



On-Line Ink Cost Per Page Calculator User's Manual

**Version 2.1
February 2010**

Introduction

The RISO on-line Ink Cost Per Page Calculator allows you to estimate the cost of documents printed on the RISO HC and ComColor series of full-color inkjet printers. The calculation is based on ink consumption when using the GDI controllers; however the results can be used as a “best estimate” for use with any of the HC5000, HC5500 and ComColor PostScript® RIPs. This tool is for estimating ink costs for RISO inkjet printers only. This tool cannot estimate costs for printing on RISO duplicators or other manufacturer’s equipment.

Note: RISO makes no guarantee of document cost or ink consumption. Actual consumption results may vary depending upon machine settings, condition of equipment, and other environmental factors not considered in the estimation process.

Locating the Calculator

The Calculator is located under the Resources section of the RISO website. You will need a valid password and log-in in order to access the tool. (Resellers should access the tool through the reseller section of the RISO website).



Getting Started

Before you can analyze a file, you must create a print file (.PRN) from your digital original, using one of RISO's GDI printer drivers for the HC or ComColor printers. There are two ways you can generate a print file for use with the analysis tool.

The first, and most stable method, is to create a dedicated port to generate the .PRN file. The other is to "print to file" from the application's print properties box. While this method will work, in some cases the .PRN file may not generate properly, causing an error in the tool. If this happens, the .PRN file must be re-created and re-uploaded.

Most programs can print to file, however for best results we recommend that the files to be analyzed originate as PDF, MS Word, MS Publisher, or other Microsoft desktop program.

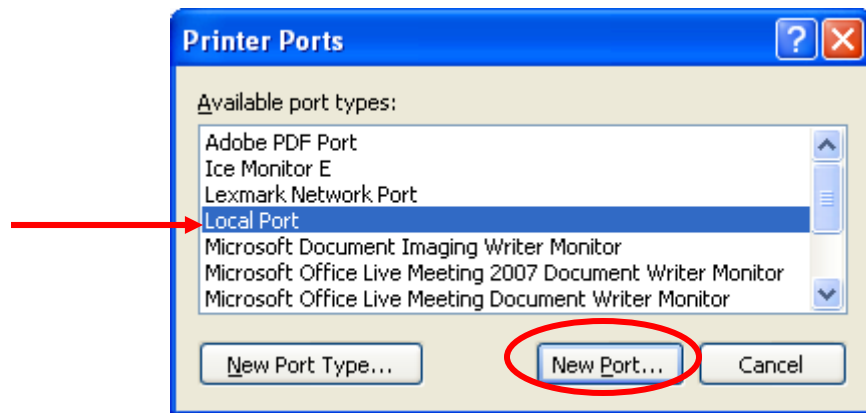
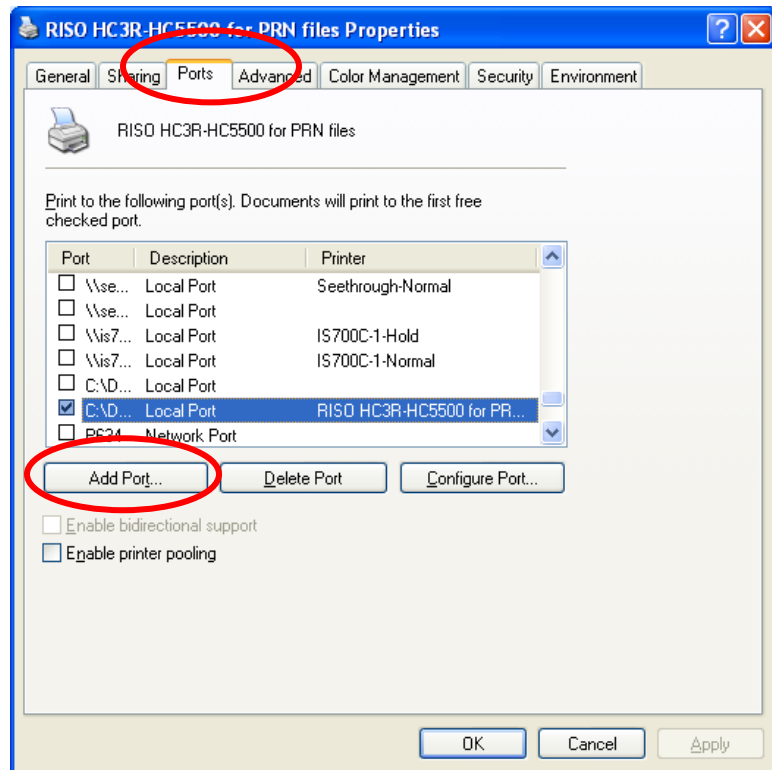
If you do not have a GDI print driver loaded, you will need to do that now.

Creating a dedicated port

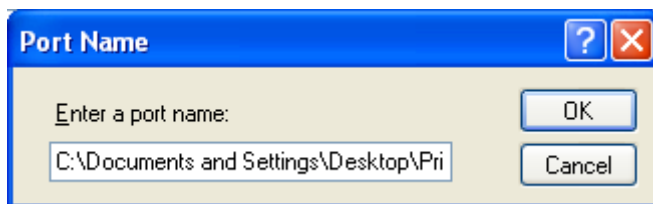
Note: If you are also printing with the GDI driver to the device, you should have a second driver loaded that is dedicated for making .PRN files.

First, create a folder on your computer where you want your .PRN files to save to. For example, on your C:/ drive or Desktop.

Next, go to your Printers and Faxes folder from the Start menu. Select the driver you have loaded for generating .PRN files. Right click on the icon and select Properties from the menu. Select the Ports tab and click Add Port.



Select Local Port and click New Port.

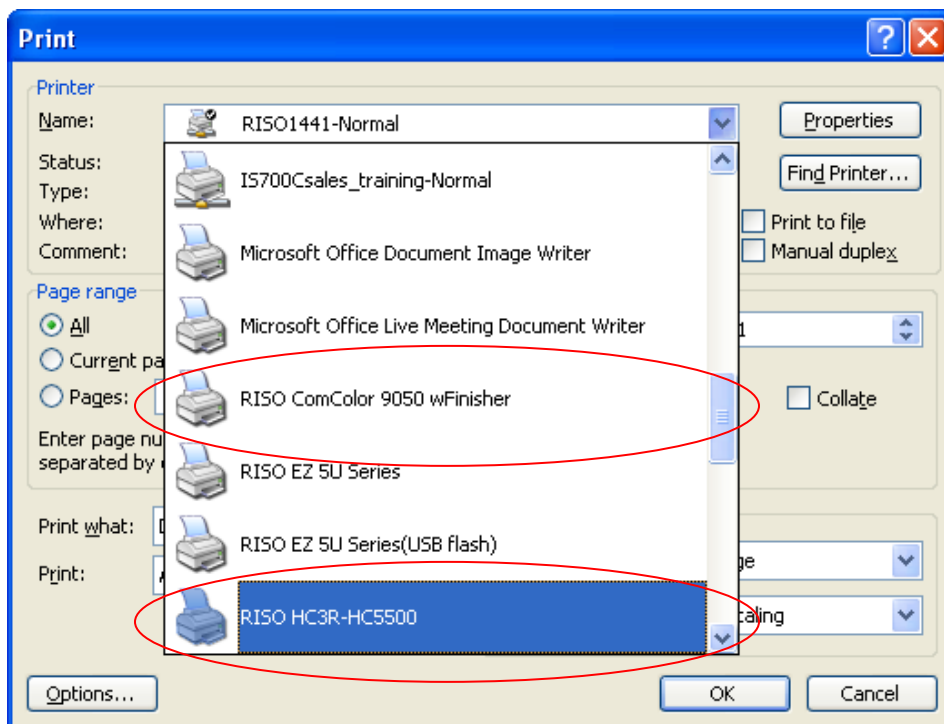


Enter the path to the folder you created for saving your .PRN files. Be sure to add the .prn extension to the port name or it will not work. Click OK; then click Apply.

Creating .PRN files

Open the document you wish to analyze. Go to the File menu and select Print. Select the GDI print driver with the dedicated port from the drop down menu.

Note: You must use the HC3R-5000 driver for analyzing documents that will be printed on the HC, and any one of the ComColor GDI printer drivers for documents that will be printed on the ComColor printers. For this guide, we will use the HC3R-5000 Print Driver.

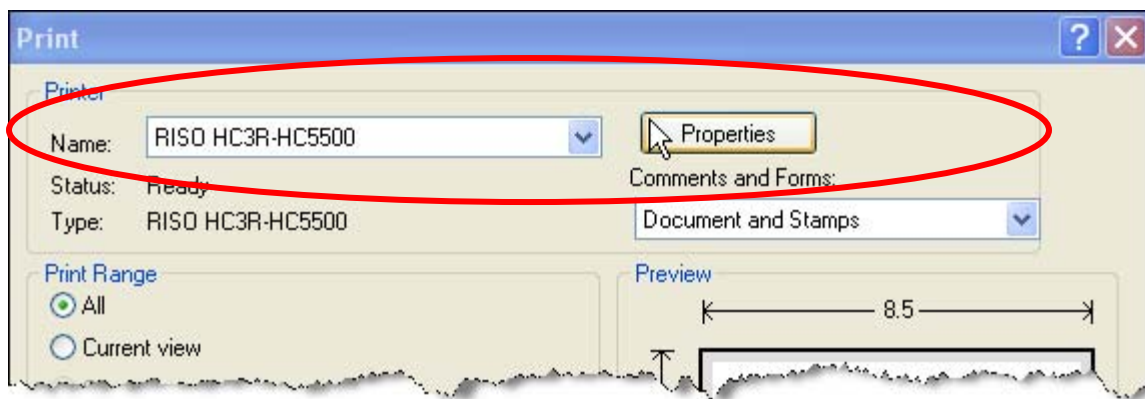


The Ink Calculation program will only recognize .PRN files that have been created using one of RISO's GDI print drivers. The maximum size .PRN file that you can upload to the calculator is 100 MB.

You must select the desired settings you want the document to be analyzed at, such as Standard Paper Type or High Quality Paper Type, 300 x 300 dpi, or 300 x 600 dpi, page size and layout, etc in the print properties window.

The following are instructions for creating .PRN files from Adobe PDF documents.

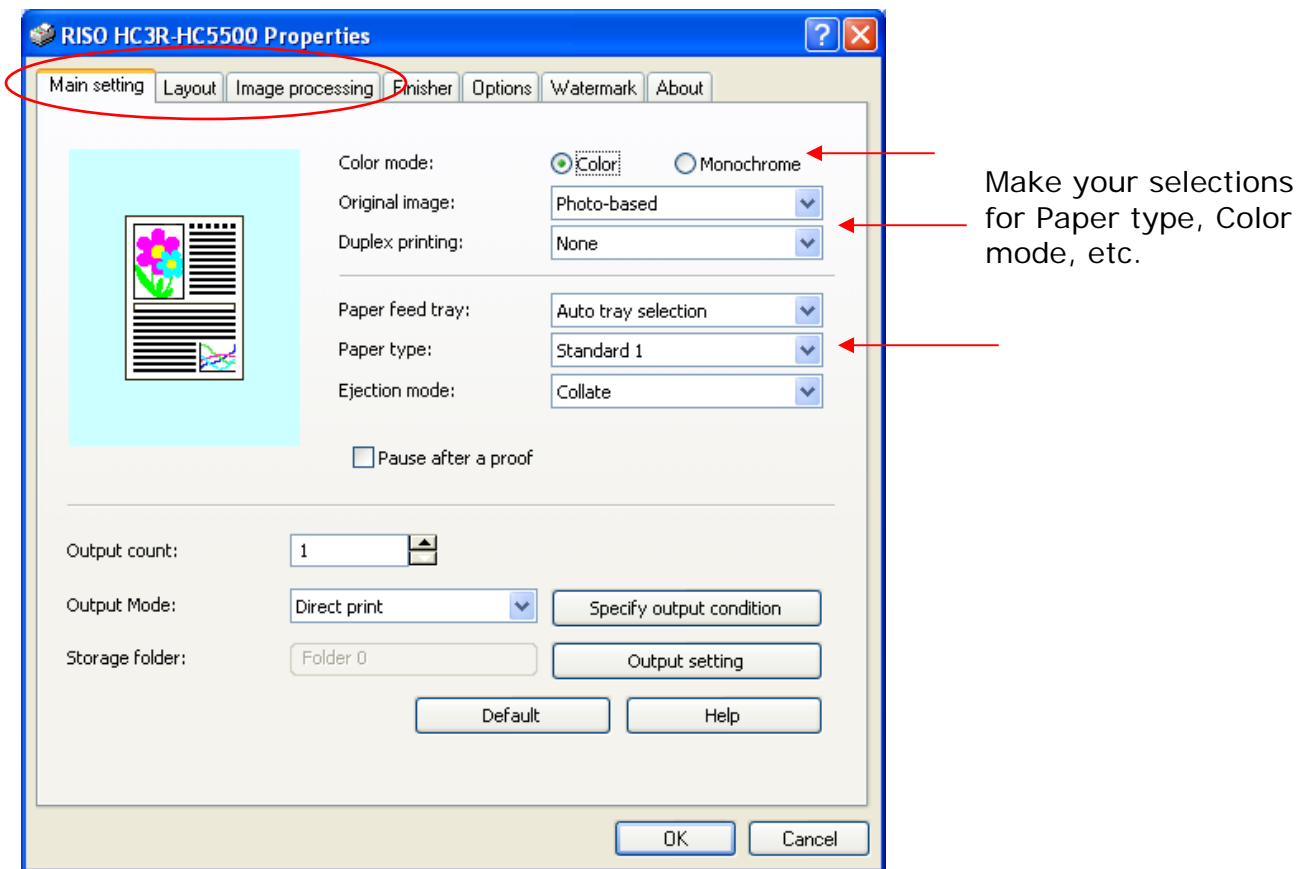
Open a PDF document. The document should be formatted to the proper original size, so if the document is a #10 envelope, it should be formatted as such in Acrobat. Select File → Print and select the HC3R-5000 printer driver and click on Properties.

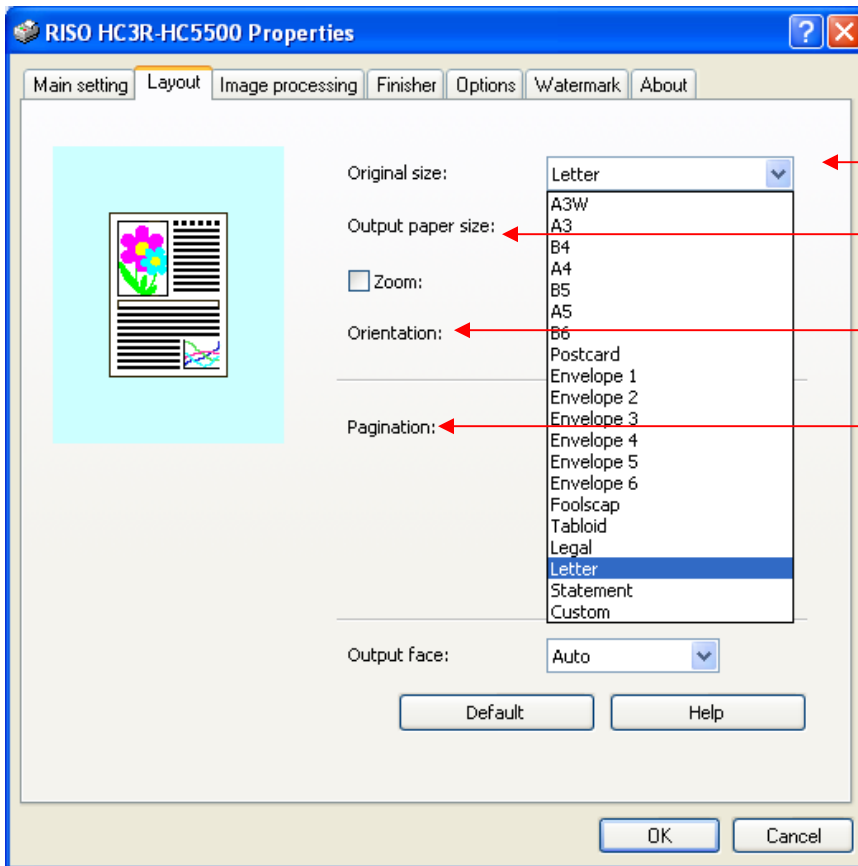


Make whatever print setting you'd like the document analyzed at in the properties of the printer driver. You should note the following.

1. If your file is a multi-page document, you can analyze the entire document as one file. You will get a total ink cost for all pages. You will also get an average cost per page where the Calculator will divide the total cost by the total number of pages in the document.
2. If you want to analyze each individual page by itself, you will need to repeat the steps for creating the .PRN file for each page.

3. You should make the driver selections as you would if you were actually printing the document out. (As a booklet, N-Up, etc.)
4. If your document is an odd or custom size such as a #10 envelope, you should select Custom page size in the driver and insert the dimensions. This will ensure a more accurate analysis.
5. If your document is monochrome, you should select monochrome (Black or Auto for ComColor printers) in the driver. If you do not do this, the document will analyze the black as CMYK and return a higher cost.



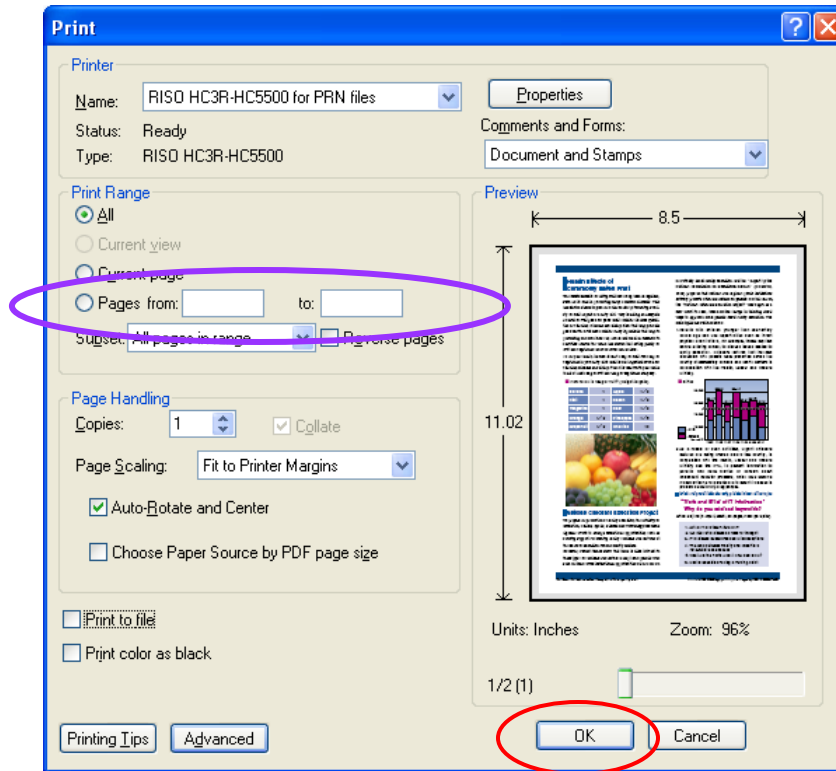


Make your selections for Original size, output size, Orientation, Pagination, etc.

Note: If the final output is going to be multi-up or paginated into a booklet, you should set this as such in the driver. This will impact cost due to the cleaning cycle. For example, if you have a four page document that would be printed 2-up on 11" x 17" paper, your input size should be set to Letter (or whatever size the 1-up pages are) and the output size set to Tabloid (or whatever the final output size will be). Pagination should be set to Booklet. Your calculation will be based on a page count of 2 (two sides to 11" x 17" page). The number of head cleanings is reduced by half of what it would be for four pages.

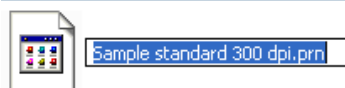
Once all your desired driver selections are made, select OK to return to the Windows Print Dialog Box.

Note: If you are analyzing individual pages of a multi-page document, you will also need to select the Pages from and to in the print range.



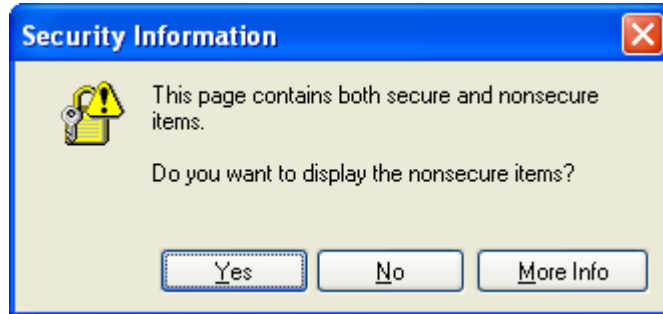
Click OK and your .PRN file will be generated in the folder you designated when you set up the Port.

Note: All files will be given the same name with a .prn extension on the end. If analyzing multiple files, or individual files at multiple settings, re-name the .PRN file by clicking on the icon and typing in a new name. We suggest using the original file name and adding information about the settings used, i.e., Standard Paper 300 dpi, will help you identify it when you go to have it analyzed. **Be sure to leave the .prn extension on the file!**



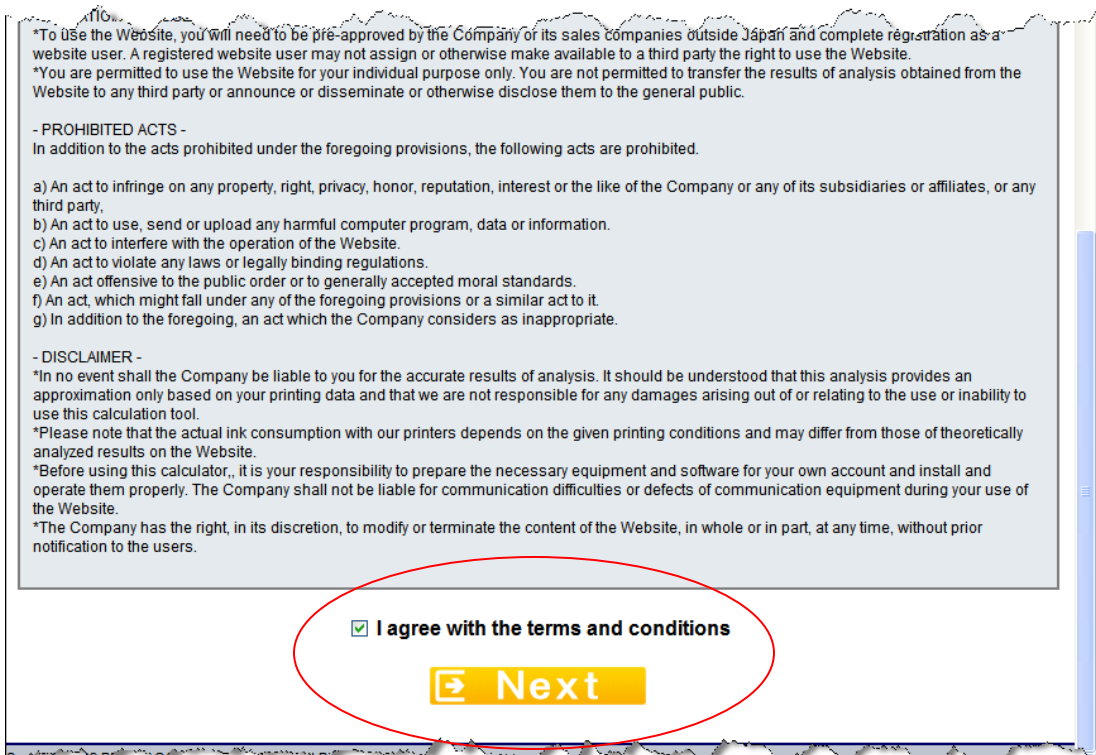
Using the Cost Per Page Calculator

Enter the Calculator program by clicking on the purple box inside the Cost Calculator section of the RISO website. You may get the following message.



Select Yes.

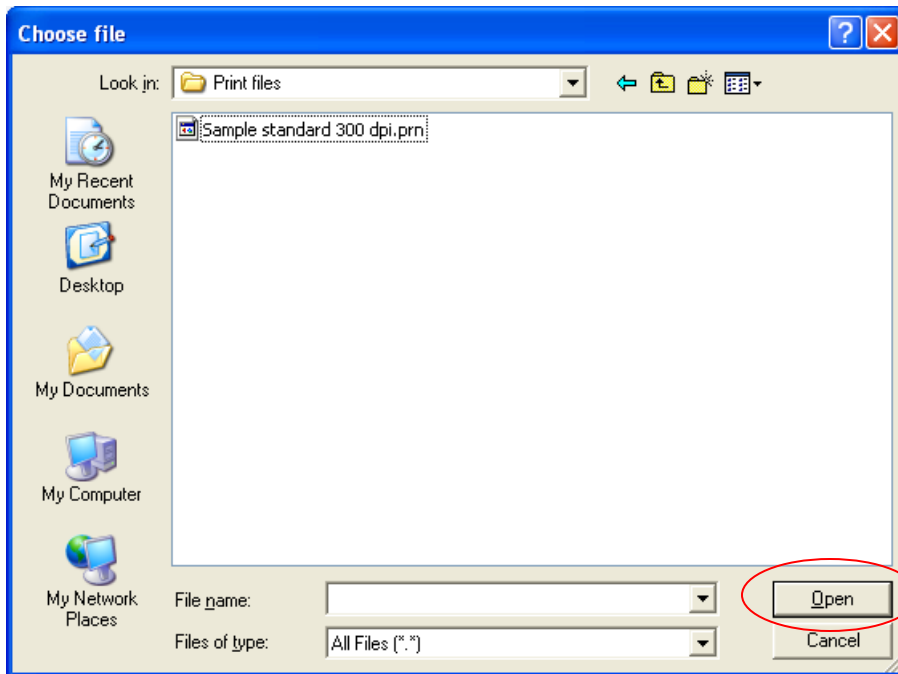
You will be brought to a Terms and Conditions page. You must scroll down to the bottom of the window, check the 'I Agree' box, and select Next.



You are now in the Calculator program.

Select the machine that you will be analyzing the document for by selecting from the Printer Model drop down menu.

Next, browse to where the .PRN files are located using the Browse button.

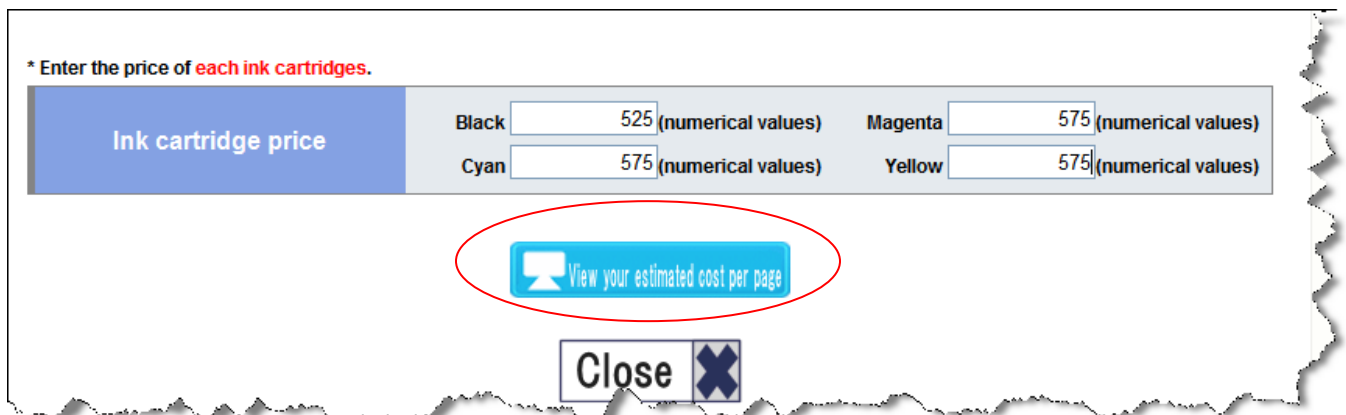


Select Open to upload the file.

Enter in the Unit of Currency, which is the symbol you want to appear by the amount.



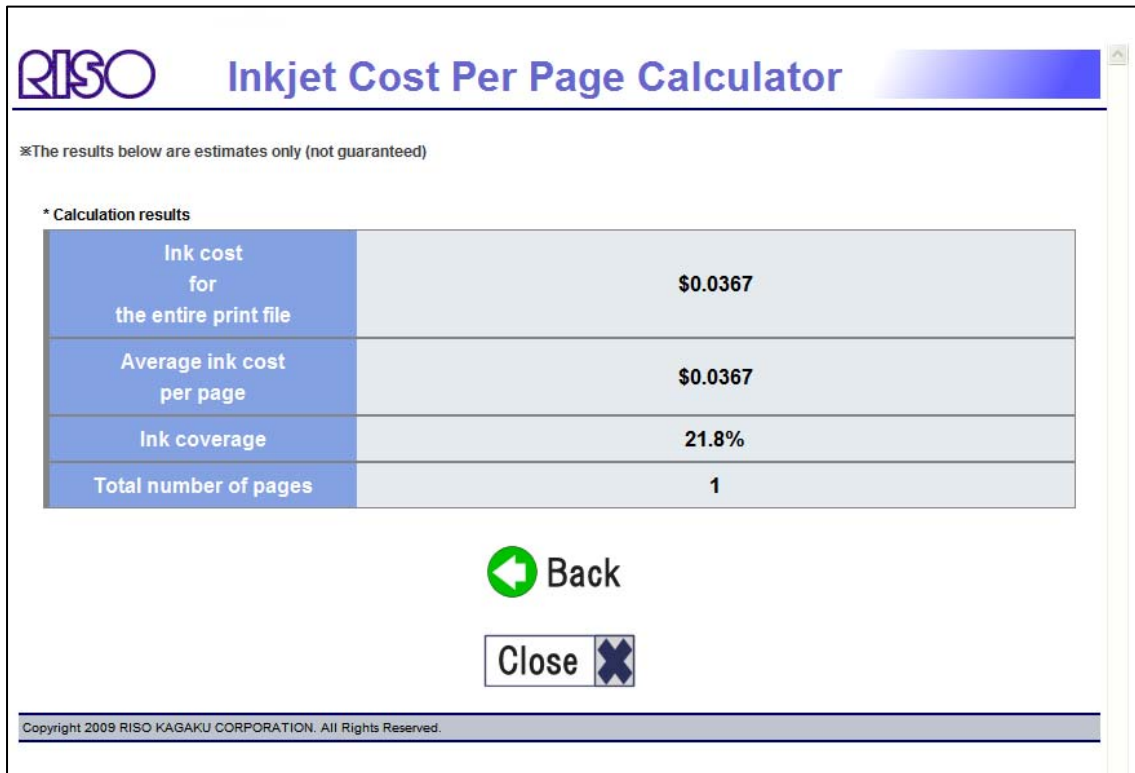
Next, enter in the cost per cartridge for each of the four inks. **Note:** You must enter in a value for each color, even if you are analyzing a monochrome file only. This is because all four cartridges are required for head cleaning, which is factored into the cost per page.



Select 'View your estimated cost per page' by clicking the blue button. The analysis may take a few minutes to complete. Do not close out your browser.

Reading the Analysis Results

The results page will contain your total cost for all pages analyzed, average cost per page, percent coverage, and total number of pages analyzed.



The screenshot shows the RISO Inkjet Cost Per Page Calculator interface. At the top left is the RISO logo, and to its right is the title "Inkjet Cost Per Page Calculator". Below the title is a disclaimer: "※The results below are estimates only (not guaranteed)". Underneath is a section titled "* Calculation results" containing a table with four rows of data. Below the table are two buttons: a green "Back" button with a left-pointing arrow and a "Close" button with a blue 'X' icon. At the bottom of the page is a copyright notice: "Copyright 2009 RISO KAGAKU CORPORATION. All Rights Reserved."

* Calculation results	
Ink cost for the entire print file	\$0.0367
Average ink cost per page	\$0.0367
Ink coverage	21.8%
Total number of pages	1

Total Cost for Entire Document – This is the total cost for all pages analyzed. If your document is one page, the cost is for the single page. If your document is 8 pages and you analyzed all 8 pages together, then the Total Cost is for all 8 pages.

Average Cost Per Page – This number is the Ink Cost for Entire Print File divided by the total number of pages. If your document is a single page, the average cost per page and total cost for entire document will be the same.

Ink Coverage – This is the fill of the document, not coverage across the page. This number will change based on the setting selected. **Note:** If you are analyzing multiple pages at once, this number will have no relevance and should be disregarded.

Total Number of Pages – This is the number of pages that would be in printed form. So, for example, if your document was 4 pages and you selected booklet in Pagination, the number of pages would be 2. If you did not turn pagination on, the number of pages would be 4.

Note: The figures do not include any service charges.

Tip: Once you are done with your analysis, you should delete the .prn files. These files can be large and can take up unnecessary hard disk space.

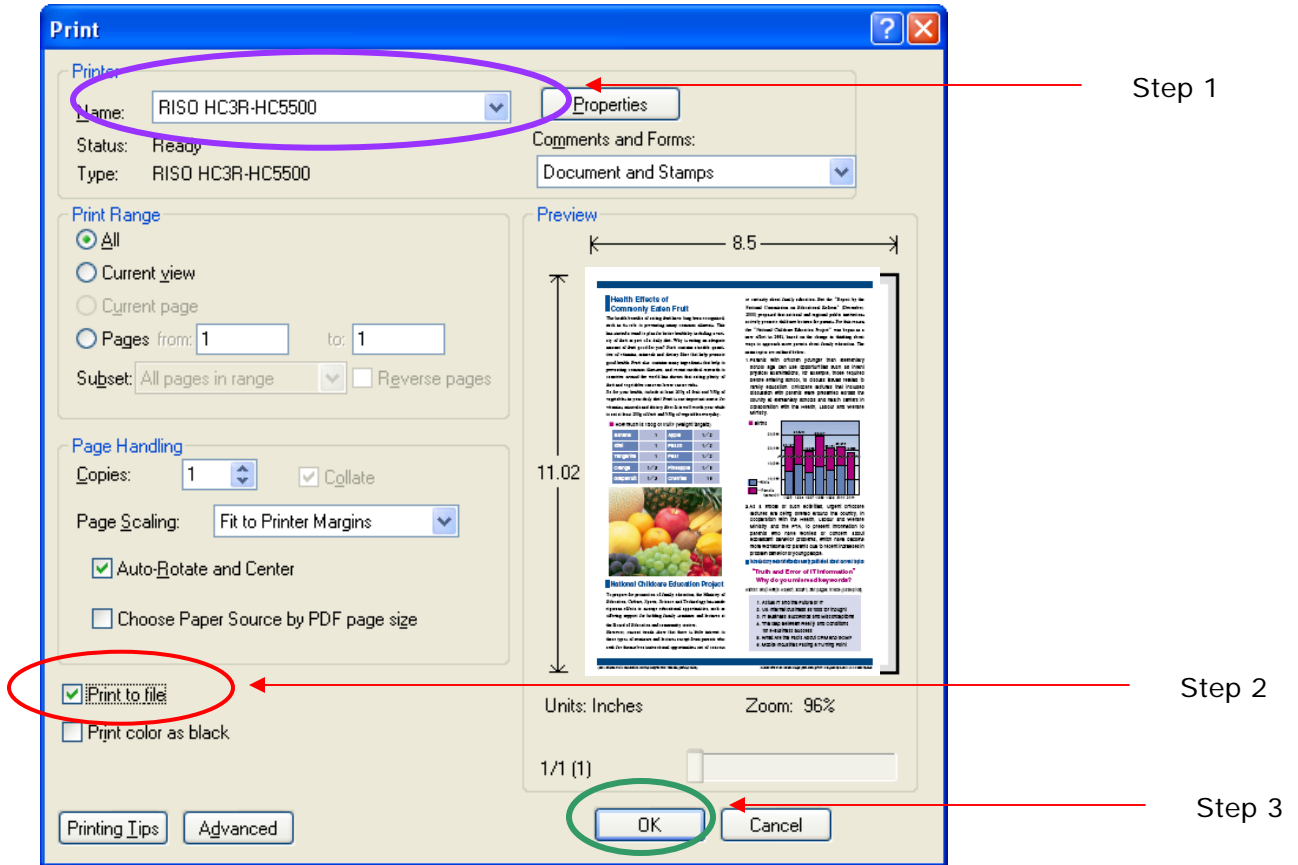
Creating .PRN files using Print to File

You can also create .PRN files using the print dialog box of your application software. This method can cause errors with the analysis tool, requiring you to re-create the .PRN file.

To create a .PRN file from the application software, open the document you wish to analyze and select File and Print. Select the GDI driver you use to output the document to the printer (not the driver you created with the designated port).

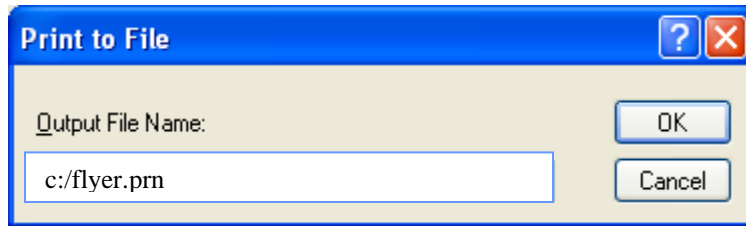
Click on Properties and make all the driver settings you wish to analyze the document at, following the same steps as outlined above. When finished, select OK, returning you to the print properties box.

Before selecting OK to print, check the Print to File box in the print dialog box.



For PDF files, you will be asked to input a file name and path. Enter in the file name and be sure to add a .prn extension. You should name the .prn file the same as the original file, and provide some description as to the settings you selected. This is particularly useful if you analyze a document at multiple different settings. So, for example, you may have flyer.prn and flyerHighQuality.prn.

The .prn file should appear in the same folder that the original PDF document resided. You can also specify the path to save the file to, such as c:/. Click OK to generate the .PRN file.



Browse to the .prn file from the analysis tool to upload it.

Follow the same procedures outlined previously for uploading and using the online calculator tool.

Delete the .prn files after you have finished analyzing them so as to not take up disk space.

Frequently Asked Questions and Troubleshooting

What other files types can be converted to .PRN?

Theoretically any program that allows you to “print to file” should be able to create a .prn file that can be processed through the Ink Calculation program. Using PDF files and Microsoft Files (Word and Publisher) however, is recommended.

I get an error when processing the .prn file in the Calculation program.

What’s going wrong?

If you receive an error message it is possible that you have not used a RISO GDI printer driver to create the .prn file. Go back and re-create the .prn file using the GDI driver. If you receive an error and you are sure you used the proper driver, create the .PRN file again. From time to time, it may take two or three attempts at generating a print file that the tool will accept. This is a known issue and we are working to resolve this.

The tool perpetually processes or errors out?

The Cost Per Page Calculator can accept print files up to 100MB in size. Double check the size of your print file.

Must I put an ink cost in for each color?

Yes. Even when analyzing monochrome files, you need to insert a cost for all four inks. This is because the ink used in head cleaning is factored into the cost per page, and all four ink cartridges are required for head cleaning.

I created my .prn files, but I can’t find where they saved to?

If creating a .prn file from a PDF, the file should save to the location from which it was opened. If you cannot locate it, try using the search feature in Windows, or create another .prn file and specify the path where you want the file to save, such as c:/, and it will save to your c:/ drive. You can move the files from there to any location.

Can I upload more than one .prn file at a time for analysis?

No. The tool can only analyze one file at a time. To analyze additional files, select the Back button after the previous analysis is returned. This will bring you back to the main tool. Any information you input selected will still be active, so all you need to is browse to the next file.

Can my end user's use this tool?

Yes! End user's must have a valid serial number for a ComColor or HC machine, and must register to use the tool.

