. Each jet is represented by a short horizontal line. Together these short horizontal lines form a “stair step” pattern. Electrically defective jets appear as solid bars. Electrically defective jets can be compensated in certain modes. The print modes for which compensation is available are shown clearly above the prime pattern.
- 3 If there are any missing or misdirected jets go to **Utility Menu/Prime Menu/Clean**, and choose the color with clogged or missing jets (**K, C, M, Y, Cl, Cm**) and press **OK** to clean. Press **Utility Menu/Prime Menu/Prime Single** to confirm cleaning for missing or misdirected jets on individual cartridges.



Clearing clogged jets

Clogged jets can not be automatically detected and therefore you must manually clear them. Only clear them after you have tried to clean them using the procedures on the previous page.

- 1 Press **Utility Menu/Calibration Menu/Open Jet Menu/Edit List Menu** and press the **Edit List** button that designates the color of the cartridge of interest.
- 2 To compensate for a specific jet, press **Next / Prev** until the number of the jet is displayed. Then press the **Jet** button to toggle the jet's status **On** or **Off**.
- 3 Press **OK** to accept the settings.
- 4 To check jet status press **Utility Menu/Calibration Menu/Open Jet Menu/Print Jet List**. The jet status list will print, showing jet compensation list by number for each cartridge.

Basic calibration

Preparations

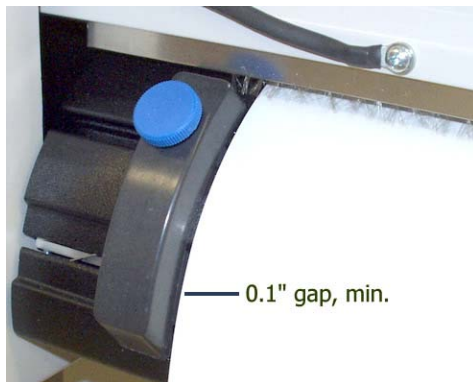
To prepare for basic calibration you must activate the dryer system. This allows the platen to expand to reach normal operating temperature.

Note

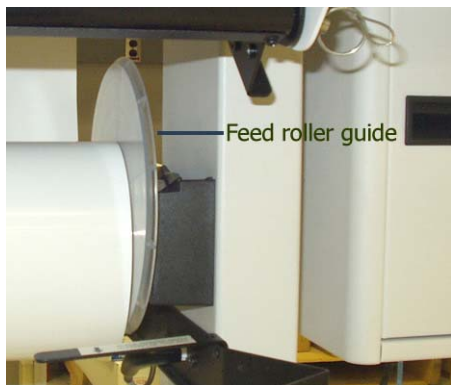
If the platen were allowed to remain cool for the procedure, the measurements and adjustments would be inaccurate once the platen expanded during normal operation.

Wait at least 5 minutes after completing steps 1 and 2 below before proceeding with the **Line Length Test** in the next section.

1. Set dryer to **4** (Low Heat, Fans). At the control panel select **Setup Menu/Dryer Menu/Dryer Setting**. Select **Next** or **Prev** to a setting of 4 and press **OK**.
2. Activate the dryer. At control panel select **Utility Menu/Service Menu/Diagnostics Menu/Accessory Menu/Dryer Status**. You will notice T1 and T2 (temperature sensors) will begin to slowly climb to a target value of 40°C (104°F).
3. Ensure that both rear paper guides are not touching media edges – 2.5 mm (0.1") offset, minimum, on both sides. This is very important as media drag may occur at either the left or right sides causing left or right side micro-banding. Also ensure that the media is not rubbing or 'climbing' over guides at any time during printing.



Media guide – 0.1" gap, min.



Feed roller guide

4. Straighten the media – after loading media in the normal routine – by holding the feed roller guide (round plastic guide) at right side with one hand and then simultaneously pressing the **Feed Media/Forward** button on the Control Panel. Drive the media forward until it pulls against the media roll. Do not allow guide to rotate, resistance is the key to pulling the media straight. Loud noise and vibration will occur – this is normal, but do not allow the roll to walk out of cradle. Again, verify that the rear media guides are not touching the media edges.

Line Length Test

The Line Length Calibration sets the printer paper speed to print accurate length lines.

1. At the Control Panel, select **Utility Menu/Calibration Menu/Paper Calib Menu/Line Length Menu/Line Length Test**. The printer prints a 33 inch line.
2. Using a draftsman's ruler, measure the precise distance between the "Ts" and write that value (e.g., 33.02 inches) down – you will need it below.
3. Choose which is more important:
 - *minimizing micro-banding* (for most graphic images this is probably the best choice!) - **go to step 3a**.
 - or
 - *line length accuracy* - **go to step 3b**.
- a. At the Control Panel select **Utility Menu/Calibration Menu/Paper Calib Menu/Line Length Menu/Img Qual Value** and enter the measured Line Length value from step 1.
- b. At the Control Panel select **Utility Menu/Calibration Menu/Paper Calib Menu/Line Length Menu/Line Length Value** and enter the measured Line Length value from step 1.
4. You will be prompted to **Select User (1-8)/Save User**. This will now be the default value for this type of Media in the User that you have selected.

Color Deadband Test

Color Deadband compensation provides a method for adjusting dot placement. In bidirectional printing mode, the velocity of the carriage causes dots to miss the target area on the media. This test provides a way to check and adjust for best printing results.

Note

To correctly see the yellow color on the test pattern it is necessary to use a blue light source.

1. At the Control Panel, select **Utility Menu/Calibration Menu/Color Db Menu/Color Db Test**. A test pattern prints.
2. Use an eye loupe and choose the best group of vertically aligned bars in the test pattern for each color. Record the number for each and enter the value(s) if required by pressing the color and updating the number. This value should be between 9 and 11.
3. Proceed to the **Color Calibration - Horizontal** test in the next section

Note

Always perform a Color Deadband Test whenever a print cartridge has been removed and then reinserted.

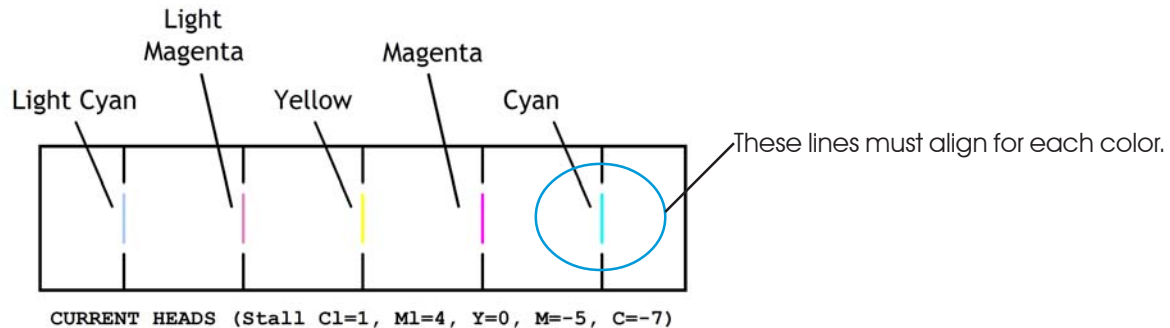
Color Calibration – Horizontal

Horizontal color calibration aligns the jets in the cartridges horizontally to line up to the black cartridge and to each other. This test provides a way to check and adjust for best printing results.

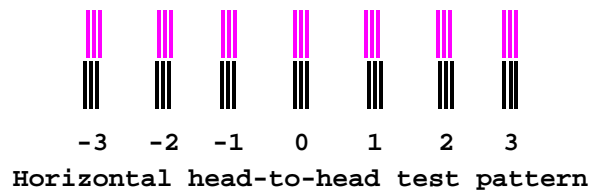
- 1 At the Control Panel, select **Utility Menu/Calibration Menu/Color Calib Menu/Horiz Calib Test**. A test pattern prints.

Note: To correctly see the yellow color on the test pattern it is necessary to use a blue light source.

- 2 Examine the registration target in the **Current Heads** test pattern (see below). If the vertical lines for each color align horizontally with the black lines (in registration), your calibration is correct. If not, go to the next step to make additional adjustments.



- 3 Use an eye loupe and choose the best group of aligned bars for each set of colors in the horizontal head-to-head test pattern (see below).



- 4 Record the number for each and enter the value(s) if required by pressing the color and updating the number.

Note: Perform the Color Calibration Horizontal test whenever a print cartridge has been removed and then reinserted.

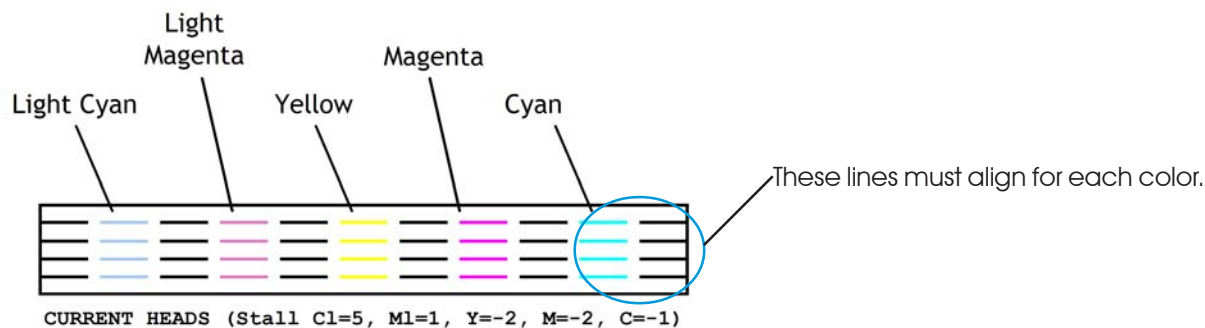
Color Calibration – Vertical

Vertical color calibration aligns the jets of the cartridges vertically to line up to the black cartridge and to each other. The test provides a way to check and adjust for best printing results.

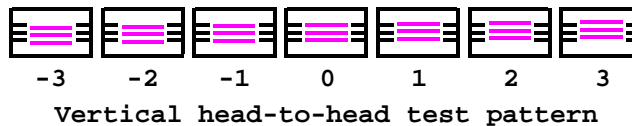
- 1 At the Control Panel, select **Utility Menu/Calibration Menu/Color Calib Menu/Vert Calib Test**. A test pattern prints.

Note: To correctly see the yellow color on the test pattern it is necessary to use a blue light source.

- 2 Examine the registration target in the **Current Heads** test pattern. If the horizontal lines for each color align vertically with the black lines (in registration), your calibration is correct. If not, go to the next step to make additional adjustments.



- 3 Use an eye loupe and choose the best group of aligned bars for each set of colors in the vertical head-to-head test pattern.
- 4 Record the number for each and enter the value(s) if required by pressing the color and updating the number.



Note: Perform the Color Calibration Vertical test whenever a print cartridge has been removed and then reinserted.

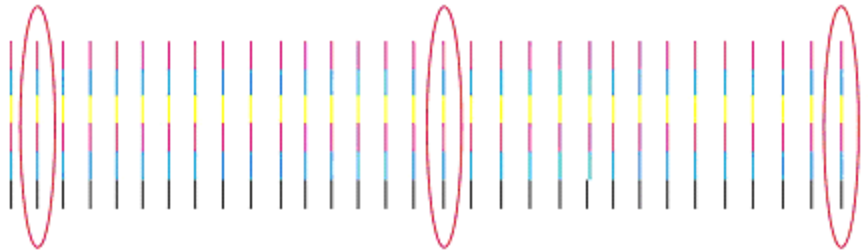
Deadband Test

The Deadband Test is important when using bidirectional printing. It looks for horizontal shifts of one color, not vertical shifts within a color to verify that alignment for bidirectional printing is performing properly both electrically and mechanically.

Run the **Deadband Test** to verify that the printer calibrations (electrical and mechanical alignment) are correct.

- 1 At the Control Panel select **Utility Menu/Service Menu/Calibration Menu/Deadband Test**. A test pattern prints.
- 2 Use an eye loupe and examine the test pattern – all 6 colors should line up across the entire print.

Note: Verify alignment at 3 primary points: vertically at the right side (observe next to last line), left side (next to last line), and center area of the printed pattern. It is best to perform this final test on the widest media possible. Do **NOT** be too critical of the “Deadband Test” results. The lines should be fairly straight, but they will almost never be perfectly straight. If there is a large difference then go back to the “Color Deadband” and the horizontal alignment tests and check the settings.



This is the last step of basic calibration. If you still see horizontal micro-banding then perform the **Micro-banding Calibration** procedure in the next section to further minimize micro-banding.

Micro-banding calibration

Preparations

These are the same preparations as for basic calibration: load media, activate dryer, warm up platen. If the dryer is in idle mode, reset the dryer temp by choosing an alternative dryer option, setting, then going back and choosing correct option.

Setting Print Mode

The number of print passes must be set to 6-pass to check for micro-banding.

- 1 At the Control Panel, press **Setup Menu/Print Mode Menu/Print Passes**, toggle **Next/Prev** to **6** and press **OK**.

All Color Test

- 1 Press **Utility Menu/Service Menu/Diagnostics Menu/Color Test Menu/All Color Test**. A color bar will print for each cartridge.
- 2 Analyze the calibration test target print (especially the *cyan* sector) for media overfeed or underfeed.
 - To change the *Paper Calibration Value*: **Utility Menu/Calib Menu/Paper Calib Menu/Feed Adjust Menu**.

If **overfeed** is observed as in example A below (white lines/gaps occurring), then **decrease** the **Paper Calibration Value** (see procedure above) by one or two digits (e.g., from 4806 to 4804) and re-test. Only change this value by one or two units at a time!

Note: Every time the *Paper Calibration Value* is changed you will prompted to **Save User**.

- If **underfeed** is observed as in example B below (dark lines/overlap occurring), then **increase** the **Paper Calibration Value** (see procedure in sidebar at left) by one or two digits (e.g., from 4806 to 4808) and re-test. Only change this value by one or two units at a time!



Example A – “Overfeed”



Example B – “Underfeed”

Note: When re-testing – choose the color showing the most micro-banding (e.g., the cyan sector) and *test and adjust this color only* by choosing **Stall Select**.

To do this - press **Utility Menu/Service Menu/Diagnostics Menu/Color Test Menu/Stall Select**. Select the stall (e.g., K, C, M, Y, C1, M1), then press **Utility Menu/Service Menu/ Diagnostics Menu/Color Test Menu/Color Test Print** – just that color will print.

- Tip:** Please note that you can adjust the *Paper Calibration Value* while printing. This allows you to fine tune “on-the-fly” to compensate for micro-banding.
- 3 Continue to adjust and print until micro-banding is gone. Then re-run the **All Color Test** to verify all colors are free of micro-banding.
 - If only one color now shows micro-banding check **Vertical Calibration**
 - If banding can not be corrected and shows during normal printing, replace the cartridge.

Cartridge recognition

The printer is designed to use only cartridges specific to your printer model. To eliminate potential damage to the printer, a Cartridge Recognition feature checks to ensure that the proper cartridges are installed, and that they are installed correctly. Cartridge recognition is performed when a print request is received (i.e., image data, prime, etc.).

In addition to cartridge recognition, the printer automatically performs tests on the cartridges and uses the information to improve image quality, monitor cartridge life, and update the user with system status. Some tests are performed between prints and require no user input, while others require user input.

Cartridge-related error messages are listed in Appendix B. Cartridge-related troubleshooting is covered in Appendix C.

To clear a cartridge-related error, press **Utility Menu/Access Cartridge** to move the carriage to the position which allows replacement of the ink cartridges. Check to make sure you have the correct cartridges installed in each position, that they contain the same type of ink and that all cartridges are installed properly. Install new cartridges if necessary.



To clear cartridge recognition error

- 1 Press **Utility Menu/Access Cartridge** to move the carriage to the position which allows replacement of the ink cartridges.
- 2 Verify that six valid cartridges are installed. Replace any invalid cartridges.
- 3 Press **Exit**. If the problem has been corrected, the printer will proceed with the print request. If the problem has not been corrected, the printer will beep.

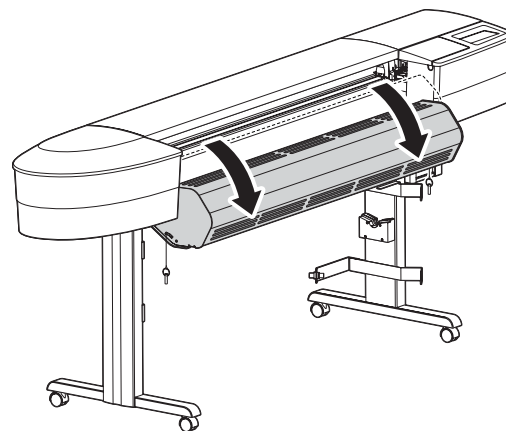
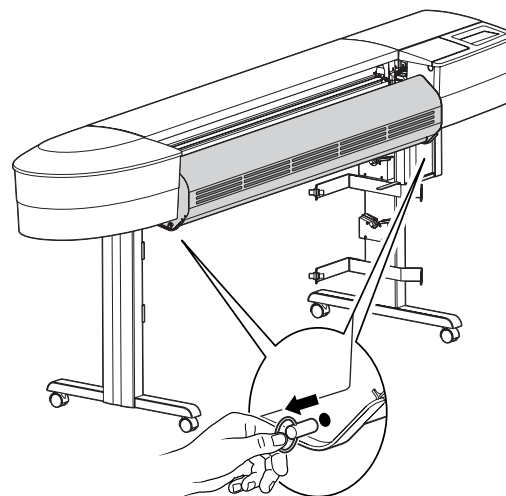
Lowering the air plenum

Sometimes during printing or servicing, you may want to lower the air plenum.



To lower the air plenum

- 1 Pull out the retaining pin on the lower left and right sides.
- 2 Gently lower the air plenum.



You can define printer options through your application software or by choosing settings from the printer's control panel. The following printer options are described in this chapter:

- Feed Media Options
- Print Mode Options
- User Setup Options
- Paper Options
- Changing Ink Types
- Network Options

Choosing feed media options

Feed media options let you:

- advance the media
- display, enter and reset media counter values
- determine the printer action when the end of media is reached.

Feed media

Feed media options let you move the media forward or backward.



To feed media

- 1 Press **Feed Media/Forward (or Backward)**.

Media feeds in the selected direction while the button is pressed.

Media counter

The Media Counter function gives you a means of **estimating** the amount of media left on a roll. When a new roll of media, or a used roll where the remaining length is known, is installed on the printer, you can enter the length of the roll into the printer's front panel display. As images are printed, this amount is decremented. You can view the estimated amount of media remaining on the printer's front panel display. When you are ready to remove the roll, you can display and print the estimated amount of media remaining on the roll. When you reload this media, you can enter this figure on the printer's front panel display.

The media counter can be reset to 0 to avoid confusion if it is not being used. The media counter will not decrement below 0. The current value of the media counter is maintained across power cycles but is not stored as a user parameter.

▶ **To enter a media length value**

- 1 Press **Feed Media/Media Counter**.
- 2 Set the media length by entering a value between 0 and 500 feet.
- 3 Press **OK**.

▶ **To display the current value**

- 1 Press **Feed Media/Display Counter**.
- 2 View the current value.
- 3 Press **EXIT**.

▶ **To print the current value**

- 1 Press **Feed Media/Display Counter**.
- 2 Press **Print Counter**.
- 3 Press **EXIT**.

▶ **To reset the media counter**

- 1 Press **Feed Media/Media Counter**.
- 2 Press **Reset Counter**.
- 3 Press **OK**.

End of media

End of media settings tell the printer how to proceed when the end of a media roll is reached.

When End of plot is set to **Feeder Stop**, the printer will look for an abnormally long absence of the loop of media that occurs between the feeder roll and the platen. After 20 seconds, the printer enters pause mode just as if you had pressed **Pause** from the main menu. The printer will remain in pause mode until you press **Pause** (which toggles to the resume state) or you press **Reset**. Pressing **Pause** allows you to continue the current print at your discretion.

A few rules regarding the End of Plot feature:

- will not work when **Sheet** is selected as supply type.
- setting is remembered across power cycles.
- setting is not stored as a user parameter.
- setting cannot be changed once a plot begins to print.
- if you press **Pause** to resume the print, end of media detection is disabled for the remainder of the print.
- if enabled, detection is reinstated at the beginning of each print.
- when the printer is in pause mode due to End of Plot, the printer will beep 3 times every 20 seconds until the **Pause** or **Reset** buttons are pressed.



To set end of media

- 1 Press **Feed Media Menu/End of Media**.
- 2 Choose **Feeder Stop** or **Normal**.
- 3 Press **OK**.

Choosing print mode options

Print mode options let you choose from three predefined print modes, or create user settings in which you can make custom settings for the following:

- Color mode
- Pass correction
- Quality mode
- Print passes
- DPI
- Print direction
- Carriage speed

Color mode

Color mode refers to whether you are printing in color, grayscale or monochrome.



To choose the color mode

- 1 Press **Setup Menu/Print Mode Menu/Color Mode**.
- 2 Choose **Color or Mono**.
- 3 Press **OK**.

Quality mode

Your printer offers four predefined print quality modes which let you make tradeoffs between speed and quality.

The quality mode you use depends on various factors, such as your software application, whether you're printing in color or monochrome, and the type of media you're using. Each quality mode directly affects the printing speed and quality of the image you print, so you should understand the differences.

Each of the quality modes attempts to strike a balance between speed and quality. The default quality mode, Productivity, provides quality images at a reasonable printing speed for most users. Whenever you choose a print mode other than Productivity, you will choose to emphasize either speed or quality.

Each quality mode includes presets for the following options: Color mode; DPI; Carriage speed; Pass correction; Print passes and Print direction.

When you select User mode, you can set each of the print mode options individually.

Quality modes are summarized in the table which follows. It is not necessary to set all the parameters unless you want to create a user-defined print mode.

Mode	Color	DPI	Passes	Direction	Speed
High Speed	Color	600 x 600	Two	Bi	10
Productivity	Color	600 x 600	Three	Bi	10
Fine	Color	600 x 600	Four	Bi	10
Enhanced	Color	600 x 600	Six	Bi	10
Ultrafine	Color	1200 x 600	Eight	Bi	10

High Speed - This mode generally is used when speed is more important than quality. Use it to check position, layout, color, etc. It will rarely be used for finished quality images.

Productivity - This setting is for fast, average quality.

Fine - Fast, better than average quality.

Enhanced - Fast, very good quality (default).

Ultrafine - Average speed, best print quality.



To choose print quality

- 1 Press **Setup/Print Mode/Quality Mode**.
- 2 Choose the desired quality.
- 3 Press **OK**.

Dots per inch

For best results, be sure the printer dpi setting matches the image resolution in the file you are printing.

The dpi setting refers to the resolution at which your image is created, not the resolution at which it is printed.

The resolution at which you save your image file affects the size of the printed image as shown in the following table.

Image (file) resolution	Printer dpi setting	Affect on printed output	
300 dpi	600 dpi	1 input pixel prints as 4 output pixels.	The printed image is the same size as the original.
600 dpi	600 dpi	1 input pixel prints as 1 output pixel.	The printed image is the same size as the original.
600 dpi	1200 dpi	1 input pixel prints as 2 output pixels.	The printed image is the same size as the original.
1200 dpi	1200 dpi	1 input pixel prints as 1 output pixel.	The printed image is the same size as the original.



To choose dpi

- 1 Press **Setup menu/Print mode menu/Dots per inch**.
- 2 Choose **300, 600** or **1200** as the resolution.
- 3 Press **OK**.

Print passes

The number of passes indicates how many times the cartridges must fire to lay down the ink for a complete scan line. You may select multiple passes, so that on a single pass, the jets fire only a fraction of the dots. If you're printing an image with heavy fill or shading, setting the quality mode to an option that lays down less ink can help prevent running and bleeding.

Note: Two pass mode is not recommended for graphic arts printing.



To change the number of passes

- 1 Choose **Setup Menu/Print Mode Menu/Print Passes**.
- 2 Choose **Two, Three, Four, Six, Eight, Twelve or Sixteen**.
- 3 Press **OK**.

Pass correction

Pass correction enables the printer to check whether open jet compensation will be able to fully compensate for the currently set number of passes before beginning a new print job.

When Pass Correction is set to **Auto**, the printer checks to see if open jet compensation will fully compensate for the currently set number of passes before beginning a new print job. If it finds that open jet compensation will not be able to completely compensate, it will either increment the number of passes or stop printing. At the beginning of each print, the printer resets to the original user-defined settings and attempts to compensate again. If it is unable to compensate, the auto correct process repeats.

This feature helps minimize ink and media waste caused by failing jets during unattended printing. When the number of passes must change, a notification message displays on the control panel. In **Auto** mode, printing continues. In **Pause** mode, printing is paused waiting for user intervention. If compensation is not possible, the printer stops printing.

 **To set pass correction to auto**

- 1 Press **Setup Menu/Print Mode Menu/Pass Correction**.
- 2 Choose **Auto**.
- 3 Press **OK**.

Carriage speed

Carriage speed lets you determine the number of dots per second that are laid down as the carriage moves over the media.

 **To set the carriage speed**

- 1 Press **Setup Menu/Print Mode Menu/Carriage Speed**.
- 2 Choose **1, 2, 3, 4, 5, 6, 7, 8, 9** or **10**. (10 is the fastest.)
- 3 Press **OK**.

Print direction

Print direction specifies whether the inkjets fire on both passes of the carriage over the print area (bidirectional), or just on the return pass (unidirectional). If you're printing an image with heavy fill or shading, unidirectional can reduce running and ink bleeding. If you're more concerned with printer speed, bidirectional firing can decrease your printing time.

 **To change the print direction**

- 1 Press **Setup Menu/Print Mode Menu/Print Direction**.
- 2 Choose **Uni** or **Bi**.
- 3 Press **OK**.

Choosing paper options

Paper options let you define the following:

- Supply Type
- Media Standard
- Margins
- Auto-Load Delay
- Save Media
- Auto Cut

Supply type

This setting allows you to select your supply options. The available options are **Sheet**, **Roll**, **Roll2** or **Takeup**. Select **Sheet** if you intend to use cut sheet stock. Select **Roll** if you are going to use roll paper on the upper roll feeder. Select **Roll2** if you are going to use roll paper with the lower roll feeder. (No takeup available with either roll option.) Select **Takeup** if you intend to use roll paper with the takeup system.



To choose supply type

- 1 Press **Setup Menu/Paper Option Menu/Supply Type**.
- 2 Choose the supply type.
- 3 Press **OK**.

Media standard

When you create an image, you determine its size at the computer. It's important that you know the size of the image and load the appropriate size media because the printer automatically defines the print area based on the loaded media's width. Be sure that the media you load is wide enough to accommodate the image. If extra length is required, use roll media. If the media is smaller than the image, the image may be truncated. Minimum media width is 11".

▶ **To choose the media standard**

- 1 Press **Setup Menu/Paper Option Menu/Media Standard**.
- 2 Choose the size of media you are loading.
- 3 Press **OK**.

The tables which follow provide details on the media sizes and maximum printing areas for rollfeed and sheet media.

Media Sizes and Maximum Printing Areas for Rollfeed Media

Paper Size		Normal Print Area			Expanded Print Area			
U.S. OFFSET (GRAPHICS_ARTS)								
19.0"	x	25.0"	17.8"	x	23.8"	18.6"	x	24.6"
20.0"	x	28.0"	18.8"	x	26.8"	19.6"	x	27.6"
22.0"	x	26.0"	20.8"	x	24.8"	21.6"	x	25.6"
23.0"	x	35.0"	21.8"	x	33.8"	22.6"	x	34.6"
24.0"	x	29.0"	22.8"	x	27.8"	23.6"	x	28.6"
25.0"	x	38.0"	23.8"	x	36.8"	24.6"	x	37.6"
32.0"	x	44.0"	30.8"	x	42.8"	31.6"	x	43.6"
35.0"	x	45.0"	33.8"	x	43.8"	34.6"	x	44.6"
36.0"	x	45.0"	34.8"	x	43.8"	35.6"	x	44.6"
40.0"	x	50.0"	38.8"	x	48.8"	39.6"	x	49.6"
42.0"	x	65.0"	40.8"	x	63.8"	41.6"	x	64.6"
48.0"	x	65.0"	46.8"	x	63.8"	47.6"	x	64.6"
50.0"	x	65.0"	48.8"	x	63.8"	49.6"	x	64.6"
53.0"	x	65.0"	51.8"	x	63.8"	52.6"	x	64.6"
54.0"	x	65.0"	52.8"	x	63.8"	53.6"	x	64.6"
58.0"	x	65.0"	56.8"	x	63.8"	57.6"	x	64.6"
60.0"	x	65.0"	58.8"	x	63.8"	59.6"	x	64.6"
1000	x	1414 mm	970	x	1384 mm	990	x	1404 mm
1189	x	1682 mm	1159	x	1652 mm	1179	x	1672 mm
SPECIAL MAP (SPECIAL_MAP)								
26.0"	x	38.0	24.8"	x	36.8"	25.6"	x	37.6"
27.0"	x	39.0	25.8"	x	37.8"	26.6"	x	38.6"
30.0"	x	42.0"	28.8"	x	40.8"	29.6"	x	41.6"
610	x	860 mm	580	x	830 mm	600	x	850 mm
860	x	1220 mm	830	x	1190 mm	850	x	1210 mm

Media Sizes and Maximum Printing Areas for Rollfeed Media (continued)

U.S. ARCHITECTURAL (US_ARCH)

B	12.0"	x	18.0"	10.8"	x	16.8"	11.6"	x	17.6"
C	18.0"	x	24.0"	16.8"	x	22.8"	17.6"	x	23.6"
D	24.0"	x	36.0"	22.8"	x	34.8"	23.6"	x	35.6"
E	36.0"	x	48.0"	34.8"	x	46.8"	35.6"	x	47.6"

U.S. ENGINEERING (US_ENGR)

B	11.0"	x	17.0"	9.8"	x	15.8"	11.6"	x	16.6"
C	17.0"	x	22.0"	15.8"	x	20.8"	16.6"	x	21.6"
D	22.0"	x	34.0"	20.8"	x	32.8"	21.6"	x	33.6"
E	34.0"	x	44.0"	32.8"	x	42.8"	33.6"	x	43.6"

ISO-A (MET_NORM_A)

A3	297	x	420 mm	267	x	390 mm	287	x	410 mm
A2	420	x	594 mm	390	x	564 mm	410	x	584 mm
A1	594	x	840 mm	564	x	811 mm	584	x	831 mm
	625	x	880 mm	595	x	850 mm	615	x	870 mm
A0	841	x	1189 mm	811	x	1159 mm	831	x	1179 mm

METRIC-DIN (MET_OVER_A)

A3	337	x	460 mm	307	x	430 mm	327	x	450 mm
A2	460	x	634 mm	430	x	604 mm	450	x	624 mm
A1	634	x	881 mm	604	x	851 mm	624	x	871 mm
A0	881	x	1129 mm	851	x	1199 mm	871	x	1219 mm

ISO-B (ISO_B)

B4	250	x	353 mm	220	x	323 mm	240	x	343 mm
B3	353	x	500 mm	323	x	470 mm	343	x	490 mm
B2	500	x	707 mm	470	x	677 mm	490	x	697 mm
B1	707	x	1000 mm	677	x	970 mm	697	x	990 mm

Media Sizes and Maximum Printing Areas for Sheet Media

Paper Size		Normal Print Area		Expanded Print Area	
U.S. OFFSET (GRAPHICS_ARTS)					
19.0"	x 25.0"	17.8"	x 22.4"	18.6"	x 22.8"
20.0"	x 28.0"	18.8"	x 25.4"	19.6"	x 25.8"
22.0"	x 26.0"	20.8"	x 23.4"	21.6"	x 23.8"
23.0"	x 35.0"	21.8"	x 32.4"	22.6"	x 32.8"
24.0"	x 29.0"	22.8"	x 26.4"	23.6"	x 26.8"
25.0"	x 38.0"	23.8"	x 35.4"	24.6"	x 35.8"
32.0"	x 44.0"	30.8"	x 41.4"	31.6"	x 41.8"
35.0"	x 45.0"	33.8"	x 42.4"	34.6"	x 42.8"
36.0"	x 45.0"	34.8"	x 42.4"	35.6"	x 42.8"
40.0"	x 50.0"	38.8"	x 47.4"	39.6"	x 47.8"
42.0"	x 65.0"	40.8"	x 62.4"	41.6"	x 62.8"
48.0"	x 65.0"	46.8"	x 62.4"	47.6"	x 62.8"
50.0"	x 65.0"	48.8"	x 62.4"	49.6"	x 62.8"
53.0"	x 65.0"	51.8"	x 62.4"	52.6"	x 62.8"
54.0"	x 65.0"	52.8"	x 62.4"	53.6"	x 62.8"
58.0"	x 65.0"	56.8"	x 62.4"	57.6"	x 62.8"
60.0"	x 65.0"	58.8"	x 62.4"	59.6"	x 62.8"
1000	x 1414 mm	970	x 1349 mm	990	x 1359 mm
1189	x 1682 mm	1159	x 1617 mm	1179	x 1627 mm
SPECIAL MAP (SPECIAL_MAP)					
26.0"	x 38.0"	24.8"	x 35.4"	25.6"	x 35.8"
27.0"	x 39.0"	25.8"	x 36.4"	26.6"	x 36.8"
30.0"	x 42.0"	28.8"	x 49.4"	29.6"	x 39.8"
610	x 860 mm	590	x 795 mm	600	x 805 mm
860	x 1220 mm	830	x 1155 mm	850	x 1165 mm
U.S. ARCHITECTURAL (US_ARCH)					
B	12.0" x 18.0"	10.8" x 15.4"		11.6" x 15.8"	
C	18.0" x 24.0"	16.8" x 21.4"		17.6" x 21.8"	
D	24.0" x 36.0"	22.8" x 33.4"		23.6" x 33.8"	
E	36.0" x 48.0"	34.8" x 45.4"		35.6" x 45.8"	
U.S. ENGINEERING (US_ENGR)					
B	11.0" x 17.0"	9.8" x 14.4"		10.6" x 14.8"	
C	17.0" x 22.0"	15.8" x 19.4"		16.6" x 19.8"	
D	22.0" x 34.0"	20.8" x 31.4"		21.6" x 31.8"	
E	34.0" x 44.0"	32.8" x 41.4"		33.6" x 41.8"	

Media Sizes and Maximum Printing Areas for Sheet Media (continued)

	Paper Size		Normal Print Area			Expanded Print Area			
ISO-A (MET_NORM_A)									
A3	297	x	420 mm	267	x	355 mm	287	x	365 mm
A2	420	x	594 mm	390	x	529 mm	410	x	539 mm
A1	594	x	841 mm	564	x	775 mm	584	x	785 mm
	625	x	880 mm	595	x	815 mm	615	x	825 mm
A0	841	x	1189 mm	811	x	1124 mm	831	x	1134 mm
METRIC-DIN (MET_OVER_A)									
A3	337	x	460 mm	307	x	395 mm	327	x	405 mm
A2	460	x	634 mm	430	x	569 mm	450	x	579 mm
A1	634	x	881 mm	604	x	816 mm	624	x	826 mm
A0	881	x	1229 mm	851	x	1164 mm	871	x	1174 mm
ISO-B (ISO_B)									
B4	250	x	353 mm	220	x	288 mm	240	x	298 mm
B3	353	x	500 mm	323	x	435 mm	343	x	445 mm
B2	500	x	707 mm	470	x	642 mm	490	x	652 mm
B1	707	x	1000 mm	677	x	935 mm	697	x	945 mm

Margins

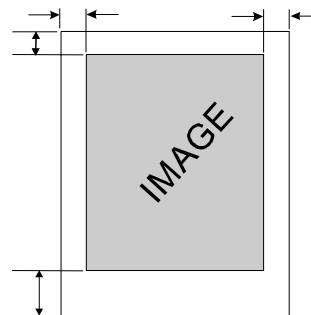
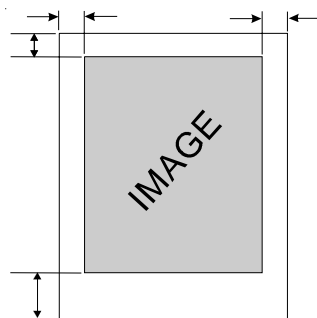
Margins can be set to **Normal**, **Expanded**, or **Edge Band**. The **Expanded** setting expands the print area and decreases the margins. Any part of the image that extends into the margin will be clipped. When the Margins option is set to **Expanded**, make sure that you align the media accurately using the guide on the right of the platen so that the ink doesn't exceed the edge of the media.

Cartridge spitting helps to clear and prevent clogs. The cartridges spit in the service station before each print job and periodically during each job. On certain prints, the jets are not completely cleared of residue during the spit. On these occasions, the extra residue is deposited with the first drops of the print resulting in edge banding. To reduce the incidence of edge banding, select **Edge Band**, which will print a vertical line in the margin on each side of the print. When **Edge Band** is selected, margins are automatically set to **Normal**. The output print area for **Edge Band** and **Normal** settings is the same.

Cut sheet maximum printing area

Normal: 0.59" (15 mm) margin on each of three sides. 1.57" (40 mm) margin on the fourth side for mono prints and 1.96" (50 mm) margin on the fourth side for color prints.

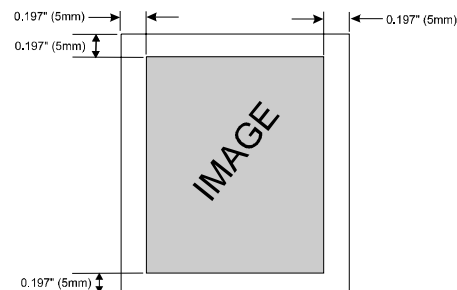
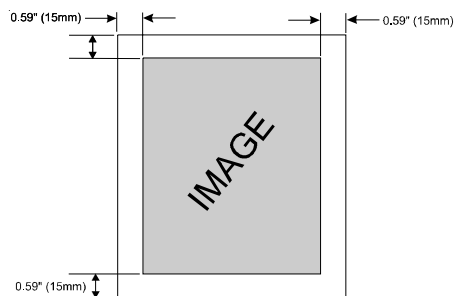
Expanded: 0.197" (5 mm) margin on each of three sides. 1.57" (40 mm) margin on the fourth side for mono prints and 1.96" (50 mm) margin on the fourth side for color prints.



Rollfeed maximum printing area

Normal: 0.59" (15 mm) margin on all sides.

Expanded: 0.197" (5 mm) margin on all sides.



 **To set margins**

- 1 Press **Setup Menu/Paper Option Menu/Margins**.
- 2 Choose **Normal, Expanded** or **Edge Band**.
- 3 Press **OK**.

Auto-Load Delay

Auto-Load Delay lets you set the time between when the printer senses the media and starts to load the media. This lets you manually reposition the media if necessary. The default is 6 seconds, selectable from a range of 1-12 seconds.

 **To set auto-load delay**

- 1 Press **Setup Menu/Paper Option Menu/Auto-Load Delay**.
- 2 Choose the delay time.
- 3 Press **OK**.

Save media

When Save Media is **On** (the default), the media advances only as far as needed to print the image. With the Save Media option turned **Off**, the printer advances the full print area of the loaded media. For example, if a 36 inch roll is loaded, the printer advances the length of the print area for a standard 36 x 48" sheet even if the printed image is only 30 inches long.

 **To turn off save media**

- 1 Press **Setup Menu/Paper Option Menu/Save Media**.
- 2 Choose **Off**.
- 3 Press **OK**.

Auto-Cut

When the Auto-Cut option is set to **On**, the printer automatically cuts the media when the image is complete. To be sure the image is dry before cutting, turn on the dryer and/or specify an auto-cut delay time. See “Auto-Cut Delay” below for the procedure. You can select **Cut** from the control panel at any time to cut the media.

Note: Automatic cutting is disabled when the paper feed option is set to **Sheet** or **Takeup**.



To set auto-cut

- 1 Press **Setup Menu/Paper Option Menu/Auto-Cut Menu/Auto-Cut**.
- 2 Choose **On** or **Off**.
- 3 Press **OK**.

Auto-Cut Delay

Auto-Cut Delay allows you to set a delay time before the printer automatically performs the auto-cut function. This provides additional time for unattended prints to dry. In addition, you may want to delay auto-cut depending on the media you are using, the ambient temperature and the humidity. Auto-Cut Delay values range from 0 to 55 seconds in five second intervals and 1 to 60 minutes in one minute intervals. When the delay time has expired, the printer cuts the image and begins printing the next image in the buffer. Auto-Cut Delay is ignored when Auto-Cut is set to **Off**.



To set auto-cut delay

- 1 Press **Setup Menu/Paper Option/Menu/Auto-Cut Menu/Auto-Cut Delay**.
- 2 Choose a time.
- 3 Press **OK**.

Delay Status

Delay Status displays the time remaining before Auto-Cut in minutes and seconds. You can cancel the remaining delay time, if desired. A countdown timer displays time left before Auto-Cut. Choosing **Reset Counter** forces the count to zero and causes the printer to cut the media immediately.

▶ To reset counter to zero and initiate auto-cut

- 1 Press **Setup Menu/Paper Option Menu/Auto-Cut Menu/Delay Status**.
- 2 Choose **Reset Counter**.
- 3 Press **Exit**.

Dryer setting

The printer dries ink via a heated platen and fans. You can choose from twelve combinations of dryer/fans on and off. Depending on the ambient temperature, humidity and ink type, you may want to adjust the dryer temperature. The settings you use also depend on the type of ink and media. Refer to the following charts for recommended settings.

▶ To set the dryer settings

- 1 Press **Setup Menu/Dryer Menu/Dryer Setting**.
- 2 Choose an option.
- 3 Press **OK**.

Xerox Media Setup Reference for 8142/8160	Recommended Printer Heater & Fan Settings¹	Recommended Print Mode
<i>Presentation Papers</i>		
Xerox Premium Coated Inkjet Paper / 95g	Heat Off, Fan Off	High Speed
Xerox Matt Presentation Paper / 90g	Heat Off, Fan Off	High Speed
Xerox Matt Presentation Paper / 120g	Heat Off, Fan Off	High Speed
Xerox Matt Presentation Paper / 160g	Heat Off, Fan Off	Production
Xerox Poster Presentation Paper / 120g	Heat Off, Fan Off	Production
Xerox Poster Presentation Paper / 170g	Heat Off, Fan Off	Production
<i>Photo Papers</i>		
Xerox Photo Paper Gloss / 150g	Low Heat, Fan On	Production
Xerox Photo Paper Satin / 150g	Low Heat, Fan On	Production
Xerox Universal Photo Paper Gloss / 175g	Medium Heat, Fan On	Production
Xerox Universal Photo Paper Satin / 175g	Medium Heat, Fan On	Production
Xerox Universal Photo Paper Gloss / 195g	Medium Heat, Fan On	Production
Xerox Universal Photo Paper Satin / 195g	Medium Heat, Fan On	Production
Xerox Universal Photo Paper Gloss / 215g	Medium Heat, Fan On	Production
Xerox Universal Photo Paper Satin / 215g	Medium Heat, Fan On	Production
Xerox Universal Photo Paper Gloss / 285g	Medium Heat, Fan On	Fine
Xerox Universal Photo Paper Satin / 285g	Medium Heat, Fan On	Fine
<i>Specialist Application Papers</i>		
Xerox Display Paper Yellow / 95g	Heat Off, Fan Off	High Speed
Xerox Display Paper Fluorescent Yellow / 95g	Heat Off, Fan Off	High Speed
Xerox Display Paper Fire Retardant White / 120g	Heat Off, Fan Off	High Speed
Xerox Display Paper Fire Retardant Yellow Fluorescent / 120g	Heat Off, Fan Off	High Speed
Xerox Outdoor Poster Paper - Blue Back / 120g	Min Heat, Fan Off	Production
Xerox Canvas Paper / 180g	Min Heat, Fan On	Production
<i>Films</i>		
Xerox Optically Clear Film / 120mic	Heat Off, Fan On	Production
Xerox Optically Clear Film - 2 Edge Strip / 100mic	Heat Off, Fan On	Production
Xerox White Opaque Glossy Film / 120mic	Heat Off, Fan Off	Production
Xerox Backlit Film - Back Print / 130mic	Heat Off, Fan On	Fine
Xerox Backlit Film - Front Print / 140mic	Heat Off, Fan On	Fine
Xerox Metallic Film - Silver / 100mic	Heat Off, Fan On	Production
Xerox Metallic Film - Gold / 100mic	Heat Off, Fan On	Production
Xerox Polycarbonate Pop-Up Film - Back Print / 275mic	Heat Off, Fan On	Fine
Xerox White Polyester Self-adhesive Light Stop Backer / 275mic	Heat Off, Fan On	Production
Xerox Light Stop Pop-Up Film - Front Print / 300mic	Heat Off, Fan On	Production
Xerox White Matt Banner Film / 200mic	Heat Off, Fan On	Production

Xerox Media Setup Reference for 8142/8160	Recommended Printer Heater & Fan Settings ¹	Recommended Print Mode
Banner Media		
Xerox Outdoor Weatherproof Banner / 280mic	Heat Off, Fan On	Production
Xerox Universal Matt Artist Canvas / 340g	Heat Off, Fan On	Fine
Xerox Banner Fabric Fire Retardant / 250g	Heat Off, Fan On	Production
Xerox Banner Polyester / 290mic	Heat Off, Fan On	Production
Xerox Matt Polypropylene Banner / 185mic	Heat Off, Fan Off	Production
Xerox Matt Polypropylene Banner / 320mic	Heat Off, Fan On	Production
Xerox Banner Vinyl / 400g	Heat Off, Fan On	Production
Xerox Banner Vinyl / 550g	Heat Off, Fan On	Production
Self-Adhesive Media		
Xerox Translucent Repositionable Film / 225mic	Heat Off, Fan On	Production
Xerox Optically Clear Inkjet Film - Self Adhesive / 140mic	Heat Off, Fan On	Production
Xerox Self Adhesive Vinyl / 275mic	Heat Off, Fan On	Production

1: Based on room conditions of 23°C and 50% RH

End of plot dry

At the completion of a print job, End of Plot (EOP) Dry **ON with Rewind** enables the printer to automatically advance the media at the printing speed 12 inches to allow the image to fully pass the heater. The media is then fed back into the printer at 25% of the normal reserve speed to avoid cockling on the retract move. **Dry ON without Rewind** allows the media to be advanced over the heater, but there may be blank media between prints. **End of Print Dry OFF** does not perform this at job completion and should be used when multiple plots are being printed.

Note: EOP does not work at the end of a roll of media where it is taped to the core. Before printing, be sure there is sufficient media left on the roll to do the print and advance the entire print past the dryer. You can determine whether there is sufficient media by choosing **Feed Media Menu/Media Counter**.



To set EOP dry

- 1 Press **Setup Menu/Dryer Menu/End of Plot**.
- 2 Choose **On**.
- 3 Press **OK**.

Defining user setup

You can save the options you use most frequently so you don't have to reconfigure the printer each time you print an image. You can define up to eight different combinations of options and save them with a user number ranging from 1-8. Select the user number you want to use before sending an image to the printer.

Note: If your printer driver has host-controlled settings, the user setup may be overridden. If possible, disable the driver control settings.

You can save settings for the following options:

- Auto-Cut
- Quality Mode
- Color Mode
- Save Media
- DPI
- Carriage Speed
- Pass Correction
- Dryer
- Print Passes
- Print Direction
- Media Standard
- Auto-Cut Delay
- Auto Wipe
- Margins

 **To save user setup**

- 1 Choose all the print options to save.
- 2 Press **Setup Menu/User Setup Menu/Save User**.
- 3 Scroll to the number for the user settings.
- 4 Press **OK**.

 **To use a previously saved user setting**

- 1 Press **Setup Menu/User Setup Menu/Select User**.
- 2 Scroll to the number for the user setting (i.e., user 1, user 2, etc.) to use.
- 3 Press **OK**.

Units Select

Measurement units can be displayed in English or Metric.

 **To choose a measurement unit**

- 1 Press **Setup Menu/User Setup Menu/Units Select**.
- 2 Choose English or Metric.
- 3 Press **OK**.

Language

Printer menus and options can be displayed in the following languages: English, German, French, Italian, Portuguese, and Spanish.

 **To choose a language**

- 1 Press **Setup Menu/User Setup Menu/Language**.
- 2 Choose the language to display.
- 3 Press **OK**.

Print settings

Pressing the **Setup Menu/User Setup Menu/Print Settings** buttons causes the printer to print a listing of its current settings and configuration. Be sure to have media loaded before you start.

Return to default settings

Pressing the **Setup Menu/User Setup Menu/Init Settings** buttons returns all printer options to the factory defaults. All saved user settings are lost. The table at the end of this chapter shows the printer defaults.

LCD contrast

The LCD Contrast function lets you adjust the brightness of the control panel. The range is 1-8, where 8 is less contrast. The default is 4. Note that if brightness is set too high, you may not be able to see the text displayed on the control panel.



To set LCD contrast

- 1 Press **Setup Menu/User Setup Menu/LCD Contrast**.
- 2 Choose the contrast value.
- 3 Press **OK**.

Choosing ink options

Ink options let you define the following:

- Auto-Wipe
- Spit Interval
- Edge Banding Reduction

Auto-Wipe

When set to **On**, the cartridge jet plates are periodically wiped during printing. This eliminates dripping during heavy continuous usage. However, if you are having problems with banding, you can sometimes solve the problem by setting the wiper to **Off** (the default).



To turn on the wiper

- 1 Press **Setup Menu/Ink Option Menu/Auto-Wipe**.
- 2 Choose **On**.
- 3 Press **OK**.

Cartridge spit interval

Cartridge spitting helps to clear and prevent clogs. This is done automatically at certain intervals. There are times when you would like to the cartridges spit more frequently. More frequent spitting has been shown to reduce certain print anomalies when using ink dilutions. This control allows you to select **Reduced**, which will reduce the interval between spits and effectively increase the spitting frequency. The default is **Normal**.



To reduce the spit interval

- 1 Press **Setup Menu/Ink Option Menu/Spit Interval**.
- 2 Choose **Reduced**.
- 3 Press **OK**.

Network settings

Your printer can be shared on a network. Network setup can be accomplished at your computer, but the IP address, IP subnet mask, gateway, and DHCP client can also be set at the printer's control panel.

Note: do not change the default gateway.

DHCP

The DHCP protocol can be used to obtain a lease on an IP address. The print server will request a permanent lease. If you are using DHCP to manage IP addresses, we recommend that permanent leases be assigned to your print servers so that the IP address will not change. DHCP servers also normally provide the subnet mask and gateway/router address information.



To set the IP address

- 1 Press **Setup Menu/Network Menu/IP Config Menu/IP Address**.
- 2 Enter IP address **192.0.0.193**.
- 3 Press **OK**.



To set the IP subnet mask

- 1 Press **Setup Menu/Network Menu/IP Config Menu/IP Subnet Mask**.
- 2 Enter Subnet Mask **255.255.255.0**.
- 3 Press **OK**.

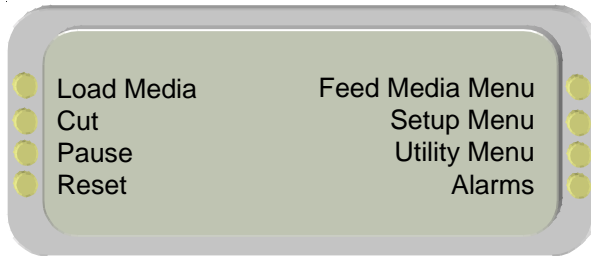
User Settings	Default	Other Options
Auto Cut	On	Off, Delay, Delay Status
Auto Cut Delay	Off	0 to 55 seconds in 5 second intervals 1 to 60 minutes in 1 minute intervals.
Carriage Speed	10	1-10
Color Mode	Color	Mono
DPI	600	1200
Dryer Setting	0-Off	1-Fans Only; 2-Heat Min, Fans; 3-Heat Min; 4-Heat Low, Fans; 5-Heat Low; 6- Heat Med, Fans; 7-Heat Med; 8-Heat Hi, Fans; 9-Heat Hi; 10-Heat Max, Fans; 11-Heat Max.
Margins	Normal	Expanded, Edge Band
Media Standard	All	US Eng, US Arch, ISO A, Met Over A, ISO B, Special, Graphic, US All, Met ALL
Pass Correction	Auto	Pause, Off
Print Direction	Bi	Uni
Print Passes	6	2, 3, 4, 8, 12, 16
Quality Mode	Enhanced	High Speed, Fine, Productivity, Ultrafine
Save Media	On	Off
Save User	1	1-8
Select User	1	1-8
Units	English	Metric
System Settings	Default	Other Options
Auto Wipe	Off	On
Auto-Load Delay	6	1-12
End of Media	Feeder Stop	Normal
End of Plot	On with Rewind	Off, On without Rewind
Language	English	German, French, Italian, Spanish, Portuguese
LCD Contrast	5	1-8
Spit Interval	Normal	Reduced
Supply Type	Takeup	Sheet, Roll, Roll2

This section contains an overview of the printer's menu tree. Text items in *italics* indicate that selecting the option gives access to a menu with further options. Items in **bold** are the default option.

Main Menu at a Glance

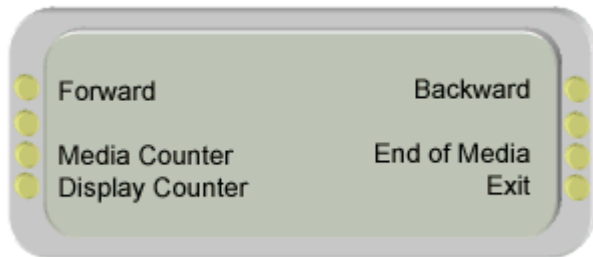
Main Menu	Load Media
	Cut
	Pause
	Reset
	<i>Feed Media Menu</i>
	Forward
	<i>Media Counter</i>
	<i>Display Counter</i>
	Backward
	<i>End of Media</i>
	Exit
	<i>Setup Menu</i>
	<i>Print Mode Menu</i>
	<i>Paper Option Menu</i>
	<i>Dryer Menu</i>
	<i>User Setup Menu</i>
	<i>Ink Option Menu</i>
	<i>Network Menu</i>
	Exit
	<i>Utility Menu</i>
	<i>Prime Menu</i>
	Access Cartridge
	<i>Calibration Menu</i>
	Display Settings
	Print: Settings
	<i>Service Menu</i>
	Exit

Main Menu



Load Media	moves media into the platen and reads the width of the loaded media.
Cut	cuts media.
Pause	stops printing and allows the operator to cancel print jobs, reinitialize the printer, or examine the print job. Pressing Pause again will restart printing.
Reset	clears the print buffer. When cancelling a print, first remove it from the computer's print queue, then press the Reset button on the printer.
Feed Media Menu	provides access to further options for moving the media forward or backward and entering/displaying media length values.
Setup Menu	provides access to further submenus for setting printing options.
Utility Menu	provides access to further submenus for calibration and other functions.
Alarms	provides access to a further submenu which displays the currently active alarm conditions.

Feed Media Menu



Forward	advances media toward the front of the printer.
Media Counter	provides access to additional options where the length of a roll of media (0 to 500') can be entered and the media counter reset.
Display Counter	displays a screen where the current value of the media length can be viewed and printed on the media.
Backward	moves media toward the back of the printer.
End of Media	provides access to options for handling the end of media condition.
Exit	returns to Main menu.

Setup Menu at a Glance (Bold indicates the default)

Setup Print Mode Menu

<i>Color Mode</i>	Color , mono
<i>Quality Mode</i>	High Speed, Productivity, Fine, Enhanced , Ultrafine
<i>Dots per Inch</i>	300, 600 , 1200
<i>Print Passes</i>	2, 3, 4, 6 , 8, 12, 16
<i>Pass Correction</i>	Auto , Pause, Off
<i>Carriage Speed</i>	1- 10
<i>Print Direction</i>	Uni, Bi
Exit	

Paper Option Menu

<i>Supply Type</i>	Sheet, Roll, Roll2, Takeup
<i>Media Standard</i>	All , US Engr, US Arch, ISO A, ISO B, Special, MET OVER A, Graphics, US All, Met All
Margins	Normal , Expanded, Edge Band
<i>Auto-Load Delay</i>	1-12, 6
<i>Auto-Cut Menu</i>	Auto-Cut, Auto-Cut Delay, Delay Status
<i>Save Media</i>	On /Off
Exit	

Dryer Menu

<i>Dryer Setting</i>	0-Off ; 1-Fans Only; 2-Heat Min, Fans; 3-Heat Min; 4-Heat Low, Fans; 5-Heat Low; 6-Heat Med, Fans; 7-Heat Med; 8-Heat Hi, Fans; 9-Heat Hi; 10-Heat Max, Fans; 11-Heat Max
<i>End of Plot</i>	Off, On with Rewind , On without Rewind
Exit	

User Setup Menu

<i>Select User</i>	1-8, 1
<i>Save User</i>	1-8, 1
<i>Units Select</i>	English , Metric
<i>Language</i>	English , German, French, Italian, Spanish, Portuguese
Init Settings	
Print Settings	
<i>LCD Contrast</i>	1-8, 5 (8 is less contrast)
Exit	

Ink Option Menu

<i>Auto-Wipe</i>	On/Off
<i>Spit Interval</i>	Normal , Reduced

Network Menu

IP Config Menu, Restore Defaults, Network Info

Exit

Service Menu at a Glance (Bold indicates the default)

Service menu

Calibration menu

Diagnostics menu

Color Test menu

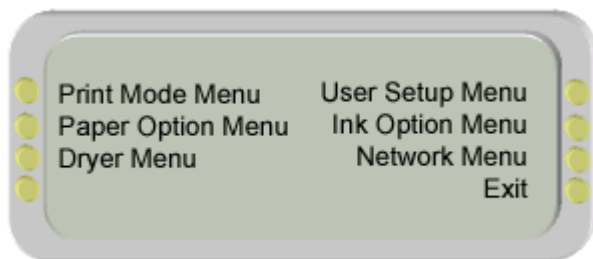
About

Ink Status menu

Test Print

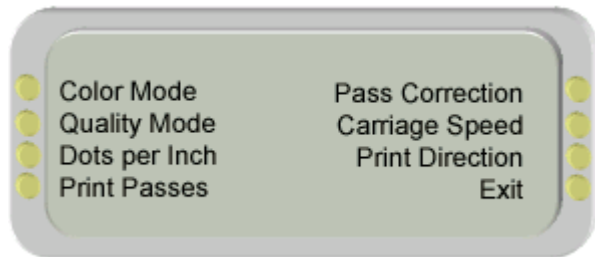
Exit

Setup Menu



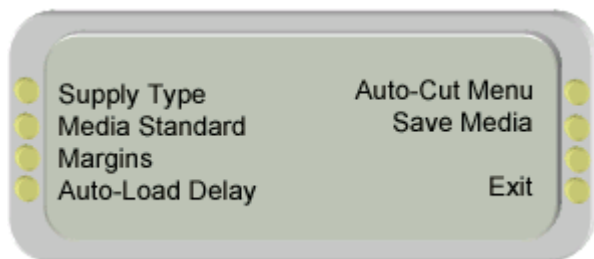
Print Mode Menu	provides access to options for color, quality, dots per inch, and EOP dry.
Paper Option Menu	provides access to options for loading paper.
Dryer Menu	provides access to a further menu in which you can select the dryer setting and preferences for drying the end of a plot.
User Setup Menu	provides access to options for defining and saving user settings.
Ink Option Menu	provides access to options for auto-wipe, spit interval, dryer settings, and end of plot settings.
Network Menu	provides access to options for setting network parameters.
Exit	returns to the Main menu.

Print Mode Menu



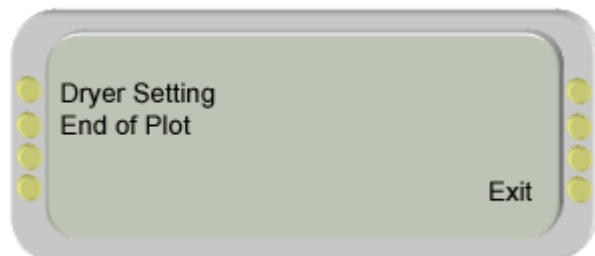
Color Mode	provides access to a further menu to select color (default) , monochrome, or grayscale printing.
Quality Mode	provides access to a further menu to select the print mode.
Dots per Inch	provides access to a selection screen for print resolution.
Print Passes	provides access to a selection screen for print passes.
Pass Correction	provides access to a selection screen for pass correction.
Carriage Speed	provides access to a selection screen for carriage speed.
Print Direction	provides access to a selection screen for print direction.
Exit	returns to the Setup menu.

Paper Option Menu



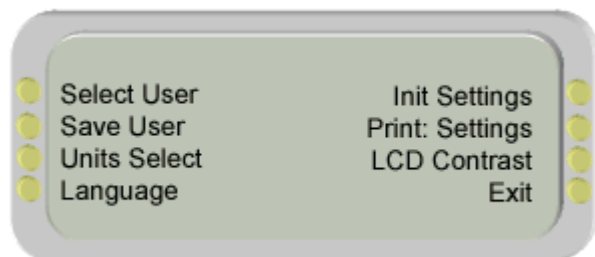
Supply Type	provides access to a selection screen for supply type.
Media Standard	provides access to a selection screen for media standard.
Margins	provides access to a selection screen for margins.
Auto-Load Delay	provides access to a selection screen for auto-load delay.
Auto-Cut Menu	provides access to a menu to activate Auto-Cut, set an Auto-Cut delay time and check delay status.
Save Media	provides access to a further menu to turn Save media On (default) or Off. When set to On, printing will stop at the end of the image rather than scrolling out the full paper size.
Exit	returns to the Setup menu.

Dryer Menu



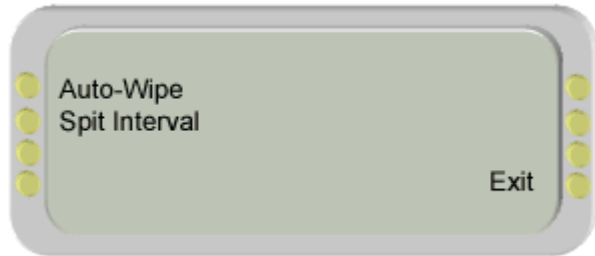
- | | |
|---------------|--|
| Dryer Setting | provides access to a selection screen for 12 different dryer/fan settings. |
| End of Plot | provides access to a selection screen in which you can define how the end of a plot is dried. At the completion of a print job, End of Plot (EOP) Dry ON with Rewind enables the printer to automatically advance the media at the printing speed 12 inches to allow the image to fully pass the heater. The media is then fed back into the printer at 25% of the normal reserve speed to avoid cockling on the retract move. Dry ON without Rewind allows the media to be advanced over the heater, but there may be blank media between prints. End of Print Dry OFF does not perform this at job completion and should be used when multiple plots are being printed. |
| Exit | returns to the Setup menu. |

User Setup Menu



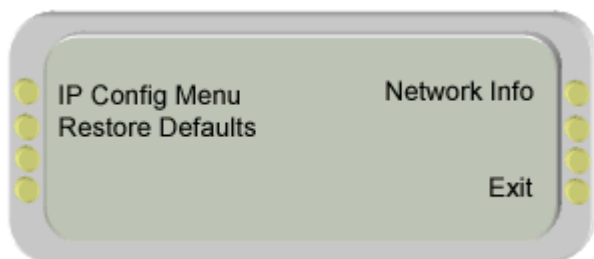
Select User	provides access to a further menu to select a previously saved user configuration. Default = User 1.
Save User	provides access to a further menu to save the current printer configuration to the selected user number. Default = User 1.
Units Select	provides access to a further menu to choose the calibration units: English (default) or Metric.
Language	provides access to a further menu to select the language used for the display. Choose from English (default) , German, French, Italian, Spanish, Portuguese.
Init Settings	returns the printer to its default settings. All previously saved options are erased.
Print: Settings	prints the current printer settings.
LCD Contrast	lets you select the contrast level of the display. Range is 1-8, 5 (default) (8 is less contrast)
Exit	returns to the Setup menu.

Ink Option Menu



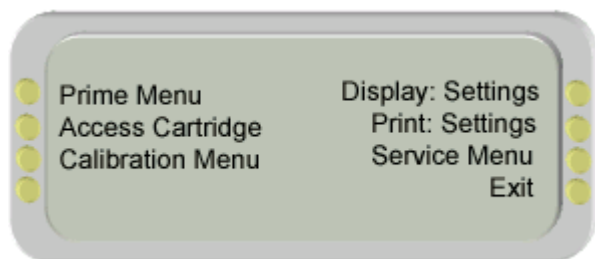
Auto-Wipe	provides access to a further menu to turn the Auto-wipe function Off or On (default) . When On, the cartridges are wiped during printing.
Spit Interval	provides access to a selection screen for spit interval.
Exit	returns to the Setup menu.

Network Menu



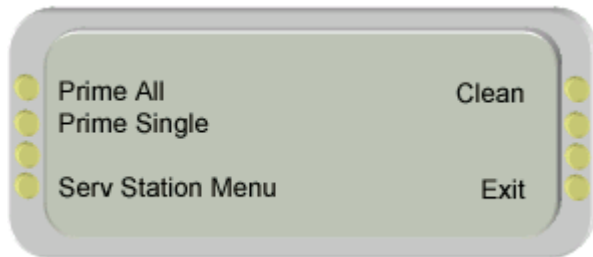
IP Config	Lets you set the IP address for the printer.
Restore Defaults	Restores the printer's default IP address.
Network Info	Displays the IP address, IP subnet mask, IP gateway, TCP Port, Mac address, DHCP Client (enabled/disabled), Ethernet
Exit	returns to the Setup menu.

Utility Menu



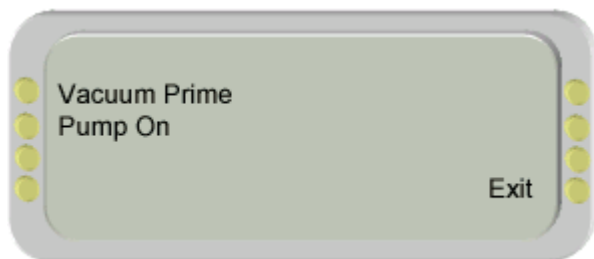
Prime Menu	provides access to further menus in which you can prime one or all of the cartridges.
Access Cartridge	moves the ink carriage out of the service station for installing and replacing cartridges and the media cutter.
Calibration Menu	provides access to a further menu for calibration options and diagnostics.
Display: Settings	displays information such as media and page width and height, on time, and cumulative plot time.
Print: Settings	prints information such as media size, firmware revision, RAM size, and plot hours.
Service Menu	provides access to the Service menu (technical support only)
Exit	returns to the Main menu.

Prime Menu



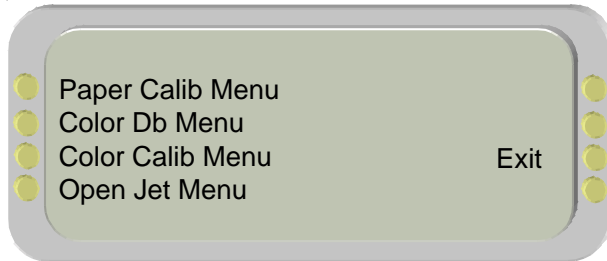
Prime All	primes all six cartridges.
Prime Single	provides access to a further menu for choosing an individual cartridge to prime.
Serv Station Menu	provides access to further menus for filling tubes and cleaning cartridges.
Clean	provides access to further selections for cleaning individual cartridges. Causes selected cartridges to clear their jets by expelling a small amount of ink into the waste bottle to help clear clogs and maintain optimal print quality.
Exit	returns to the Utility menu.

Service Station Menu



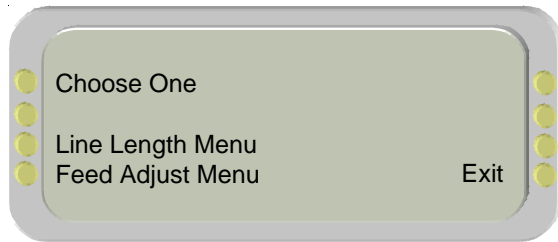
Vacuum Prime	use this option to help clear cartridge clogs or air from the ink lines.
Pump On	use this function to draw ink from the reservoir through the line fill cartridge when filling lines during installation or when flushing ink from the system to change ink types.
Exit	returns to the Utility menu.

Calibration Menu



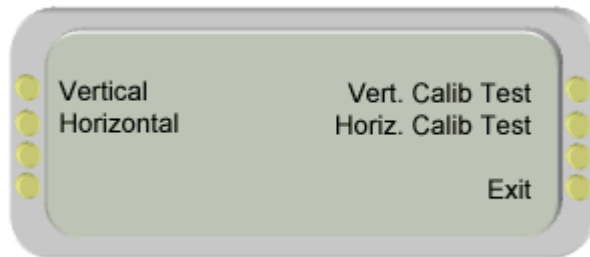
Paper Calib Menu	provides access to a further menu to select Line Length Test or Paper Calib Test. Both tests are used for paper calibration.
Color Db Menu	provides access to a further set of menus in which you can print the color deadband test pattern and set deadband velocity compensation for each cartridge.
Color Calib Menu	provides access to a further set of menus in which you can run the vertical and horizontal calibration patterns.
Open Jet Menu	provides access to a further set of menus in which you can print the jet status pattern and set the compensation for jets in each cartridge.
Exit	returns to the Utility menu.

Paper Calib Menu



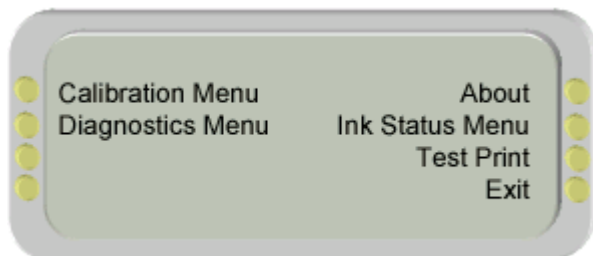
Line Length Menu	provides access to a screen for printing the line length test pattern and choosing line length value or image quality value.
Feed Adjust Menu	provides access to a screen for printing the feed adjust test and changing the feed adjust value.
Exit	returns to the Utility menu.

Color Calib Menu



Vertical	provides access to a menu in which you can enter the number which corresponds to the best vertical alignment in the test pattern for the C1, M1, C, M, and Y cartridges.
Horizontal	provides access to a menu in which you can enter the number which corresponds to the best horizontal alignment in the test pattern for C1, M1, C, M, and Y cartridges.
Vert/Horiz. Calib. Test	prints the current heads, current horizontal head to head, and other calibration patterns described in "Finishing Setup".
Exit	returns to the Utility menu.

Service Menu



Calibration Menu	provides access to other calibration options.
Diagnostics Menu	provides access to a further set of menus for performing diagnostics (tech support only).
About	provides information about the printer's firmware version, BROM, RAM, and printer size.
Ink Status Menu	provides access to a menu in which you can check the ink level for cartridges and ink bottles.
Test Print	automatically prints a test file stored in ROM on the printer. Use only under direction of technical support.
Exit	returns to the Main menu.

XEROX®**Technical Information A****INKTYPES:**

Dye and pigment inks.

MEDIAROLL PARAMETERS

Inner roll core: 2" and 3"

Max. outside roll diameter: 6"

Max. roll width: 60", 42"

RESOLUTION:

300 x 300 dpi (dot duplication)

600 x 600 dpi

1200 x 600 dpi (1200 interpolated)

FEATURES:

Rollfeed with cutter

Power feed and takeup

8 user-savable settings

Processor: PowerPC 405 GP

Ink cartridges (6)

700 ml ink reservoirs (6)

Automatic ink priming system

LINELENGTHACCURACY:

+/- 0.2% or +/-0.015 inches, whichever is greater.

INTERFACES:

100BaseT Compatible (RJ45 connector)

POWER:

100-120 / 200-240 VAC 50-60 Hz

Consumption:

25 W Idle

1120 W Typical

1225 W Maximum

OPERATING ENVIRONMENT:

59° - 85°F (15° - 30°C)

20 - 70% RH, Non-condensing

STORAGE ENVIRONMENT:

40° - 95°F (5° - 35°C)

5 - 80% RH, non-condensing

24 hours max. at temperatures below 32°F (0°C) and above 104°F (40°C).

CERTIFICATIONS:

Safety

Compliant with the requirements for class A ITE Products.

Electromagnetic Compatibility

Compliant with the requirements for Class A ITE products: FCC rules, DOC, Energy Star® compliant.

DIMENSIONS - 60" PRINTER AND STAND (UNPACKED)**Height** 48 in. (122 cm)**Width** 112 in. (284 cm)**Depth** 28 in. (72 cm)**Weight** 270 lbs. (122 kg)**DIMENSIONS - 42" PRINTER AND STAND (UNPACKED)****Height** 48 in. (122 cm)**Width** 94 in. (239 cm)**Depth** 28 in (72 cm)**Weight** 245 lbs. (111 kg)**Made in the U.S.A.**

These display messages are helpful in determining the status of the printer and possible corrective action when operation does not appear to be normal.

Alarms

You can view the currently active alarms by choosing ALARMS on the main menu. A blinking asterisk on the main menu indicates the presence of an alarm condition.

To view the alarm, press Alarms on the main menu. The alarms menu lists the error condition. If more than one alarm condition exists, press the Next button on the Alarms menu to view other alarms. If you cannot clear the error, record the message and the sequence of events leading to the message so that you can describe the problem to technical support personnel.

Carriage axis failure

If the “Carriage Axis Failure” message is displayed, cycle the printer's power to clear the error.

Cartridge

The printer automatically performs tests on the cartridges and uses the information to improve image quality, monitor cartridge life, and update the user with system status. Some tests are performed between prints and require no user input, while others require user input.

The following table shows cartridge-related error messages and corrective actions.

Error Message	Corrective Action
Invalid Ink Type!	Be sure all the cartridges are the same Xerox ink type. Your printer will not work if you have a mixture of different Xerox ink types. If you are using a new type of ink that has been introduced since you purchased your printer, you may need to upgrade the printer's firmware to accommodate the new ink type.
Invalid OEM ID!	Be sure the cartridge OEM value matches your printer OEM value. Your printer will not work with cartridges designated otherwise. OEM type information is available in the "About" menu display and also in Disp: Cart Info menu which is available in the Service menu. Replace the cartridge if necessary.
End of Jet Life!	Replace cartridge. You can check cartridge status by choosing Disp: Cart Info from the Service menu. End of cartridge life is indicated after 2800ml of use.
Pen Error - Code X	Be sure the cartridge is installed correctly. Your printer will not work if the cartridge doors are improperly secured. Replace the cartridge if necessary. If cartridge replacement does not eliminate the error, contact your service representative for assistance.
Invalid Pen ID	<p>Be sure that the ink in the cartridge is the same as in the other cartridges. (See <i>Invalid Ink Type</i> above.) Try the following: Cycle power on and off. Replace the cartridge if necessary. Clean the flex connections.</p> <p>If you are printing and this error occurs, cancel the print job. Press Utility Menu/Access Cartridges. Remove the cartridge and clean the flex connections. Replace the cartridge and press Utility Menu/Access Cartridges.</p>

When the cartridge error is displayed, choose **Utility/Service Menu/Ink Status Menu/Disp: Cart Info** to get information about the cartridge. Press **Utility Menu/Access Cartridge** to move the cartridges out of the service station. After the cartridge has been replaced, cleaned, etc., press Access Cartridge again to return the cartridges to the service station.

Ink system

The printer monitors the amount of ink in the disposal bottle and displays a warning when the waste bottle needs to be emptied. When the waste bottle is full or removed from the printer, service station functions will not be permitted. Be sure to dispose of ink properly. Ink bottle error messages and corrective actions are listed in the table below.

Error Message	Corrective Action
Invalid Ink Type!	Be sure all the ink bottles are the same Xerox ink type. Your printer will not work if you have a mixture of different Xerox ink types. If you are using a new type of ink that has been introduced since you purchased your printer, you may need to upgrade the printer's firmware to accommodate the new ink type.
Invalid OEM ID!	Be sure the ink bottle OEM value matches your printer OEM value. Your printer will not work with ink bottles designated otherwise. OEM type information is available in the "About" menu display and also in Disp: Bottle Info menu which is available in the Service menu. Replace the ink bottle if necessary. Bottle status is updated any time a bottle is changed or replaced. bottles can be removed and replaced during a print job but there is a timeout feature. If you're running out of ink, you can get a new bottle and swap out the old one without stopping the print job. If the timeout elapses before the bottle is replaced, the print job will pause and wait for a valid new bottle install before it can continue.
Ink Limit Reached!	Replace ink bottle. End of bottle life is indicated after 700ml of use.
Bottle Error - Code X	Be sure the bottle is installed correctly. Your printer will not work if the bottle is missing or improperly installed. Replace the bottle if necessary. If bottle replacement does not eliminate the error, contact your service representative for assistance.

Main board

Main board errors will be displayed as "MBID Error - Code X". "X" will be a specific error code number. For all main board errors, note the error code number and contact technical support for further assistance.

Memory

If the "Insufficient raster memory" message displays, press the Reset button on the Main menu to clear the message and abort the print job.



Troubleshooting C

This appendix contains valuable information to help you solve the most common printer problems. The problems addressed are divided into these types:

- Printer health
- Print quality
- Data transfer
- Application software

Troubleshooting quick list

Many common problems can be solved by checking for just three items:

- Is the printer connected to a good power source?
- Is the voltage switch on the back of the printer set correctly; i.e. 115/230?
- Is the network functioning correctly?

Isolating problems

You can quickly isolate problems to either the printer, computer/printer interface, or application software using the following procedure:

1. Turn the printer OFF, then ON.
2. Load media, then run a prime to assure that all jets fire. (See the Quick Start Guide.)
3. Perform a color calibration. (See the Quick Start Guide.)

If your printer fails during any of the above steps, call your reseller or call Technical Support. Otherwise, continue with the steps that follow.

4. Using the DOS Copy command, send a sample print directly to the printer through the Ethernet port. For example, on Windows 98, type: `copy /b <filename>.rtl lpt1`. On Windows NT type: `print /d:lpt1 <filename>`.
5. If your computer is running on a network, login and copy the sample file to the printer over the network.
6. If steps 4 or 5 fail, repeat them using another computer.

If any of the previous steps failed, your printer may not be correctly connected to your computer and/or network. Contact your network administrator or your reseller. Otherwise, continue with the steps that follow.

7. Print directly to the printer from several software applications.
8. If you are networked, login and try printing from several software applications.
9. If steps 7 or 8 fail, repeat them using another computer or remove from the network and test standalone.

If one application fails, but others print successfully, that can indicate a problem with a specific software package. Call technical support of the failed product. If all the applications fail, determine what they have in common; for example, a RIP box or Windows driver. Call technical support of the particular vendor.

Printer health

Printer will not turn on

Make sure the power cord is securely attached to the printer and plugged into an operating outlet.

Make sure the power switch is turned on.

Make sure total power load does not exceed main power circuit breaker limits for that power line.

Printer intermittently reboots

Check that power is coming to the printer.

Disconnect dryer AC power cable.

Display does not come on

Check that the power cord is plugged in and the printer switch is turned on.

Press any control panel button. The display should come on.

File will not print

Check your electrical connections.

Try using the EFPU (Emergency File Print Utility) to print the file. The EFPU is available on the System CD.

Slow printing under Windows

Windows applications naturally print slower than DOS applications. Be sure the Windows Print Manager is turned OFF.

Takeup roll doesn't turn

Be sure the media feed option is set to Takeup.

Takeup roll doesn't stop turning

Check that the take-up sensor is not blocked. There should be nothing between the take-up sensor and media.

Automatic cutter doesn't work or tears the paper

Make sure the Auto-Cut option is set to ON.

Make sure Media Supply Type is set to Roll or Roll2.

Make sure the cutter is properly installed. (See the Quick Start Guide.)

TURN POWER OFF and clean the inside of the black belt using alcohol and a lint-free cloth. Push the carriage back and forth to access all areas of the belt. Manually push the carriage all the way to the left to force the cutter to drop. Turn power on.

If the cutter is worn, replace it. You should replace the cutter after every 200 plots (more or less, depending on the type of media used).

Carriage jams

Check for media jams or blockage.

Be sure the service station is lowering. If it does not lower, push it left and down, or the cutter will not disengage.

Remove the service station. Allow the carriage to return to the service station area. If ok, inspect the area below service station for anything that might cause it to elevate.

Carriage axis failure

This may be caused by using media which may curl and cause carriage axis failure. Be sure to use inkjet quality media.

An obstruction in the path of the carriage assembly is hindering carriage movement. The obstruction may or may not be visible. Other common causes include dirty encoder strip, media interference, worn carriage bushings, cutter malfunction, and loose trailing cable connections.

After checking the following items, reboot the printer to ensure proper operation.

Note: If the error re-occurs, observe whether the carriage is in the same or different location.

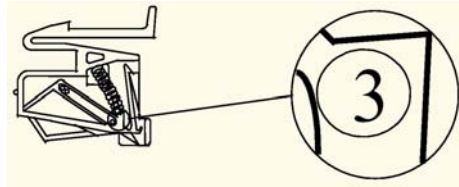
If the carriage is in the same spot, check the encoder strip for visible damage (clear plastic strip under the trailing cable tray and above the belt).

Verify that carriage movement is free and smooth by turning the power off and moving the carriage from one end of the shaft to the other (make sure there is no binding and that nothing is blocking the carriage movement).

(MAKE SURE POWER IS OFF BEFORE PERFORMING THIS STEP.)

Clean the top and bottom of the encoder strip using a cotton swab and distilled water (let it dry completely ~ approximately 30 minutes) before trying to operate the printer).

Remove the cutter from the left side of the carriage and check it for visible damage. Make sure cutter version 3 (or newer) is installed (see the figure below).



Check the shaft for visible damage (carriage moves back and forth on it during operation).

Clean the shaft with a lint-free cloth and isopropyl alcohol (let it dry completely before trying to operate the printer).

Check the belt for visible damage such as fraying and pieces coming off it.

Check the trailing cable (cable that moves during printer operation) for visible damage.

Check whether the idler assembly (located at the left end of the belt) moves freely. Check whether it is cracked or broken.

Cannot draw ink during initial siphon

Check that the ink bottle is securely installed.

Check whether foreign material has blocked the ink delivery lines. If necessary, flush the lines with distilled water, then reprime.

Initial siphon cannot be established

Check that ink bottles are securely installed.

Check ink delivery system for leaks in the lines. If leaks cannot be stopped, call Technical Support.

Ink cartridges do not fire properly

Be sure that cartridges and the service station are cleaned periodically to maintain good print quality. (See the Maintenance Guide.)

Cartridges may wear out after extended use. Try replacing the cartridge.

Store cartridges in a sealed container at room temperature when not in use for extended periods of time.

Make sure the protective tape is removed from the cartridges.

Remove the cartridge and reinstall it, or clean the electrical contact on the cartridge and carrier. Be sure it is clean and dry. Be sure the cartridge is seated properly. (See the Quick Start Guide.)

Check that ink is being fed through the delivery lines. If necessary, prime the ink line by choosing **Utility Menu/Prime Menu/Service Station Menu/Vacuum Prime**.

Be sure the ink bottles are not empty.

Cartridges leaking

Ensure cartridges are installed correctly.

Ensure lines are primed and filled with ink.

Various nozzles are clogged or stop firing

Use the printer's Clean function; **Utility Menu/Prime Menu/Clean**.

Repeat prime several times.

Remove, clean, and reinstall cartridge; repeat prime. Do not use alcohol on the jet area.

Clean service station; clean cartridge again; repeat prime.

Clean cartridge electrical contacts using a cotton swab moistened with water. Dry contact. Repeat prime. Do not use acetone or any other harsh cleaner as this may cause damage to the flex cable.

Nozzle may have failed. Replace cartridge.

Check to see whether spray from printing has contaminated the flex contact. Remove the cartridge and wipe the carriage flex and cartridge flex with a cotton swab moistened with water.

Run the jet status plot as described in the Quick Start Guide. If sections of the print are missing, add the affected jets to the compensation list. Replace the cartridge if necessary.

Ink spills on the flex cable

Flex cable refers to the copper contacts on the carriage where the cartridge seats. Clean the flex cable gently with a cotton swab moistened with water. Do not use acetone or any other harsh cleaner as this may cause damage to the flex cable.

Dryer 'Disabled' Condition (under Sensor Status)

Check voltage switch position (either 115V or 230V depending on region). For a dryer set to 115V and operated at 230V line input, the circuitry in the dryer will sense over temperature due to the excessive current (prior to the circuit breaker tripping). This will cause the dryer to go into shutdown mode, turning the heaters off and cycling the fans. Turn power off and on again.

Caution: When the printer's power cord is plugged in, AC power is routed to the dryer regardless of the printer power switch position. Always remove power from the printer and dryer (turn off printer power switch and unplug printer's power cord) whenever switching voltage switch positions or when manipulating the circuit breaker. To reinitialize the printer, apply power to the printer and dryer (plug in printer power cord and turn on printer power switch).

Printer settings are lost when printer is turned off or rebooted

Be sure to save your printer settings to a user number. (See "Saving User Settings" in Chapter 2.) When you are ready to print, select the user number that you saved.

What if I need a firmware upgrade?

You can download firmware upgrades from Xerox's Internet web page www.xerox.com.

Firmware Download Procedure (Upgrade/Printer Refresh)

If your printer is set up using a printer server, you can use the Emergency File Print Utility (EFPU) to download the new firmware to your printer. The EFPU can be found on the System CD.

1. Using the EFPU, send the XXXX.ROM file to the printer.
Approximately 20 - 40 seconds later a single beep should be heard, indicating the download was successful. After a one second delay, the printer will automatically reboot. The printer should come up normally. Verify the new firmware revision by sequencing through **Utility Menu /Service Menu/ About** menu.
2. If multiple beeps are heard, reboot printer and reseal the Ethernet connection. Resend the .ROM file to the printer.

Print Quality

Many of the print quality concerns can be resolved by priming, cleaning, calibrating and using the printer's Clean Function. When this is the case, "Prime, clean, calibrate, or replace" is indicated with other solutions. Refer to the following for details:

Clean Function - see "Cartridge Cleaning" in the Maintenance Guide

Prime - see Quick Start Guide

Clean - see Maintenance Guide

Calibrate - see Quick Start Guide

Replace - see Maintenance Guide

No print appears

Check that tape has been removed from the printhead of the cartridge.

White lines or large gaps on print or portions of characters missing

Clean Function, prime, clean, calibrate, or replace cartridges.

Check if the ink bottle is empty. Replace or refill if necessary.

Make sure the media feeds freely.

Overall print quality is poor

Prime, clean, calibrate, or replace cartridges.

Make sure the printer is positioned on level ground.

Use a higher quality print mode, such as Ultrafine.

Be sure you are using genuine Xerox inks and media.

Cartridge spits small amounts of ink on paper

Nozzle plate may be flooded. Try using a lower firing rate or replacing the cartridge.

Streak marks

Clean the service station at least once a week, or more often, depending on the number of prints you are running. (See the Maintenance Guide.)

Prime, clean, calibrate, or replace cartridges.

Line drawings exhibit bleeding

Be sure you are printing on the coated side of the media. Load cut sheet media so that the notch is on the side closest to the carriage. Roll feed media should be loaded so the coated side is on the outside.

If your application software permits, use gamma correction to lighten the color.

Too much air may have been drawn into the cartridge during extended operation.

Colors print as monochrome

Be sure the Color/Mono mode is set correctly. To change a specific drawing from monochrome to color or vice versa, you must switch the Color/Mono setting and re-transmit the file.

Ink smears after removing the print

Be sure the ink is dry before removing the print. Turn the dryer on.

Smudged or dark characters

Be sure you are using the correct type of media for the application.

Make sure the media is straight and unwrinkled when loading it into the printer.

Prime, clean, calibrate, or replace cartridges.

Try a different print mode.

Improperly formed or misaligned characters

Calibrate cartridges.

Color problems or shadowing

Calibrate cartridges.

Excessive graininess

Perform color deadband compensation.

Ghosting

The temperature of the print cartridge affects the size of the dots it prints. When the cartridge is warmer it produces slightly larger dots than when it is cool. Several things affect the temperature of the cartridge including the ambient temperature, the number of dots that have recently been printed and the cartridge heater circuit. This change in temperature and subsequent spot size causes what is referred to as “ghosting” or “parasitic suppression”. Ghosting can occur when printing unidirectional if there is an area in the image in which the cartridge is not firing (i.e. a white box within a filled area). Since the cartridge cooled down while it wasn't printing, a light area can appear adjacent to the non-printed area. This light area is “ghosting”. By using the cartridge heaters to warm the cartridge in these non-printed areas, the change in temperature helps minimize “ghosting”.

STEPS TO MINIMIZE GHOSTING (PARASITIC SUPPRESSION)

1. Slow the carriage speed down to 5 or lower.

On the Main Menu, press **Setup Menu/Print Mode Menu/Carriage Speed**. In the Carriage Speed menu, adjust the value to **5** or less and press **OK**. If you are printing using software to control the printer, you need to make these adjustments in the software.

2. Put the printer in a bi-directional mode.

On the Main Menu, press **Setup Menu/Print Mode Menu/Print Direction**. In the Print Direction menu, adjust the value to **BI** and press **OK**. If you are printing using software to control the printer, make these adjustments in the software.

Colors are not correct or sections of print missing

Prime, clean, calibrate, or replace cartridges.

If you are using a third party RIP, contact the RIP vendor to determine whether they have updated their color tables to work with Xerox inks.

Image is the wrong size

Be sure the dpi setting (300, 600 or 1200) matches the resolution of your image file. See Chapter 2 for instructions.

Print contains only partial image

Check the settings of the Margins option. When Margins are set to Normal (the default), the print area is smaller than when Margins are set to Expanded. Try setting the Margins option to Expanded to make the print area larger.

The printer may not have correctly sized your media. Use the Manual Load option to load your media. (See the Quick Start Guide.)

The printer automatically prints in portrait orientation (X axis = paper axis). If you rotated the image in your application to save paper, set the paper size to the next larger size (for example, if you are printing a C size image, choose D size paper). Be sure to set Save Media to ON. This stops the printer from scrolling the full paper height.

Jagged vertical lines

Prime, clean, calibrate, or replace cartridges.

If these suggestions fail, call Technical Support for instructions on cleaning the encoder strip and performing deadband calibration.

Spotchy area fill

Try using Productivity mode. If the problem persists, prime, clean, calibrate, or replace cartridges.

Excessive banding in area fills

Consistent banding is generally a hardware problem; inconsistent banding is generally a software problem.

Use specially coated inkjet media. Xerox offers a full line of high quality inkjet media.

Change the Print Mode option to Productivity. (See "Print Modes" in Chapter 2.)

Prime, clean, calibrate, or replace cartridges.

Set Auto-wipe function to off.

Portions of lines are missing

Prime, clean, calibrate, or replace cartridges.

Clean service station; clean cartridge again; repeat prime.

Clean carriage flex cable and cartridge electrical contacts; repeat prime. Do not use alcohol, acetone, or other cleansers. Use a cotton swab moistened in distilled water. Use tap water if distilled water is not available.

Poor vertical or horizontal line quality

Perform color calibration. (See the Quick Reference Guide.)

Data Transfer

Printer doesn't generate a print

Be sure your printer is connected to the port to which you are sending the file.

If you are printing over a network, you will need to determine whether the problem is in the network. Try connecting the printer directly to your computer and send the file again. Be sure that network settings are correct as described in the Network Setup Guide online help.

Problems printing over a network

Be sure that the printer is configured to run on the network. Pick a driver in your software that is also listed under Emulation on the printer.

No output when printing from Unix

If you encounter “no output” problems when printing from Unix, try the following:

1. Check the printer hardware.

- Check that the printer is plugged in and turned on.
- Check that the cable is connected to the port on the printer and the port on the workstation or server.
 - Check that the cable is the correct cable and is not defective.
 - Check that hardware switches for the port are correctly set.
 - Use the printer's self-test feature or run the demo print to assure that the printer is functioning.

2. Verify network connections.

- On a print client or server, type *ping system-name* and press Return. This command checks that the network link between the print server and print client is set up correctly.

If the message says the system is alive, the network is functioning. The message also tells you that either a naming service or the local `/etc/hosts` file has translated the host (system) name entered into an IP address. If it hasn't, you must enter the IP address.

- If you get a "not available" message, check the following:
 - How is NIS or NIS+ set up at the site?
 - Do you need to take additional steps to allow the print servers and print clients to communicate with each other?
 - If your site is not running NIS or NIS+, have you entered the IP address for the print server in each client's `/etc/hosts` file and entered all print client IP addresses in the `/etc/hosts` file of the print server?
 - Check that the port monitor is configured correctly on the print server.

- Check that the network listen services are registered with the port monitor on the print server.
3. Check the LP print service.
 - On both the print server and print client, make sure the LP print service is running.
 - On both the print server and client, make sure the printer is accepting requests.
 - On both the print server and print client, make sure the printer is enabled to print requests.
 - On the print server, make sure the printer is connected to the correct serial port.
 - On both the print server and print client, make sure the printer is configured properly.
 - On the print server, make sure the printer is not waiting because of a fault.
 - Make sure the printer is not set up as a login terminal.

Application Software

Isolating a problem to your software

Sometimes printing problems are application software-specific.

Try printing the test file on the system CD. If the test file prints, the printer's health is probably good.

Try printing a simple file from your application or from another application. If this prints correctly, the problem may be with your software.

If you are using a Windows application and the file does not print from Windows, try printing a file from EFPU. If this prints correctly, your problem may be with your Windows driver or Windows setup.

Difficulty generating prints ranging from A to E size

Many software applications limit the maximum print size to "C" or "D" size due to the way that they map their internal coordinate system to memory.

Calling for Help

If you have tried the suggestions in this manual and still need assistance, call the reseller where you purchased your printer.

Before you call technical support for help, be sure that you have all of the following information available:

Printer Information

- model
- firmware
- revision (letter)
- memory
- serial number

Computer Information

- model
- operating system
- connection (serial or parallel)

Customer Technical Support

To resolve printer problems, use the suggestions provided in this guide. If you continue to have problems, call 1-800-821-2797.