Calibrations

Calibrations

The following Calibrations can be performed on the printer:

1 Accuracy Calibration (performed by Repair Center) ⇒ Page *3*

The Accuracy Calibration needs to be performed whenever:

- Banding is detected in printed images.
- The Feed Roller Assembly is disassembled **or** replaced.
- The Paper-Axis Motor Drive Assembly is disassembled **or** replaced.
- The Encoder Disc is removed **or** replaced.

2 Printhead Alignment ⇒ Page *5*

The purpose of the Printhead Alignment is to correct the alignment between the printheads in order to prevent color misalignment and print quality defects like banding. Normally the Printhead Alignment is launched automatically after a Printhead has been replaced. The Printer prints the Printhead Alignment page and scans the pattern on the page in order to align the printheads.

3 Color Calibration (performed by user) ⇒ Page *6*.

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.

How to Access Restricted Access Utilities

Some of the Service Utilities are restricted to hp qualified personnel only. To access these restricted service utilities, while the printer is switched OFF, press both the **resume** and **power** buttons together until the Tool icon appears on the front panel.

Tool Icon

press both the **resume** and **power** buttons together
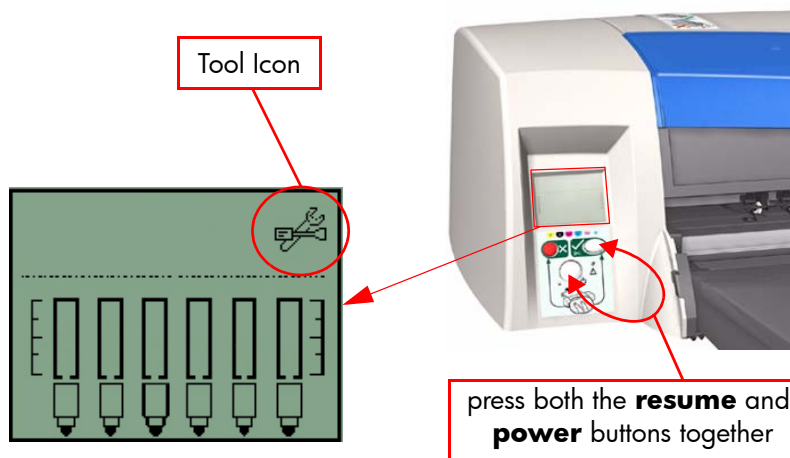
Accuracy Calibration

The Accuracy Calibration should ONLY be performed at the Repair Center when required.

The Accuracy Calibration needs to be performed whenever:

- Banding is detected in printed images.
- The Feed Roller Assembly is disassembled **or** replaced.
- The Paper-Axis Motor Drive Assembly is disassembled **or** replaced.
- The Encoder Disc is removed **or** replaced.

Make sure that you use hp Proofing Gloss in order to perform the Accuracy Calibration.

Perform the Accuracy Calibration as follows:

1 Load an A3/B-size sheet of hp Proofing Gloss in to the input tray.

2 To manually print the Accuracy Calibration, hold the power button down and press the cancel button **once** and the resume button **once**.
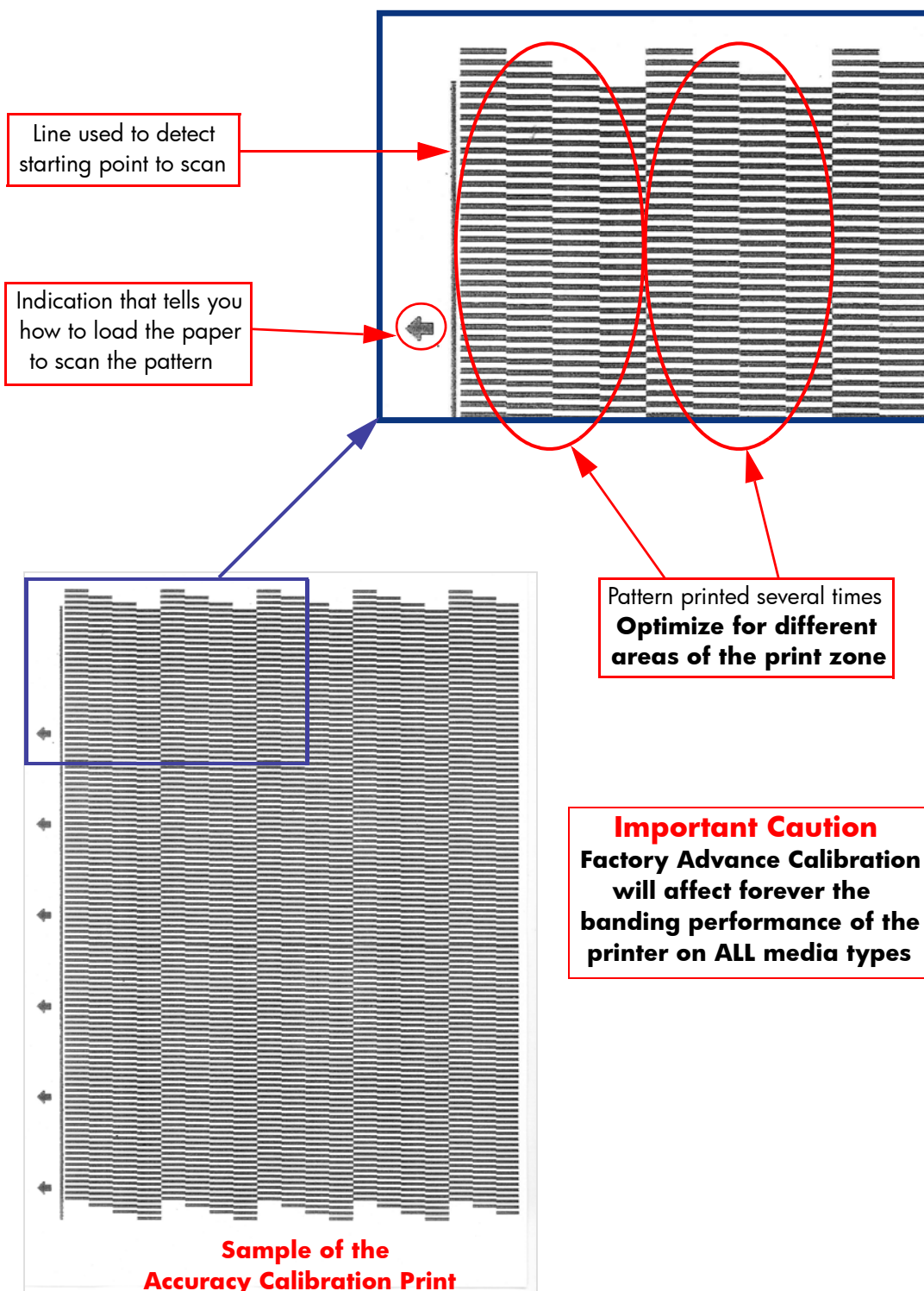
To Print the Accuracy Calibration

Press Cancel button **once**

Press Resume button **once**

Hold Power Button

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

4 To scan the Accuracy Calibration, hold the power button down and press the cancel button **once** and the resume button **four times**.
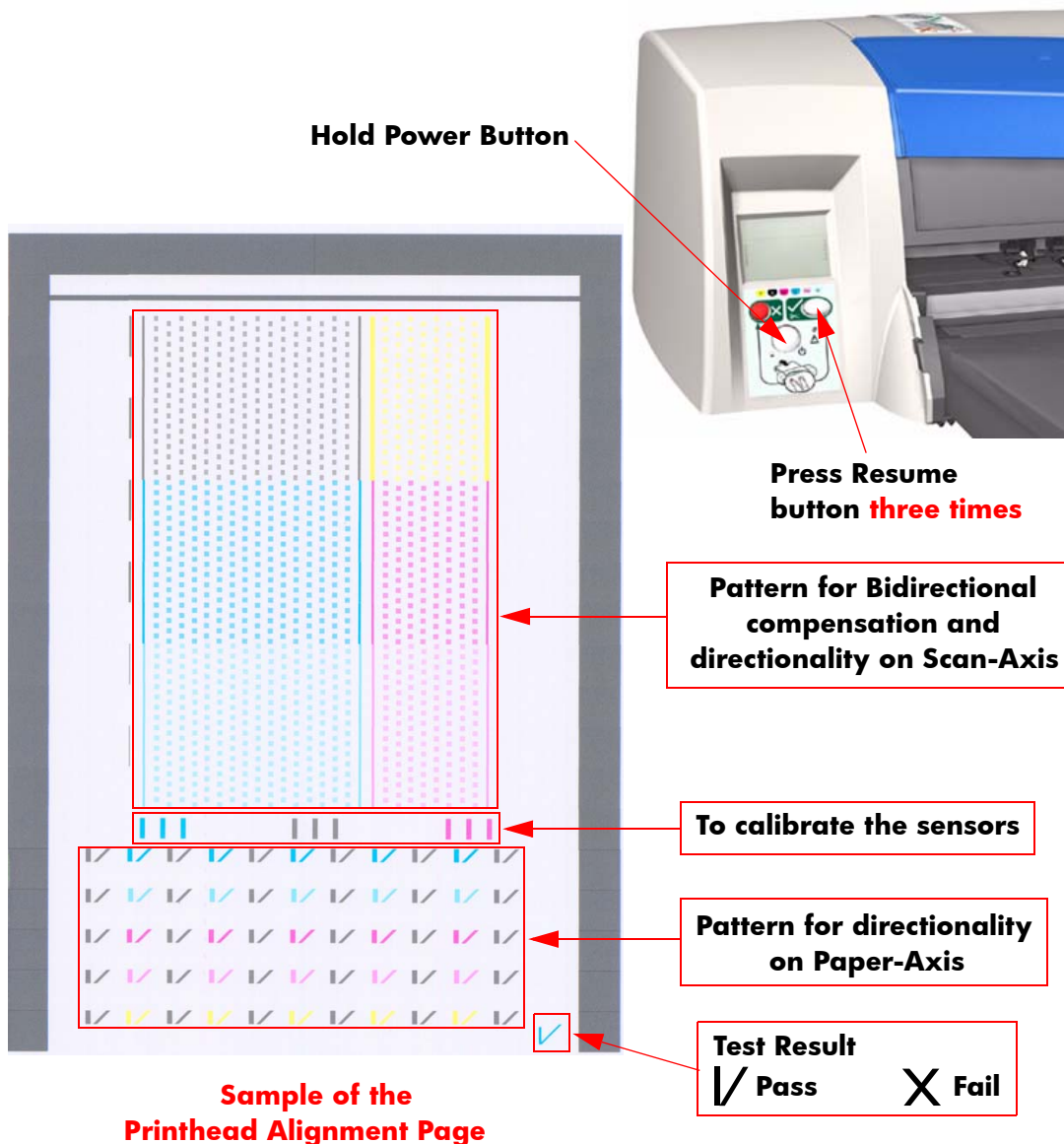
To Scan the Accuracy Calibration

Press Cancel button **once**

Press Resume button **four times**

Hold Power Button

Line used to detect starting point to scan

Indication that tells you how to load the paper to scan the pattern

Pattern printed several times
Optimize for different areas of the print zone

Important Caution
Factory Advance Calibration will affect forever the banding performance of the printer on ALL media types

Sample of the Accuracy Calibration Print

Printhead Alignment

The purpose of the Printhead Alignment is to correct the alignment between the printheads in order to prevent color misalignment and print quality defects like banding. Normally he Printhead Alignment is launched automatically after a Printhead has been replaced. The Printer prints the Printhead Alignment page and scans the pattern on the page in order to align the printheads.

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

To manually launch the Printhead Alignment, hold the power button down and press the resume button **three times**.

Hold Power Button

Press Resume button three times

Pattern for Bidirectional compensation and directionality on Scan-Axis

To calibrate the sensors

Pattern for directionality on Paper-Axis

Test Result

| ✓ Pass | ✗ Fail |

Sample of the Printhead Alignment Page

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.

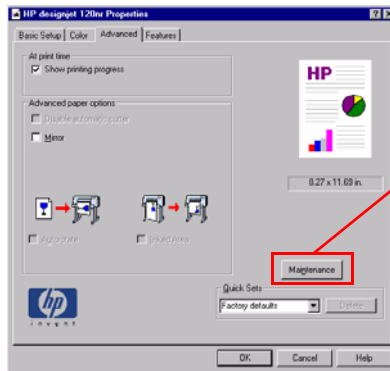### How do I calibrate color?

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.

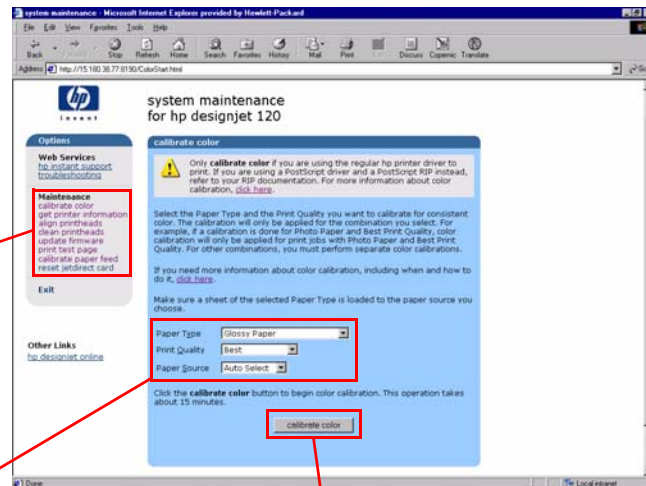## Performing the Color Calibration (HP DesignJet 120/120nr)

The Color Calibration can be performed using the hp designjet system maintenance tool which is launched via the hp printer driver.
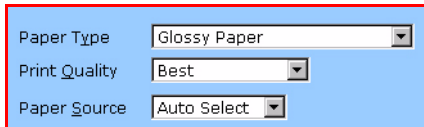
Launch system maintenance tool via the hp driver

Step 1 - Select "calibrate color"

Maintenance
calibrate color
get printer information
align printheads
clean printheads
update firmware
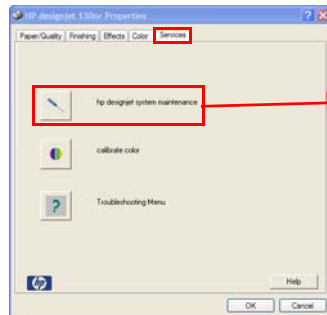print test page
calibrate paper feed
reset jetdirect card

Step 3 - Press "Calibrate Color"

Paper Type	Glossy Paper
Print Quality	Best
Paper Source	Auto Select

Step 2 - Select Paper Type and Print Quality

Performing the Color Calibration (HP DesignJet 130/130nr)

The Color Calibration can be performed using the hp designjet system maintenance tool which is launched via the hp printer driver or by double clicking on the "calibrate color" icon on the computer desktop.

Launch system maintenance tool via the hp driver

OR

Double click on the "calibrate color" icon on the computer desktop
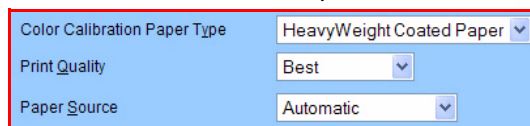
Step 1 - Select "calibrate color"

Step 2 - Select Paper Type and Print Quality

Step 3 - Press "Calibrate Color"

This table gives you the color calibration status for each type of paper and print quality.
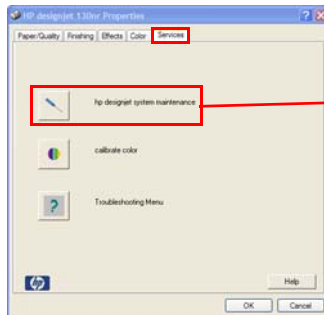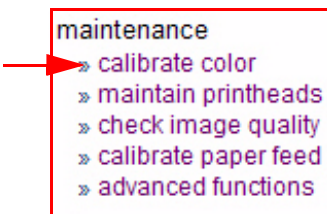You can also use this table to delete color calibration profiles that you don't need.

Step 1 - Select color calibration profile

Step 2 - Press "delete calibration profile"

Performing the Color Calibration (HP DesignJet 90/90r)

The Color Calibration can be performed using the hp designjet system maintenance tool which is launched via the hp printer driver or by double clicking on the "calibrate color" icon on the computer desktop.
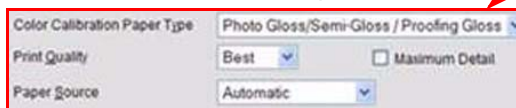
Launch system maintenance tool via the hp driver

OR

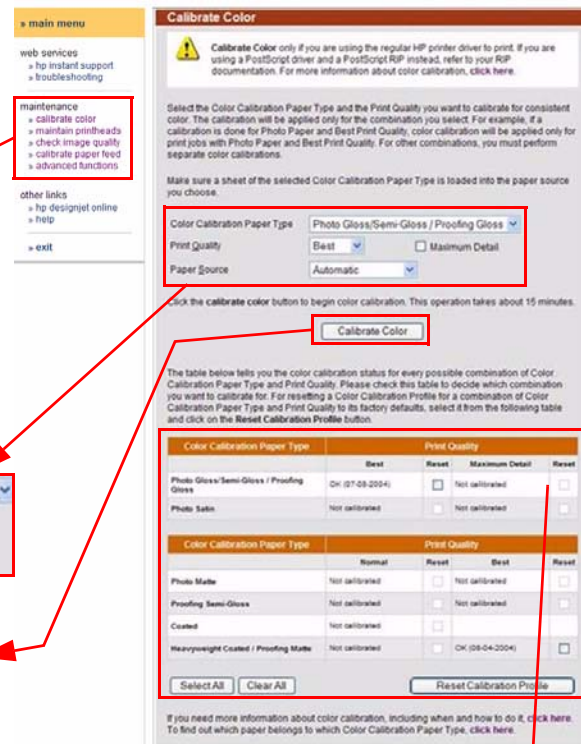Double click on the "calibrate color" icon on the computer desktop

Step 1 - Select "calibrate color"

maintenance
» calibrate color
» maintain printheads
» check image quality
» calibrate paper feed
» advanced functions

Step 2 - Select Paper Type and Print Quality

Step 3 - Press "Calibrate Color"

This table gives you the color calibration status for each type of paper and print quality.
You can also use this table to delete color calibration profiles that you don't need.

Step 1 - Select color calibration profile

Step 2 - Press "delete calibration profile"

Sample of the Color Calibration Print