

# **System Maintenance Utility**

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#### Introduction

The System Maintenance Utility is designed to assist the customer with common maintenance tasks for the printer and also to resolve common problems that they may encounter.

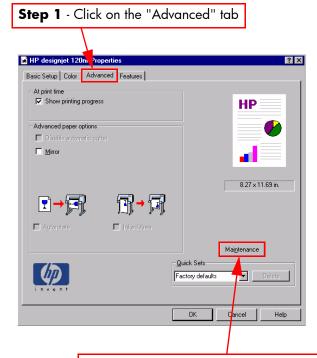
Print jobs must not be sent to the printer while the system maintenance utility is in use.

Since the design of the System Maintenance Tool is different between the Designjet 120/120nr and Designjet 130/130, this chapter will explain how to use the tool for each product separately:

- Explanation on how to use the System Maintenance Utility for the Designjet 120/120nr is found on Page 4.
- Explanation on how to use the System Maintenance Utility for the Designjet 130/130nr is found on Page 14.

# Launching the System Maintenance Utility (Designjet 120/120nr)

The System Maintenance Utility is launched via the hp printer driver.



**Step 2** - Click on the "Maintenance" box

When you finish using the System Maintenance Utility, you must click on exit on the left hand column before closing the browser.



# Launching the System Maintenance Utility (Designjet 90/90r/130/130nr)

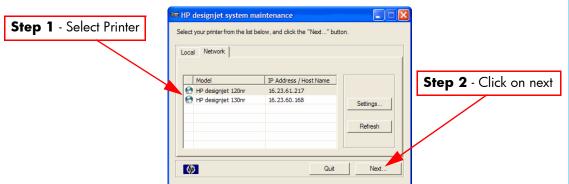
There are two ways of launching the System Maintenance Utility.

#### From your computer's desktop (Windows, Mac OS 9 and X)

1 Double click the hp designjet system maintenance icon on the desktop.



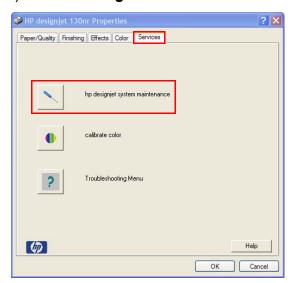
2 A printer selector window opens - select your printer from the list.



3 Click **Next** (in Windows) or **Configure** (in Mac OS).

### From the Printer Driver (Windows, Mac OS X)

In the Windows driver click the *hp designjet system maintenance* icon in the **Services** tab. In Mac OS X, select the Printer in the *Print Center* or *Print Setup Utility* and click **configure**.



When you finish using the System Maintenance Utility, you must click on exit on the left hand column before closing the browser.



## System Maintenance Utility (HP Designjet 120/120nr)

#### **Color Calibration**

The Color Calibration should ONLY be performed by the user when required.

#### Why calibrate color?

**Calibrate color** performs a maintenance function to ensure color consistency. If you calibrate correctly, the colors printed on printers with different printheads will look very similar.



This picture shows an exaggerated example of how a printout could look like before and after color calibration.

#### When do I calibrate color?

It is recommended that you **calibrate color** every time you replace a printhead or when you perceive color degradation on the printouts. There is no need to perform this operation each time you print. The results of the color calibration will be applied to all print jobs that follow, even if you power off the printer.

Perform color calibration if you print with the regular hp designjet 120 printer driver, which was included with the printer or which you downloaded from the Web. If you use a PostScript driver such as Adobe PS or LaserWriter to print through a PostScript RIP provided by HP or another third-party company, the results of **calibrate color** will not be applied to your print jobs. In this case, refer to your PostScript RIP documentation for information on how to perform color calibration.

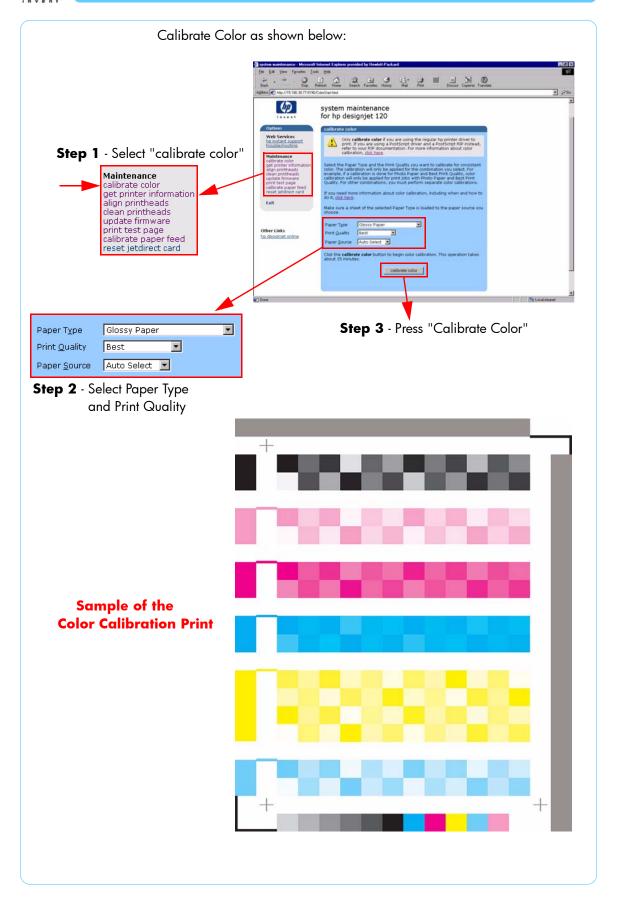
#### How do I calibrate color?

You have to **calibrate color** for every Paper Type that requires color consistency. For example, if you require consistent colors on glossy paper and on heavy weight coated paper, you must perform one color calibration for the former and another for the latter Paper Type.

When you want to calibrate color, remember to select the Print Quality option that you are going to use to print. For example, if you want to print with the High Resolution option, select High Resolution before performing the color calibration.

If the Color calibration fails, print the information page and check the list of warnings under the printer status section.





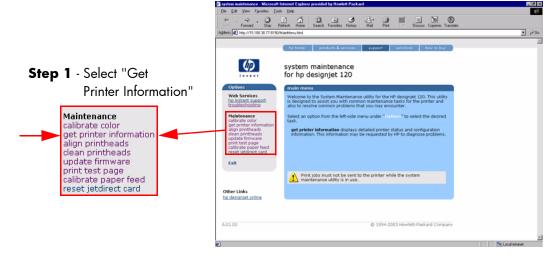


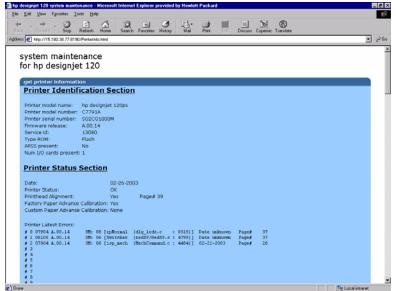
#### **Get Printer Information**

This option allows you to view all the information available on the Printer:

- Printer Identification.
- Printer Status.
- Printer Job Queue.
- Printer Errors and Warnings.
- Printer Usage.
- Ink Consumable Identification.
- Ink Consumable Status.
- Ink Consumable Usage.
- Network Card Information.

Refer to the **Test Prints** chapter for explanations on each section.





Sample of the information page

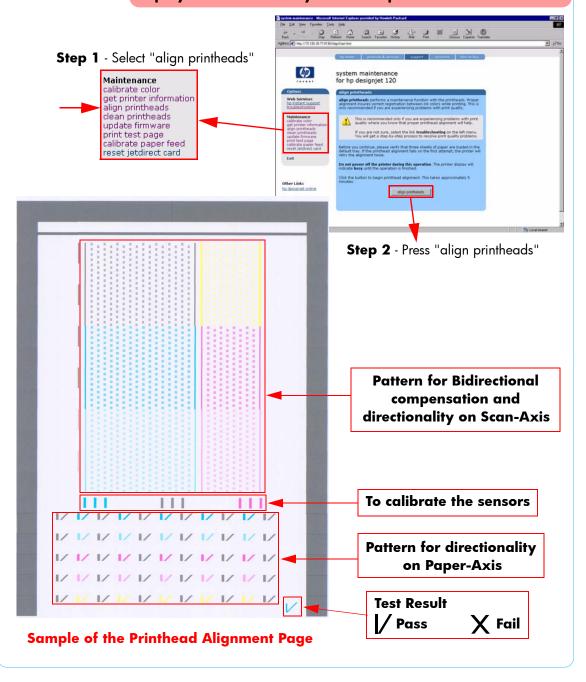


## **Align Printheads**

**Align printheads** performs a maintenance function with the printheads. Proper alignment insures correct registration between ink colors while printing. This is only recommended if you are experiencing problems with print quality.

Before you continue, please verify that three sheets of paper are loaded in the default tray. If the printhead alignment fails on the first attempt, the printer will retry the alignment twice.

Do not power off the printer during this operation. The printer display will indicate busy until the operation is finished.





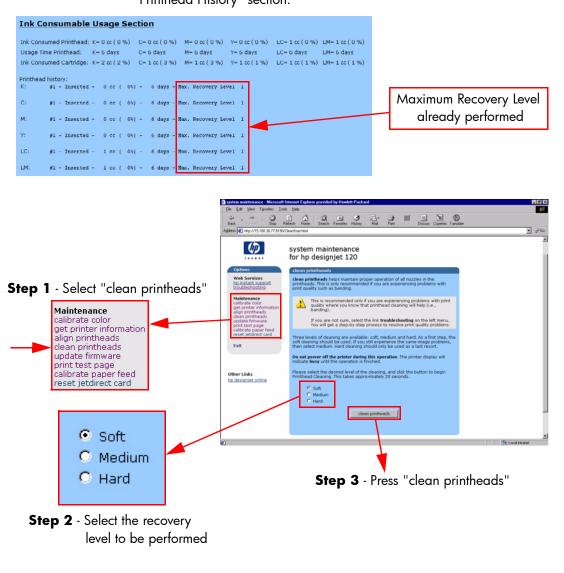
#### **Clean Printheads**

**Clean printheads** helps maintain proper operation of all nozzles in the printheads. This is only recommended if you are experiencing problems with print quality such as banding.

Three levels of cleaning are available: soft, medium and hard. As a first step, the soft cleaning should be used. If you still experience the same image problems, then select medium. Hard cleaning should only be used as a last resort.

## Do not power off the printer during this operation. The printer display will indicate busy until the operation is finished.

Before cleaning the printheads, first check the maximum recovery level already performed on the printheads. If hard level (Recovery Level 3) has already been performed, then do not try performing hard level again. The Maximum Recovery Level can be seen on the Printer Information page in the "Printhead History" section.



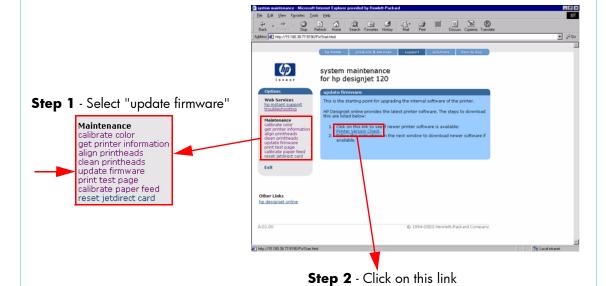


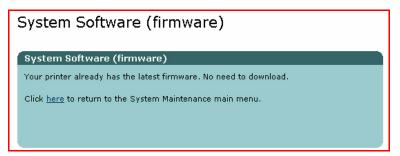
## **Update Firmware**

**Update firmware** updates the built-in software of the printer. The update process will check the printer's version with the latest version available from HP. Before trying this utility, first make sure that you have an internet connection.

Do not power off the printer during this operation. The printer display will indicate busy until the operation is finished.

The first step will be to check if newer printer software is available. If newer software is available, then follow the instructions in the window in order to upgrade the printer software.





If newer printer software is not available, then this message will be displayed

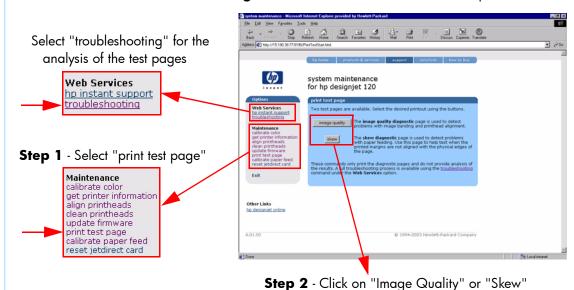


## **Print Test Page**

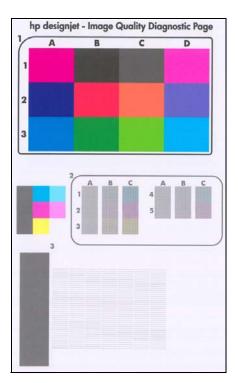
**Print test page** provides two diagnostic pages for printing. The following test pages are available:

- Image Quality Diagnostic page.
- Skew Diagnostic page.

These commands only print the diagnostic pages and do not provide analysis of the results. A full troubleshooting process is available using the **troubleshooting** command under the **Web Services** option.



hp designjet - Skew Diagnostic Page

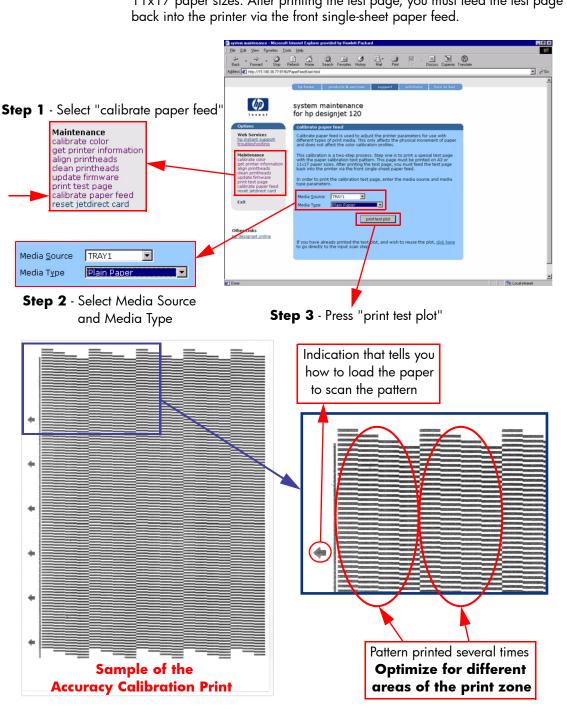




## **Calibrate Paper Feed**

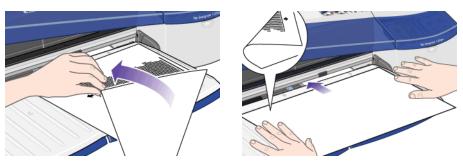
Calibrate paper feed is used to adjust the printer parameters for use with different types of print media. This only affects the physical movement of paper and does not affect the color calibration profiles.

This calibration is a two-step process. Step one is to print a special test page with the paper calibration test pattern. This page must be printed on A3 or 11x17 paper sizes. After printing the test page, you must feed the test page back into the printer via the front single-sheet paper feed.

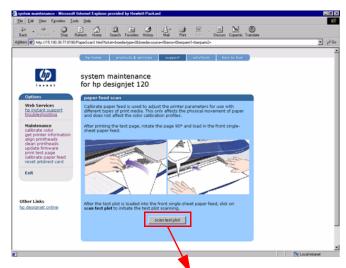




Once the Accuracy Calibration has been printed, rotate the page and reload it upside down (image facing down).



Step 1 - Rotate the page and reload it upside down (image facing down)



Step 2 - Press "scan test plot"

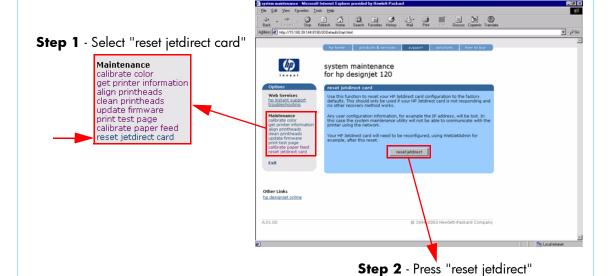


### **Reset Jetdirect Card**

Use this function to reset the HP Jetdirect card configuration to the factory defaults. This should only be used if the HP Jetdirect card is not responding and no other recovery method works.

Any user configuration information, for example the IP address, will be lost. In this case the *system maintenance* utility will not be able to communicate with the printer using the network.

The HP Jetdirect card will need to be reconfigured, using WebJetAdmin for example, after this reset.



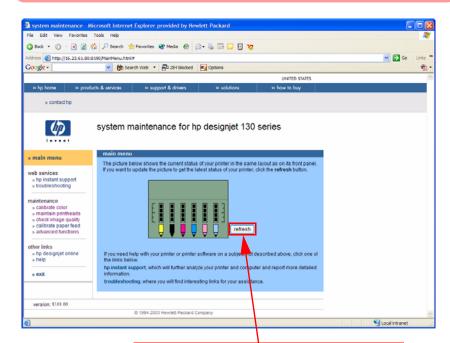


## System Maintenance Utility (Designjet 90/90r/130/130nr)

## Main Menu - Printer Front Panel Replication

The main page of the System Maintenance Utility includes a replica of the Printer's Front Panel showing the status of the Printer.

The replica Front Panel does not show the real-time status. It is a snapshot which can be refreshed by pressing the refresh button either on the web browser toolbar or in the actual replica window.



Click to refresh status of Front Panel



#### **Color Calibration**

The Color Calibration should ONLY be performed by the user when required.

#### Why calibrate color?

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This picture shows an exaggerated example of how a printout could look like before and after color calibration.

#### When do I calibrate color?

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Perform color calibration if you print with the regular hp designjet 120 printer driver, which was included with the printer or which you downloaded from the Web. If you use a PostScript driver such as Adobe PS or LaserWriter to print through a PostScript RIP provided by HP or another third-party company, the results of **calibrate color** will not be applied to your print jobs. In this case, refer to your PostScript RIP documentation for information on how to perform color calibration.

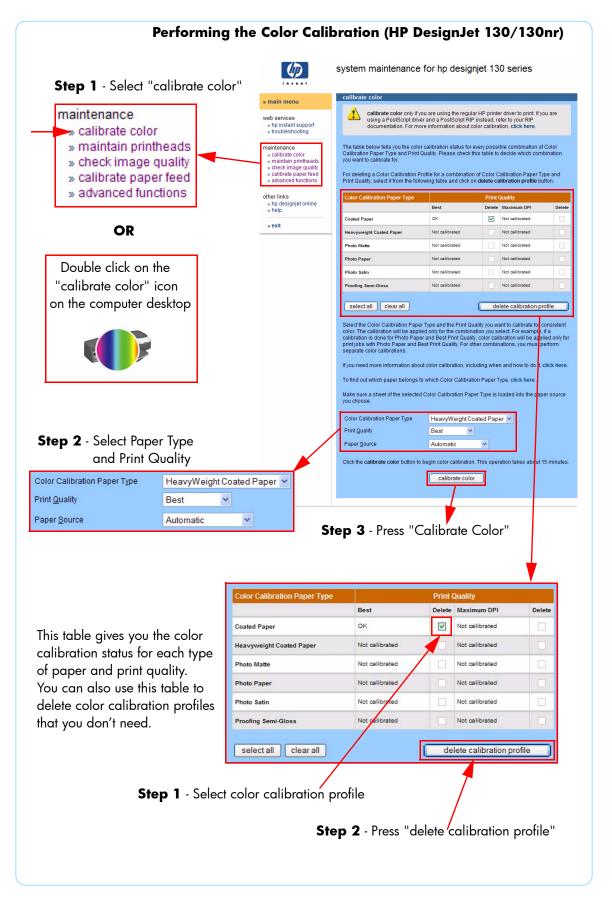
#### How do I calibrate color?

You have to **calibrate color** for every Paper Type that requires color consistency. For example, if you require consistent colors on glossy paper and on heavy weight coated paper, you must perform one color calibration for the former and another for the latter Paper Type.

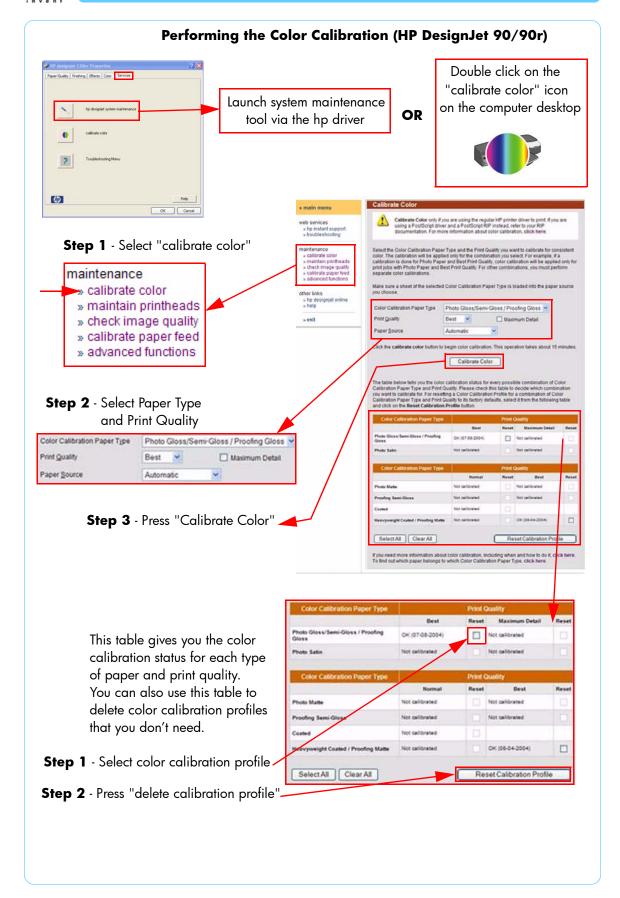
When you want to calibrate color, remember to select the Print Quality option that you are going to use to print. For example, if you want to print with the High Resolution option, select High Resolution before performing the color calibration.

If the Color calibration fails, print the information page and check the list of warnings under the printer status section.













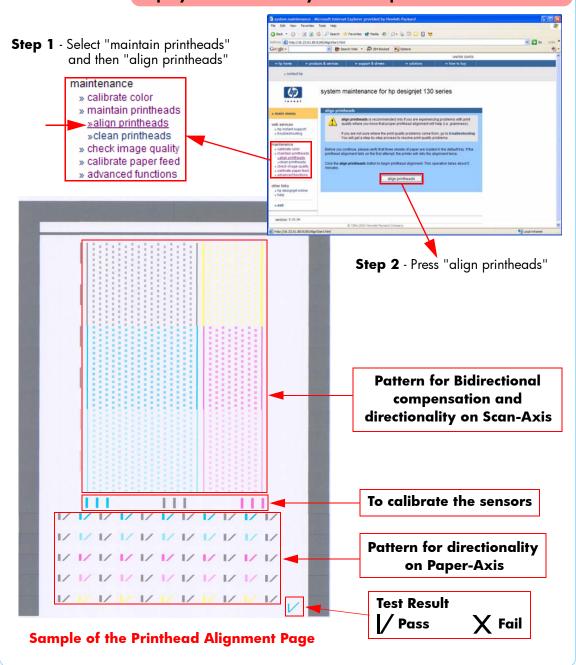


## **Align Printheads**

**Align printheads** performs a maintenance function with the printheads. Proper alignment insures correct registration between ink colors while printing. This is only recommended if you are experiencing problems with print quality.

Before you continue, please verify that three sheets of paper are loaded in the default tray. If the printhead alignment fails on the first attempt, the printer will retry the alignment twice.

Do not power off the printer during this operation. The printer display will indicate busy until the operation is finished.





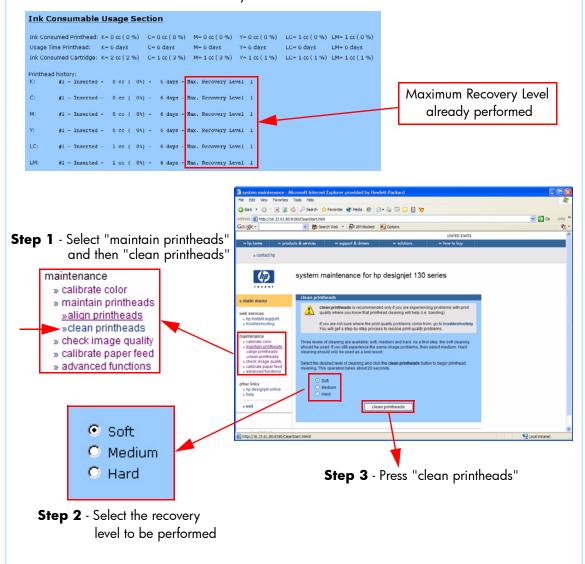
#### Clean Printheads

**Clean printheads** helps maintain proper operation of all nozzles in the printheads. This is only recommended if you are experiencing problems with print quality such as banding.

Three levels of cleaning are available: soft, medium and hard. As a first step, the soft cleaning should be used. If you still experience the same image problems, then select medium. Hard cleaning should only be used as a last resort.

## Do not power off the printer during this operation. The printer display will indicate busy until the operation is finished.

Before cleaning the printheads, first check the maximum recovery level already performed on the printheads. If hard level (Recovery Level 3) has already been performed, then do not try performing hard level again. The Maximum Recovery Level can be seen on the Printer Information page in the "Printhead History" section.



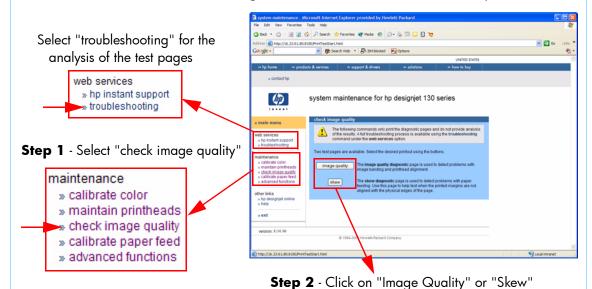


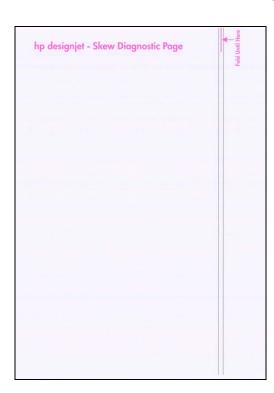
## **Check Image Quality**

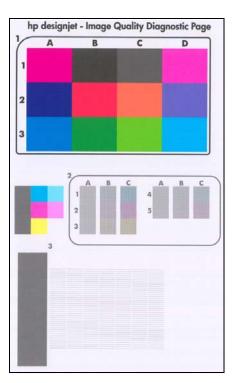
**Check image quality** provides two diagnostic pages for printing. The following test pages are available:

- Image Quality Diagnostic page.
- Skew Diagnostic page.

These commands only print the diagnostic pages and do not provide analysis of the results. A full troubleshooting process is available using the **troubleshooting** command under the **Web Services** option.





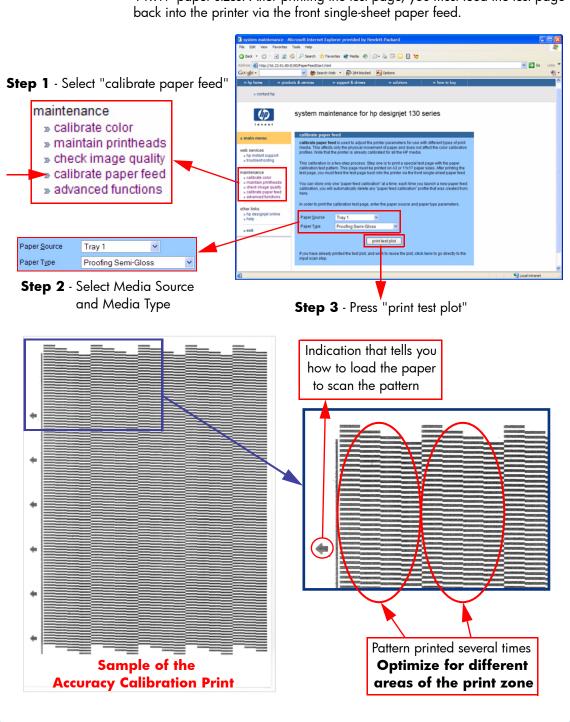




## **Calibrate Paper Feed**

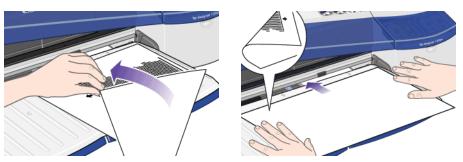
Calibrate paper feed is used to adjust the printer parameters for use with different types of print media. This only affects the physical movement of paper and does not affect the color calibration profiles.

This calibration is a two-step process. Step one is to print a special test page with the paper calibration test pattern. This page must be printed on A3 or 11x17 paper sizes. After printing the test page, you must feed the test page back into the printer via the front single-sheet paper feed.

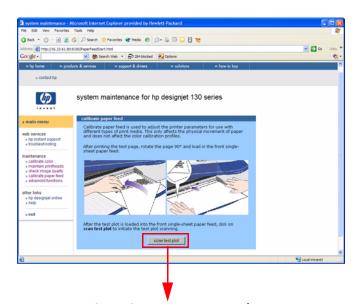




Once the Accuracy Calibration has been printed, rotate the page and reload it upside down (image facing down).



Step 1 - Rotate the page and reload it upside down (image facing down)



Step 2 - Press "scan test plot"

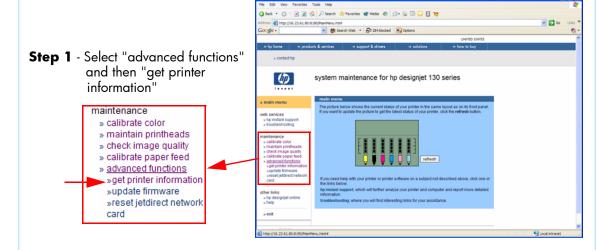


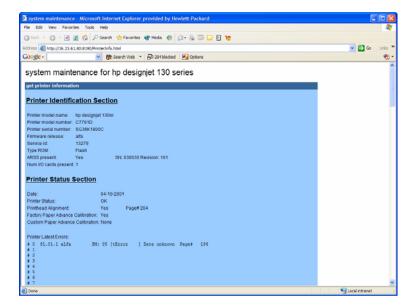
#### **Get Printer Information**

This option allows you to view all the information available on the Printer:

- Printer Identification.
- Printer Status.
- Printer Job Queue.
- Printer Errors and Warnings.
- Printer Usage.
- Ink Consumable Identification.
- Ink Consumable Status.
- Ink Consumable Usage.
- Network Card Information.

Refer to the **Test Prints** chapter for explanations on each section.





Sample of the information page



## **Update Firmware**

**Update firmware** updates the built-in software of the printer. The update process will check the printer's version with the latest version available from HP. Before trying this utility, first make sure that you have an internet connection.

Do not power off the printer during this operation. The printer display will indicate busy until the operation is finished.

The first step will be to check if newer printer software is available. If newer software is available, then follow the instructions in the window in order to upgrade the printer software.

Step 1 - Select "advanced functions" and then "update firmware"

| Select |

If you do not have Internet access, you can still send a new firmware file (which you have received on CD from HP) from your computer to the Printer.



If newer printer software is not available, then this message will be displayed



#### **Reset Jetdirect Network Card**

Use this function to reset the HP Jetdirect Network card configuration to the factory defaults. This should only be used if the HP Jetdirect Network card is not responding and no other recovery method works.

Any user configuration information, for example the IP address, will be lost. In this case the *system maintenance* utility will not be able to communicate with the printer using the network.

The HP Jetdirect Network card will need to be reconfigured, using WebJetAdmin for example, after this reset.

**Step 2** - Press "reset jetdirect network card"