Release notes for BlackMagic

Server Version: 2.6

GUI Version 2.9.1

Agent Version 2.6

Supersedes: V2.5.3

Date: 10 July 2002

Introduction

This document covers the changes since V2.5.3 and includes bug fixes and new features. Please see previous notes for information on past releases. Where new features are added then this document details the operation of those new items and release notes should always be used as supplements to the manual.

Any comments, queries or suggestions should be directed to support@riponce.com
For product information please see the Serendipity Software web site www.serendipity-software.com.au

Upgrade policy

All users that are within the one year warranty since original purchase or purchase of an upgrade are entitled the upgrade free of charge. Any users outside of the warranty period are required to pay for the upgrade and should contact the local dealer. Once purchased the user get a further one years warranty. Purchase of additional filters and output drivers does not constitute the same as a software upgrade. If purchasing an output driver for a new printer and the latest software is required, an upgrade will have to be purchased as well if warranty has expired.

Download Policy

Only dealers are allowed access to download updates and patches. The dealers must adhere to the upgrade policy. Anyone purchasing an upgrade will be shipped a CD containing the release unless Serendipity Software are advised that the dealer will be supplying the CD to the customer. The upgrade on the web site does not contain all items and is only supposed to be used for upgrading an existing installation. Serendipity Software recommends that all new installations be done with a full CD release.

If anyone has any queries regarding the policies please do not hesitate to contact Serendipity Software support by email support@riponce.com

Release highlights

Colour calibration - There is a new calibration method that provides for a faster and better calibration procedure including automated linearisation.
On-line instruments supported - Densitometers and Specrophotometers are used to feed information directly into the server for calibration.
Speed improvements - The server is faster than before with improvements in polling, screening, RDT dot sampling, and the user interface.
New Server log - There is a new server log window with the ability to trim the file and save it for email.
Densitometer - There is a new application making use of the on-line densitometers that do not have LCD displays, allowing you to view densities and dot area and save them to a file.
ICC Tweaker - A tool that allows you to tweak your ICC profile to correct the individual colours that ICC profile makers get wrong.
New output devices supported including the Epson 7600/9600 and HP 10/20/50ps.

Bug Fixes

- Fixed a bug where the Mac would display a “File exists” message if the same file was saved to a drop folder published by a unix server, (Linux/ Solaris/SGI.) This was because the resource fork was not removed after the file had been spooled.
- Fixed a problem where bicubic re-sampling was really slow with Rampage files. Now it is much faster.
- We now check for the modified time as well as size and name to determine if a new file exists for autoproofing. A problem used to occur if the same file was saved for autoproofing, i.e. same name and size, it would not get autoproofed.
- Fixed a problem on the unix version where closing the server window by clicking in the ‘X’ of the window would not kill the process.
- Fixed a Packbits error when interpreting Tiff’s from Agfa Print Drive.
- Fixed a problem where the SGI server would crash if the output resolution was around 72dpi, giving a bus error.
- Fixed a problem if using the Absolute Colourimetric Rendering Intent where the background appeared too dark.
- Fixed a problem where the server would crash when polling a Scitex system. This happened if the server failed to find the suffix marker for the path.

- Fixed a problem with the 1 Bit tiff output driver where it would overwrite a previous plate when Colour Keys were turned on. Now each one is unique.
- Fixed a bug in the Tiff Input filter where if the file was an 8 bit grey scale and the input resolution was the same as the output resolution the job would fail.
- Fixed a problem where progressive JPEG's from photoshop would fail to image.
- Fixed the banding issues in vignettes with un-screened data. This is part of the improved output quality of the new drivers.
- Fixed a problem where the User Interface would sometimes lock up if the server was engaged in lengthy operations.
- Fixed a small memory leak in the Copydot input filter.
- Fixed the Scitex Brisque input filter where edits to the Brisque files using the lw edit tool were not being picked up and therefore not being shown on the proof.
- Fixed a problem with the Celebra Input filter where a large 54 page imposition would cause some of the individual pages to be cropped.
- Fixed a problem where the server would crash if de-screening a job less than 8 pixels wide.
- Fixed a problem where named pipes did not work with Windows 2000 service pack 2.
- Fixed a problem where a job would sometimes fail to process if JobInfo was on.

New Features and Enhancements

- We now check the status of a printer that makes up a pool before sending a job to it. Before, if you turned a printer off the server would still send jobs to the printer. Now if it is off we do not send any more jobs to it until it is turned on again.
- Added a "job id" at the end of the "Nested Job" name in the Queue Manager to make each Nested Job have a unique name.
- Placed a limit on the naming length for PDF files to 28 characters maximum. This consists of up to 16 characters from the incoming filename (less any spaces), followed by an underscore and then a unique number. This is because Mac's cannot see files over 32 characters long.
- Added a check for RGB images in PS/PDF files and give the option to error if one is detected. This is enabled via a checkbox in the effects part of the pagesetup. See "RGB Image check" for more information.
- Added a better mode for the ICC rendering engine to improve quality. This is selectable in the system tab of the control panel. Options are better or faster. Faster is the same as the previous version.See "Better ICC Engine option"
- Added extra functionality to the Colour Keys allowing you to configure how your plates will output. See "Colour Key Chooser"
- Added a Continuous Tone Separated Tiff Printer driver.
- Added more PJL commands to the HP large format printer driver to provide better support for the HP800.
- Centreing has been improved to always centre the job even when it is larger than the print area and crop all around the edges. Before we used to crop the job to the page size and then centre.
- Added the ability to sort the jobs in the Queue Manager by clicking on the list headers just as you can on the RIP Monitor. Jobs can be viewed by Name, Size, Source or Status. See "Queue Manager Changes"
- Added the ability to re-submit jobs to different printers of the same sort. i.e. if you have 2 Epson 10000cf machines, jobs from one can be submitted to the other. The colour may vary from printer to printer as characteristics of the machines may differ. The calibration information is still stored in the print job for the pagesetup it was initially submitted to. But this will be particularly useful for Newspapers so they can re-direct jobs from one printer to another if one fails and time does not permit re-imaging. See "Queue Manager Changes"
- Added the ability to archive and restore ICC profiles to the Database manager. Now all parts of the database can be archived or restored in one go.
- Re-wrote the FJ 500 driver to support the 8 colours properly. You can now use CMYKLcLmOG.
- Shortened the time it takes to nest jobs when the "Nest Now" button is clicked. The jobs will now nest within 20 seconds.
- Improved the speed in ftp polling, especially on the windows platform. This will especially help Scitex Brisque systems as they cannot use the agent.
- Added support in the Postscript input filter for Illustrator 8 separations.
- Re-written most of the print drivers to utilise the new calibration method. This vastly improves the quality of output. These are listed below.
  Roland FJ400/500/600
  Epson 10000/10000CF 7500/9500 7000/9000
  HP 1055/2000/3000/5000, HP 2500GA
  Techsage SpinJet
  Canon BJ8500
- Added the ability to use scanner profiles as monitor profiles i.e. RGB to LAB conversion which allows you to use digital camera profiles to improve output quality.
- Added automatic linearisation of printers. This is a new application allowing an easy linearisation process using an on-line device connected to the serial port of the server. See "New Calibration Process"
- Added support for on-line devices connected via the serial port as follows
  Xrite DTP41
  Xrite DTP32/43
  Xrite DTP22 - Digital Swatchbook
  Gretag Macbeth Spectrlino
  Gretag Macbeth Spectroscan
- Added "Speed" option for the Epson 7000/9000. This is selectable under the customise box for the printer. The options are either Speed or Quality. See "New Speed option for Epson 7000/9000"
- Improved the performance of the Database Manager. This can still take quite a bit of time if archiving the whole database and there are a large number of icc profiles. It can also take quite a bit of memory which it will hold while the database manager has items in its list. This is because it adds the items to a list. Each icc profile can be 1.5 MB in size which can add up if there are a large number. Old databases i.e. ones created with 2.5.3, are not compatible with this version. See "General Notes" for more information.
- Added an ICC Tweaker application where individual colours can be adjusted when using ICC profiles. See "ICC Tweaker"
- Made some speed improvements to the rendering which should be better on faster CPU's.
- Performance improved in the ICC, screening and de-screening/sub-sampling (RDT) engines.
- Improved the speed when imaging Rampage files.
- Improved overall polling especially when there are a large number of files. There is a new Agent for this.
- Added support to the Gradation Editor for Orange and Green Curves. See "Orange and Green Curves in the Gradation Editor"
- Improved the performance of the Colour Keys and Special Colour merging.
- Added bottom and right margins. This can assist in setting up the TechSage SpinJet for double sided proofing.
- Added support for the Hexachrome calibration target from Gretag Macbeth Profile Maker and Monaco Profiler.

- Added support to the drop folders for single file unscreened DCS2.0 format. This requires the Postscript RIP license.
- Added the automatic trimming of the log file which is now automatically trimmed to 6 months. This can be trimmed to less if desired via the new log file window. This is the new format for the log file so existing log files are deleted when the 2.6 (or later) server is first run. The log file is not really readable any more as a file. The server windows displays as before and the new server log window allows you to save the file to disk in html format. This also gives you the ability to view the server window from any client connected, which is especially useful for remote printing setups. See “Server Log File”
- Upgraded the RIP to a new version which has better support for PDF files.
- Added support for the new Epson 7600/9600 printers.
- Added densitometer application. This allows you to read densities from the on-line devices that we support. You can read paper compensated densities, percentage tint values and export the list to a file. See “Densitometer”
- Enhanced the performance of the Print Gallery so it is faster at displaying the thumbnails. The thumbnails are now scalable and memory is no longer bloated. See “Print Gallery Changes”
- Improved the performance of the Celebra Impose Workflow.
- Added an option to the Heidelberg Delta List input filter to ignore orphaned lhd files i.e. there is not an associated job.ddc file. This option is available through the customise button on the Heidelberg input filter. The default option is to show all files as before. See “Heidelberg Deltalist New Option”
- Changed the “status” of a job in the image queue to show when it is rotating. Before it was always imaging. Now if it is rotating it tells you it is. See “Queue Manager Changes”
- Sped up the Queue Manager internal queue processing so everything is more responsive, especially when there are a large number of jobs. e.g. Deleting a large number of jobs from a printers list is much quicker.
- Added thumbnails direct onto the Queue Manager window. This is an option on the Queue Manager Image section called “Enable Updates”. This saves the need to have the Thumbnail Alien running at all, but you can if you want. See “Queue Manager Changes”
- Improved speed and memory use of the thumbnails on the Queue Manager Printers list when you double click.
- Improved the Memory use of the Thumbnail application.
- Added a preview of the curve selected when using the Curve chooser for Lineariser, Correction and dot gain curves from the Pagesetups Control Panel. See “Curves now displayed from Curve chooser”
- Added a re-size feature on all of the appropriate application windows. This allows for the re-sizing of the lists on the left side of the windows to make viewing long names easier. See “New List Re-Size capability”
- Added the ability to the Postscript interpreter to handle swap files bigger than 2GB. This allows you to RIP any size job you wish providing your machine has the capacity.
- Converted the Linux version to 64 bit which removes the 2 GB limit on PS file sizes. This allows any size of file to be imaged and rotated providing your machine has the capacity. This requires RedHat 7.1 or later.
- Added the ability to retain the old drivers in the new version. These are labelled “Vintage” drivers and are the 2.5.3 drivers for the printers that have been updated. This allows you to upgrade to the new version and retain all of your existing setups and calibration. The drivers are found at the bottom of the Printers list in the control panel. See “Vintage Driver Selection”
- Added the ability to add your own logo or slugline to a job. This must be an EPS format and it can be configured to be placed at any part of the job outside of the image area. See logo box for more information. See “Customer Sluglines”
- Added the functionality to the server to detect changes in the customise sections and automatically update them with the new features and retain any existing data in the customise box. Previously you had to select another printer from the list and then re-select the same one again to retrieve the new features. This also went back to the defaults and lost any current settings.
- Added support for the new HP Designjet 10ps/20ps/50ps.

Some of the New Features in more detail

This section describes some of the new features of this release.

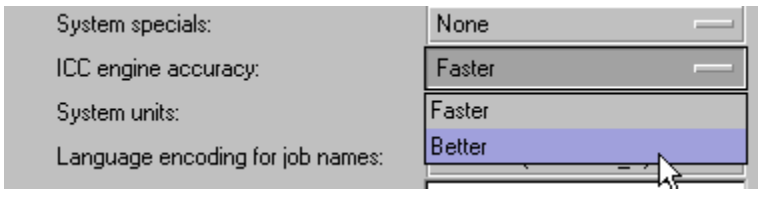
RGB Image check

You now have the ability to error a PS job if it contains RGB images. Before the job would simply print ignoring that there was an RGB image in it.

Select the option from the PageSetup if you want the job to fail if there is an RGB image present. An appropriate error message is displayed in the server log.

Better ICC Engine option

There is a better ICC engine option that provides optimised ICC output. This is a selectable option as it does impact on performance.



Select Better ICC Engine Accuracy or Faster ICC Engine. Faster is the same one as in the previous version. Obviously, better will take longer to process.

Colour Key Chooser

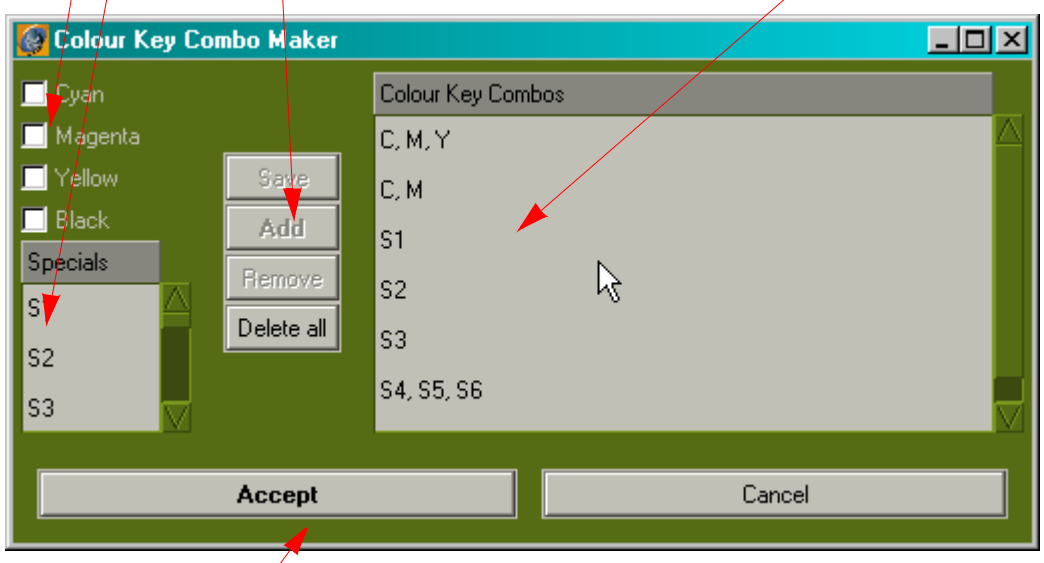
We have extended the functionality of the Colour Keys to allow you to choose your own combinations. This allows you to select any combination of plates to be combined together up to 50 Specials in a single pass.

Select the Colour Key Combo from the PageSetup.

This will bring up the Colour Key Combo window.

Select the Process Colours and specials that you wish to combine and press Add

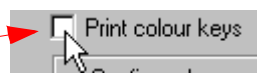
This shows the combo's that have been configured for output



Once you have configured all of the combo's that you want to print together press Accept.

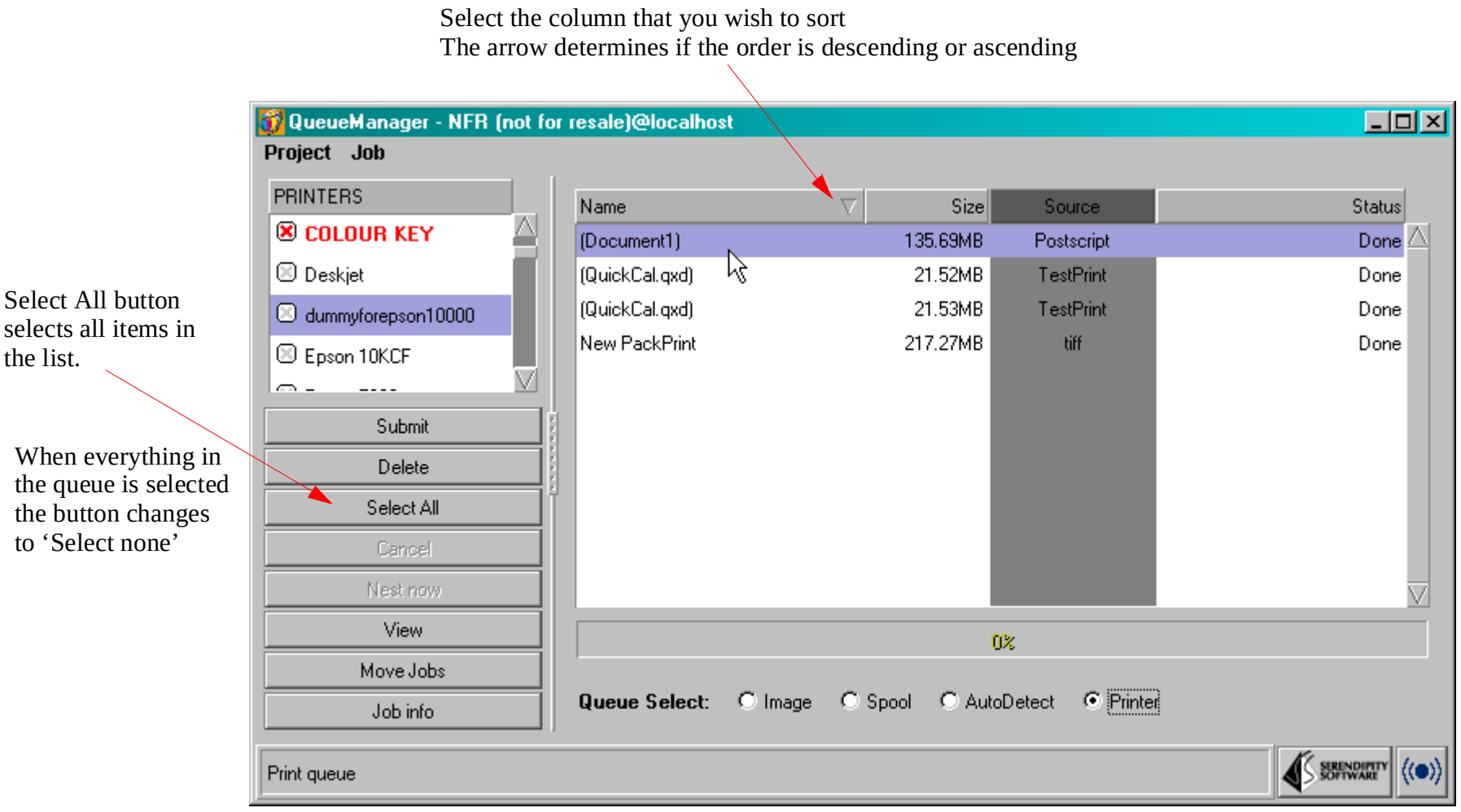
You can select the colour combinations that you want to output and then add them to the list. You can remove items from the list by selecting them and pressing the 'remove' button. The Remove all clears the list. The combinations shown on the right are the order that the job will output in one submission. To enable the colour key combo simply select the Print Colour Keys check box as before. If no combinations are enabled in the Colour Key Combo configuration tool then the classic Colour Key is used where each plate is output separately. e.g. if you have a 5 plate job you will get each of the plates output as single pages. To disable the Colour Key Combo's just un-check the Print Colour Keys check box.

Turn the colour Key Combo on and off by checking the Print Colour Keys box.



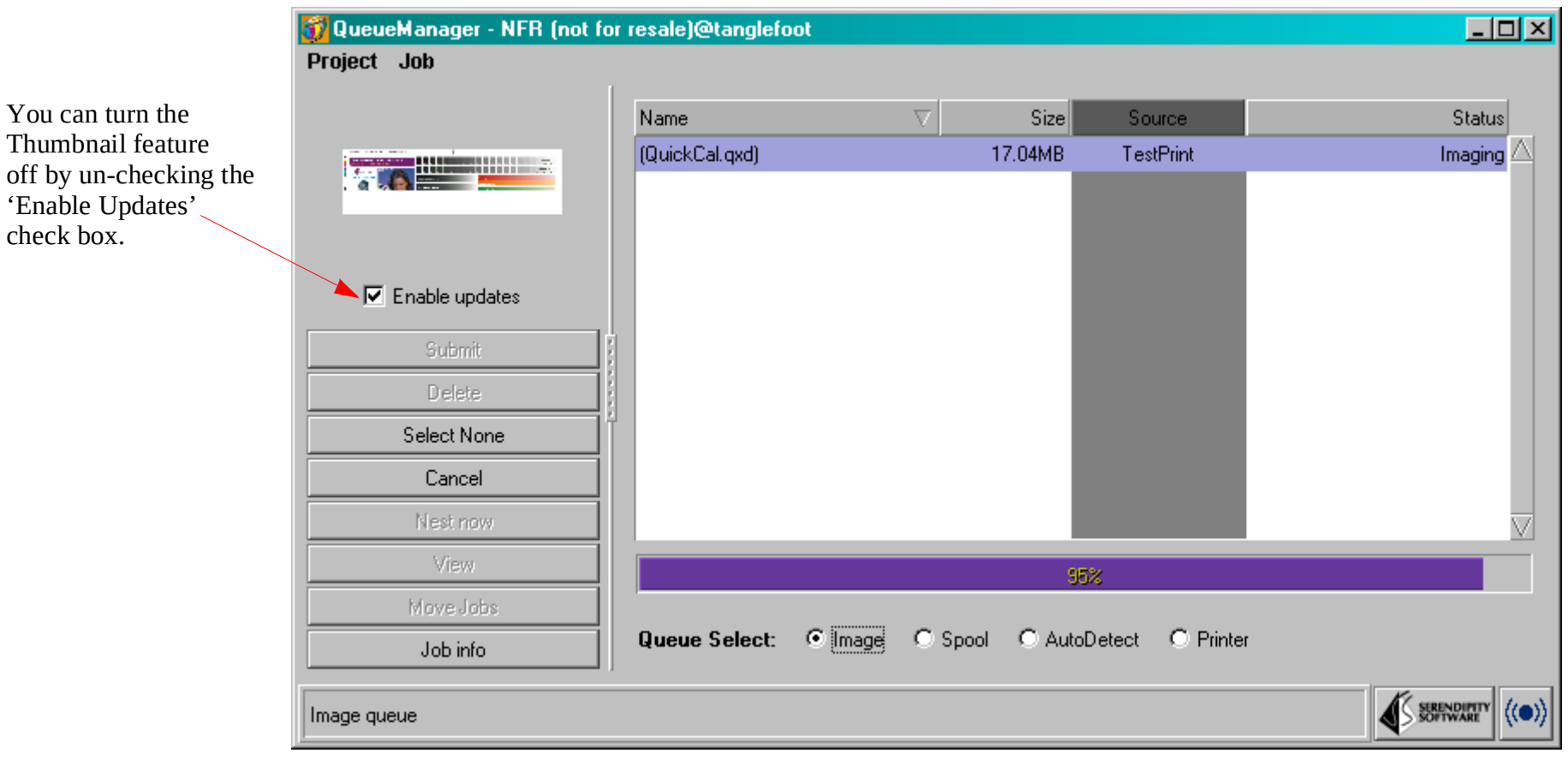
Queue Manager Changes

There have been a few changes to the Queue Manager. Firstly is the ability to sort and order your jobs in the queue by selecting the title of the column you want ordered. i.e. either select Name, Size, Source or Status.

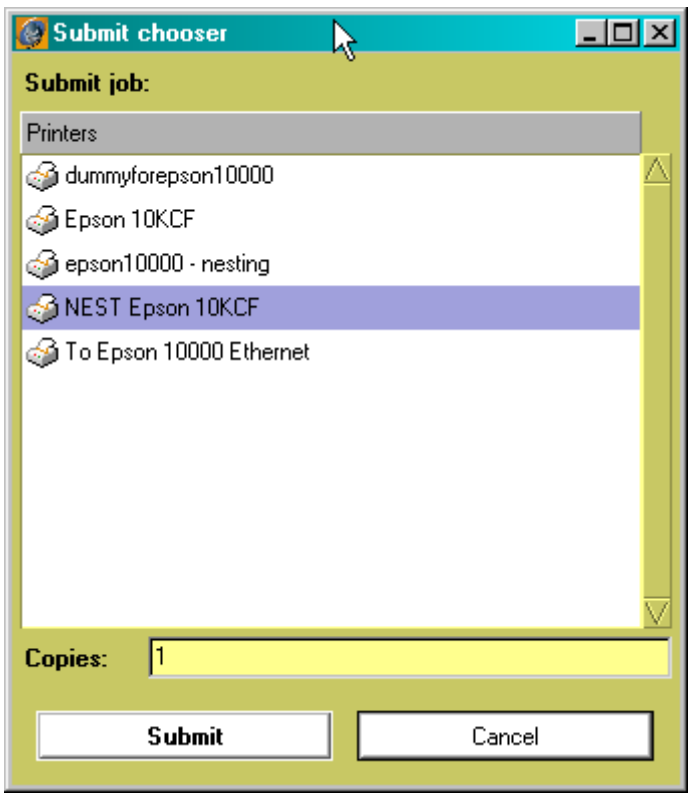


We have also added a 'Select All' button so that all items on the list can be selected. This can be used for either submitting the entire queue or deleting it. You can also Select All items and then do item by item de-selection by holding the Control key and clicking on the jobs in the list.

The other change to the Queue Manager is that you now have the ability to view the thumbnail directly in the Queue Manager without needing to bring up the separate Thumbnail Application.



On this version you have the ability to submit jobs imaged on one printer, to another printer queue of the same type. When you select a job and submit it, you get the submit chooser appear as before.



But now all compatible printers are displayed in the chooser instead of just the single printer that you printed to. This will help people that have more than one of the same machines and have a problem on one of them. Instead of having to re-image the job, you can simply re-direct to one of the other printers.

Note: All the data in the file is as it was when imaged through the pagesetup. e.g. if JobInfo was turned on in the pagesetup whose printer has failed then job info will appear on the job no matter what printer the job is submitted to. More importantly all of the colour management is already applied in the file so if your printers have very different characteristics, the colour will be wrong on the file that gets re-directed.

Multiple jobs can be submitted to another queue in one go. For example, if your printer had problems you can 'Select All' jobs in the queue and submit them to another printer.

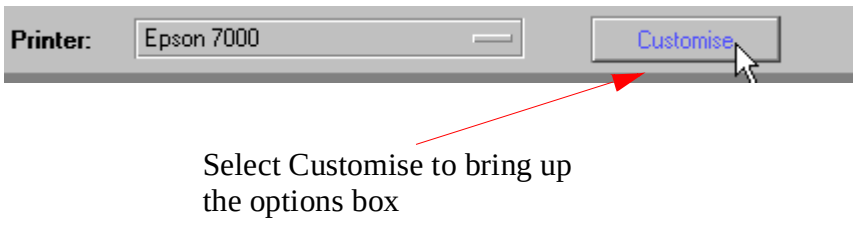
New Status shows Rotating

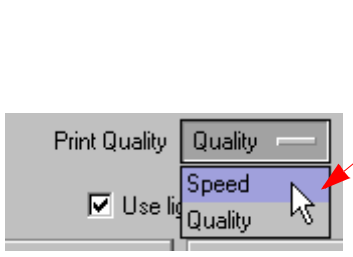
We have added a new status to the Queue Manager which states when the job is Rotating.

Before the status always displayed imaging when time was really spent rotating the job.

New Speed option for Epson 7000/9000

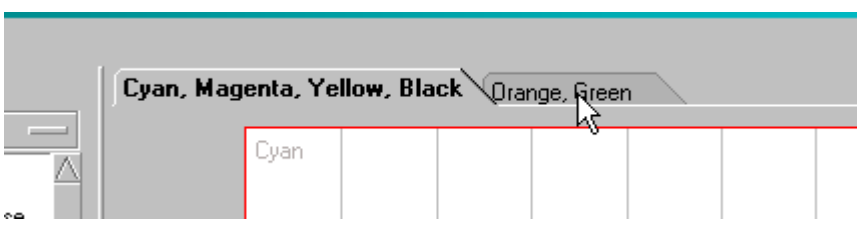
There is a new option for the Epson 7000/9000 for faster output. To select this option go to your pagesetup and select customise.



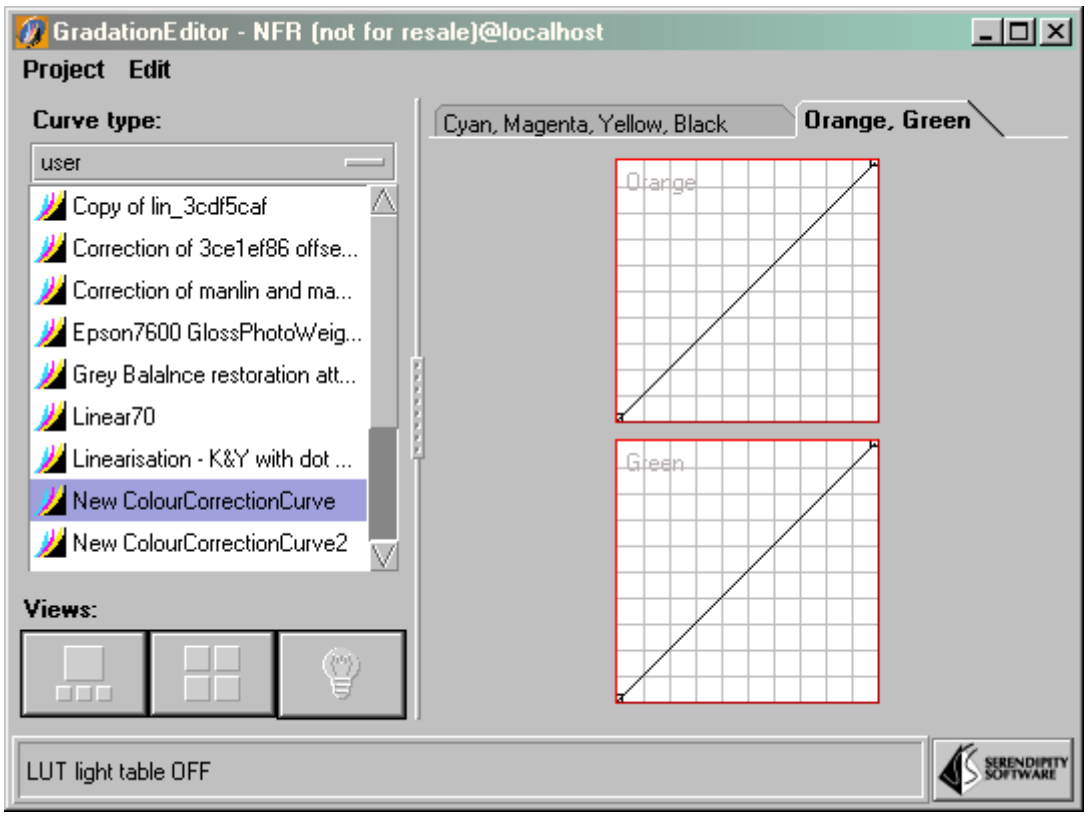


Orange and Green Curves in the Gradation Editor

We have added the ability to adjust the Orange and Green (Hexachrome) in the Gradation editor. You will see another tab

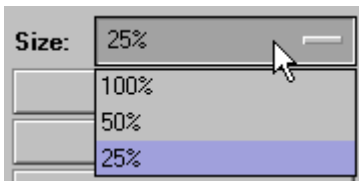


Select the Orange, Green tab to adjust the curves if required. These will only be used in a Hexachrome pagesetup.



Print Gallery Changes

There are a couple of changes to the Print Gallery. In particular the speed of displaying of the thumbnails is far faster and they are also scalable. Just below the list of Printers you will see a ‘Size’ button.It also uses less memory.



Select the scale of the Thumbnail that you wish to view them at.

Heidelberg Deltalist New Option

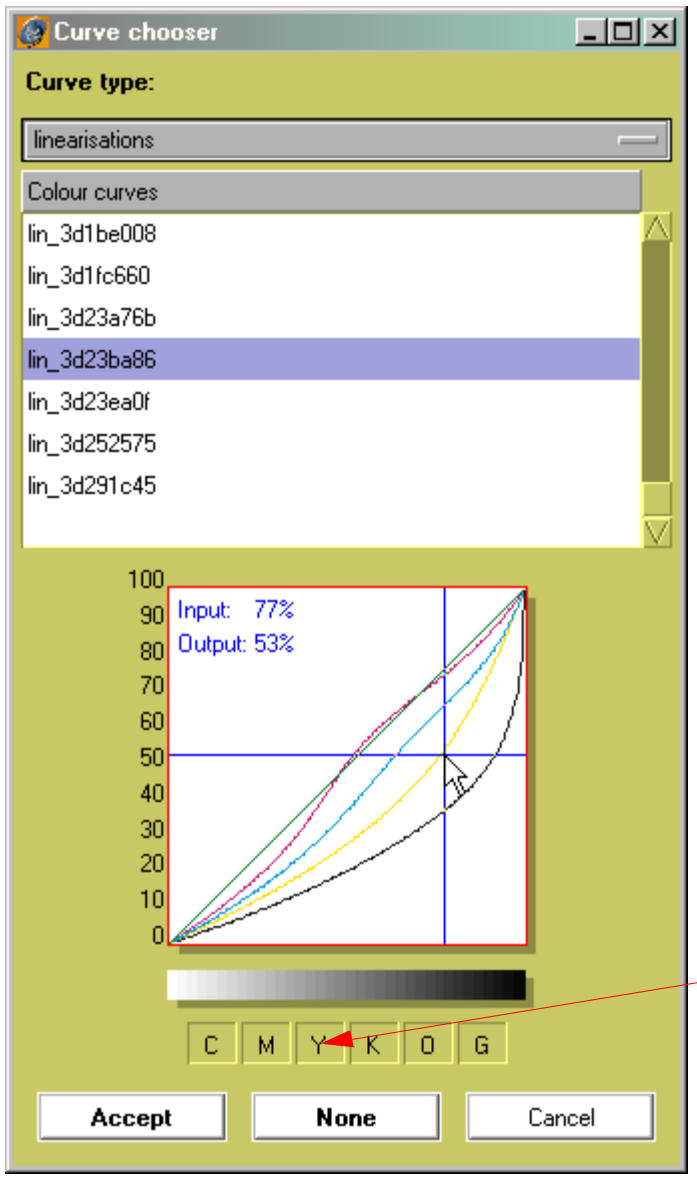
There is a new option for the Heidelberg input filter where you can ignore orphaned.lhd files. These orphaned files are ones that do not have an associated job.ddc file. They normally show up so you can stitch them together by using Virtual Press if you want to. But sometimes these can be confusing when displayed in the RIP Monitor. So now there is an option not to show them.

The new customise options for the Heidelberg DeltaList Input filter. Select to ignore Orphaned deltalist files.

In the RIP’s control panel, select your Heidelberg RIP setup and click on the customise button. If you do not wish to see the orphaned file, select the option, accept and save. You will need to re-poll to see the new list.

Curves now displayed from Curve chooser

For the Linearisation, Correction and Dot Gain curves the characteristics of the curve are shown in the Curve Chooser.

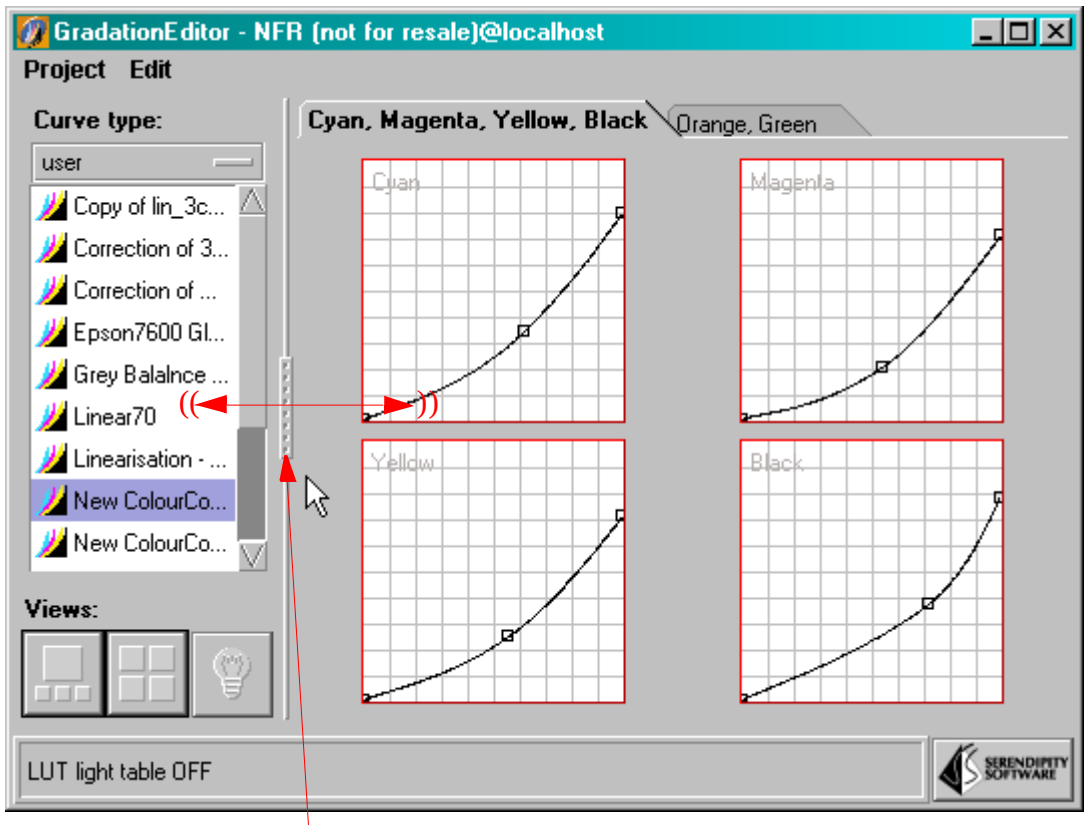


As you select different Curves they are displayed below.

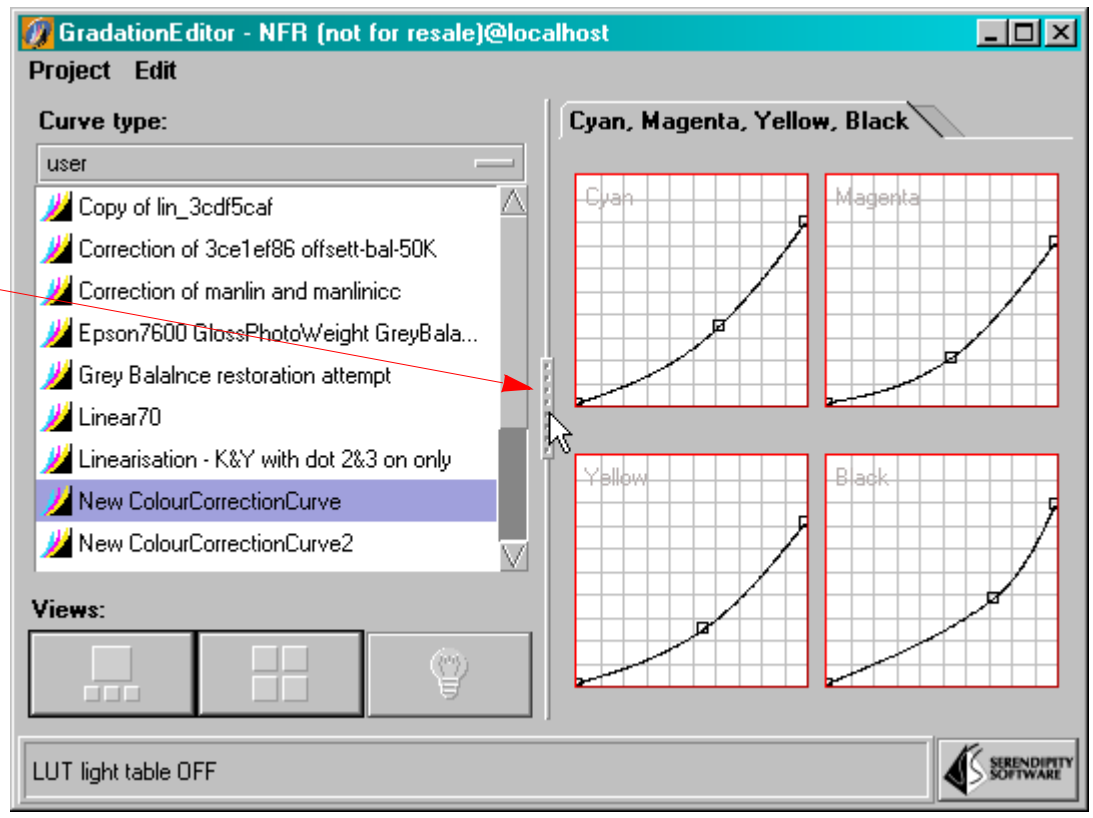
You can turn the colours on and off by clicking in the appropriate square.

New List Re-Size capability

On all of the lists of configurations used in the various applications you have the ability to resize the list to the desired amount.

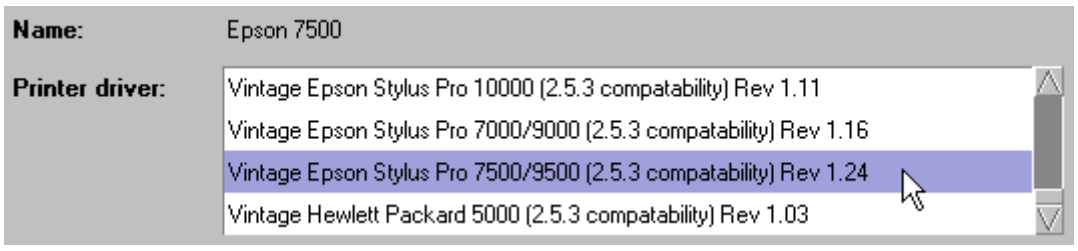


Click and move the slider bar to make the list as wide or as narrow as you like. This is on all applications with this type of list.



Vintage Driver Selection

All the main printer drivers have been re-written to utilise the new calibration process, but as this can be problematic to some customers as they upgrade from their 2.5.3 version we have also included the last release drivers referred to as ‘Vintage’ drivers.



This shows the Vintage Printer Drivers which are selected automatically after an upgrade. Choose the new ones to utilise the new calibration procedure.

If you are extremely happy about the current level of colour matching and quality from the 2.5.3 version then you can continue to use the existing drivers with all the additional features and no need to re-calibrate. When the software is first run after an upgrade the drivers are checked and if they are the previous versions the Vintage drivers are selected by default.If you want to utilise all the new calibration procedures then you must select the appropriate driver which have names similar to previous releases (just with different versions). i.e If you have BlackMagic 2.5.3 and running an Epson 10000cf, the first time you upgrade the driver “Vintage Epson Stylus Pro 10000 (2.5.3 compatibility) Rev 1.11” will be selected so you can continue as you did before the upgrade. To use the new calibration, select the driver “Epson Stylus Pro 10000 Rev 3.09”

Customer Sluglines

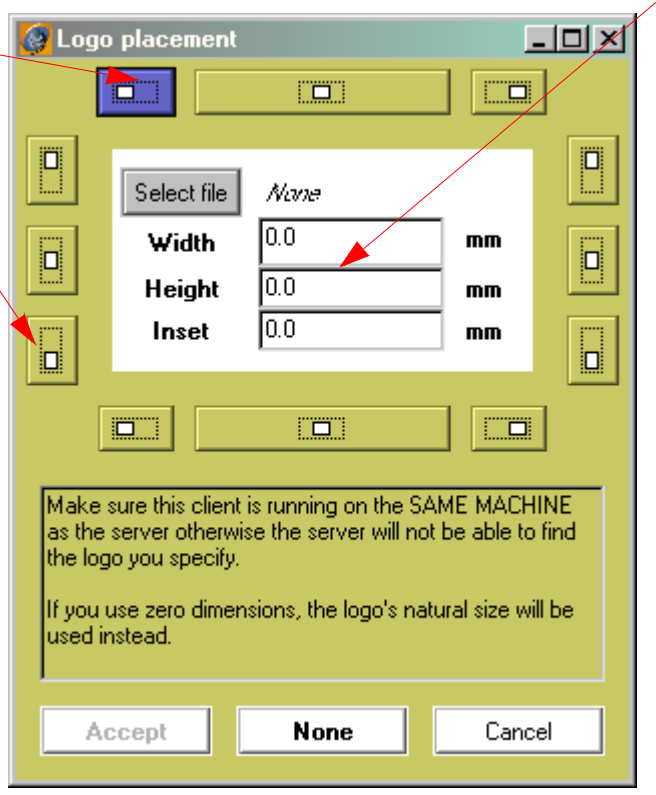
We have added the ability to add your own slugline or logo to the job. It can be positioned anywhere outside the job and scaled to the desired size. This is accessible through the pagesetup.

Click the button to launch the Logo Placement window

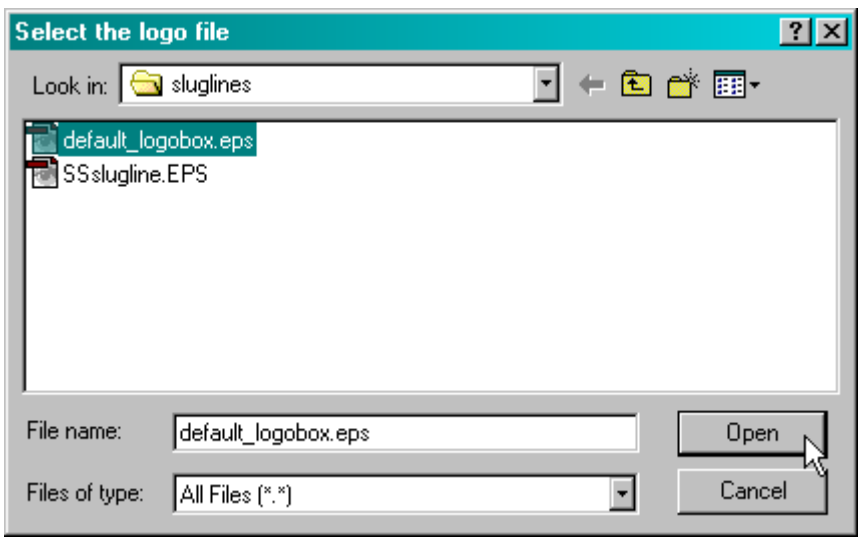
Select the position you want the file to be attached by selecting one of the boxes around the window.

Enter the Width and Height you want the logo. If no dimensions are entered then the default dimensions of the EPS are used.

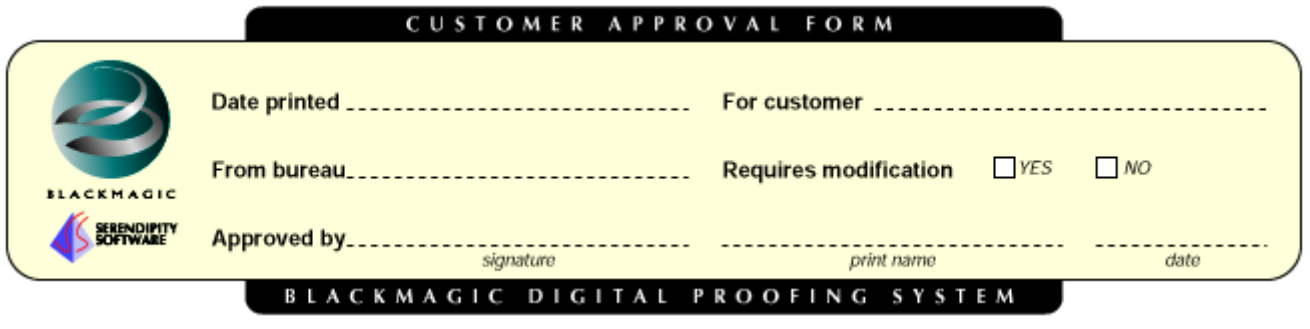
Select the inset to determine how far from the page you want the logo to sit. Only positive dimensions are allowed.



‘Select File’ brings up the file chooser. Locate the file and press Open.



The File must be an EPS and all fonts must be included. You may have the logo or slugline at any location on the server where BlackMagic is installed but the default place is in the BlackMagic home directory under lib/sluglines. There is a default slugline there for you to use if you wish.



The logo is attached to the position requested after rotation. i.e. if you specify that you want the logo in the bottom right hand corner then it will always be in the bottom right hand corner irrespective of job rotation. It does not rotate the logo so if you want it down one side you must save the EPS 90 degrees rotated.

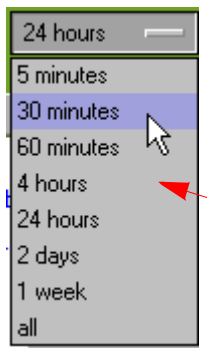
Server Log File

The server log has been changed to make it more manageable There is a separate window that can be called up from the Launch Pad which gives simplified log messages. From here you can also trim the log file and save it to a file in HTML format. The log file is automatically trimmed to 2 months as standard housekeeping by the server from now on.

The main server window will not change but the log file that is on the disk in the home directory - Blackmagic.log - has changed format. This means that as soon as you start the new BlackMagic server after an upgrade the current log file will be deleted. The new format of the log file is not easily readable any more. All future submissions of the log file to Serendipity Software or a local dealer should be done by saving the file through the server log window.

One of the main advantages of this, despite the log file never getting too big, is that the client, which can be installed on any machine can view the server log. This is an advantage for remote proofing as you now have full control and server information.

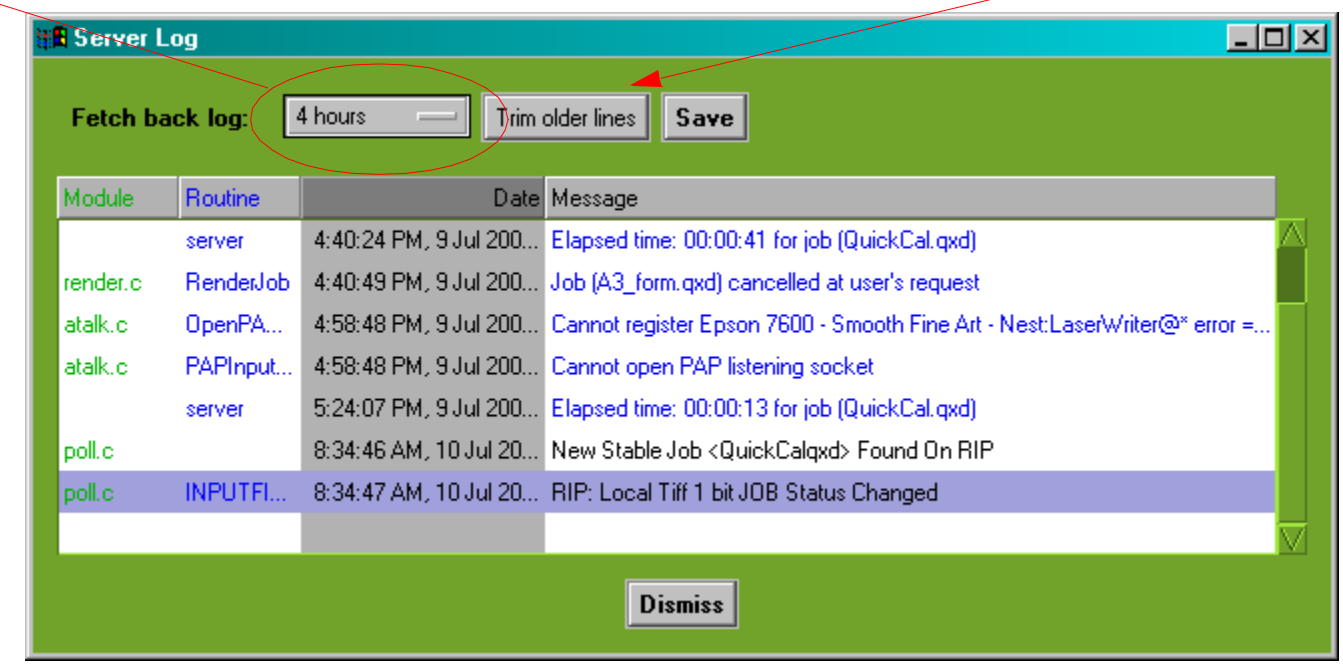
The server log window is started through the Utilities menu on the Launch Pad or by the short-cut keys <Ctrl><Shift>L while the launch pad is selected.



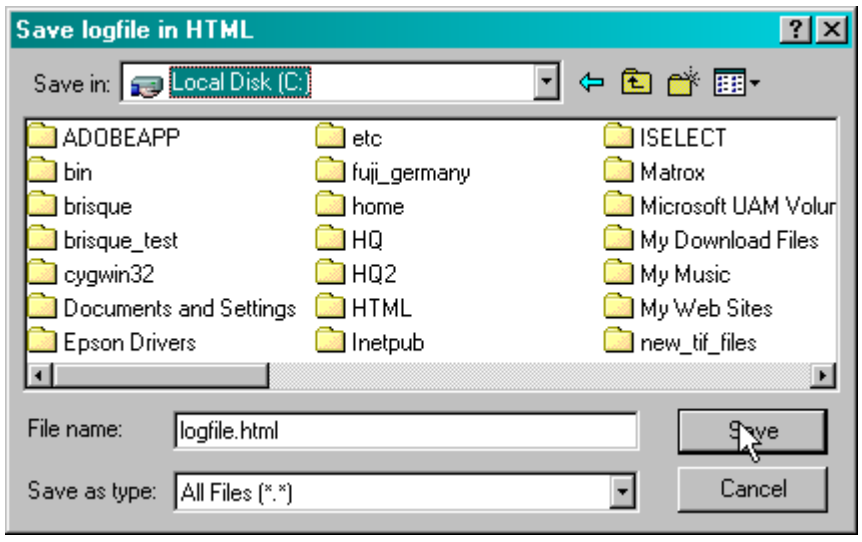
Selecting a different time from the pull down list will fetch all the messages from the log during that time period and display them.

If you want to reduce the log file to a set amount, select a time period from the pull down menu and hit the trim older lines button.

New messages are always appended to the bottom despite the time setting. If you only want to see the messages in the last 30 mins the select it from the list.



If you want to save what is being displayed in the window, click the ‘Save’ button and you will be prompted for a file name and location.



The file saves in a html format making it easy to read in a web browser. This can be easily viewed or emailed to show problems.

Logfile from TANGLEFOOT

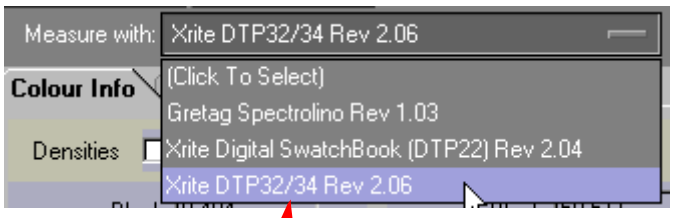
Line	Module	Routine	Date	Message
1	poll.c	null	8:34:46 AM, 10 Jul 2002 (Wed)	New Stable Job <QuickCalqxd> Found On RIP□□
2	poll.c	INPUTFILTERPOLL	8:34:47 AM, 10 Jul 2002 (Wed)	RIP: Local Tiff 1 bit JOB Status Changed
3	null	server	9:54:19 AM, 10 Jul 2002 (Wed)	Elapsed time: 00:00:47 for job (ColourChart.qxd)
4	null	server	9:54:46 AM, 10 Jul 2002 (Wed)	Elapsed time: 00:00:27 for job (QuickCal.qxd)
5	null	server	9:56:07 AM, 10 Jul 2002 (Wed)	Elapsed time: 00:01:21 for job (ColourChart.qxd)
6	null	server	9:56:17 AM, 10 Jul 2002 (Wed)	Elapsed time: 00:00:10 for job (QuickCal.qxd)
7	poll.c	null	9:56:41 AM, 10 Jul 2002 (Wed)	New Stable Job <1BMlogovigneps> Found On RIP□□
8	poll.c	INPUTFILTERPOLL	9:56:41 AM, 10 Jul 2002 (Wed)	RIP: tiff JOB Status Changed

Total of 8 messages.
File generated: 9:56:59 AM, 10 Jul 2002 (Wed)

Example of a log file from a BlackMagic server in html format.

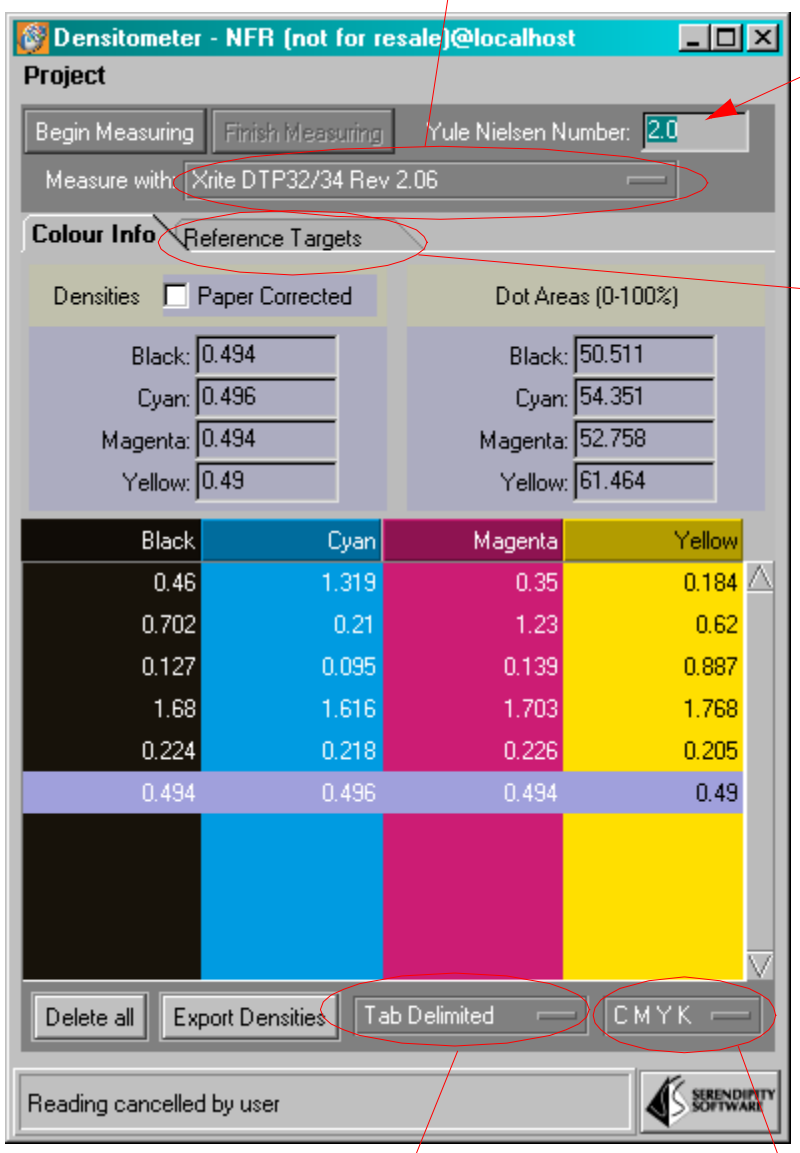
Densitometer

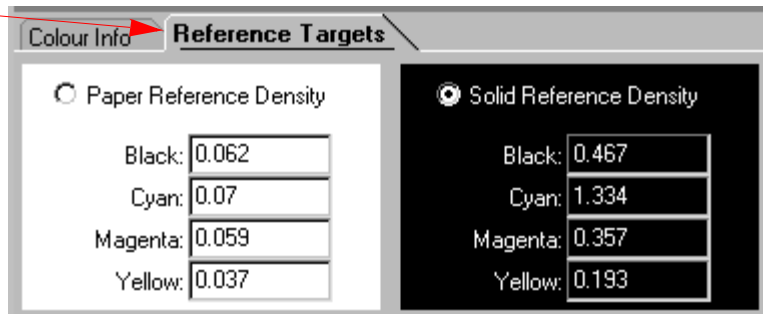
There is a new application that displays density readings and tint values from the range of on-line densitometers that BlackMagic now supports. To start the densitometer, either select it from the pull down menu on the Launch Pad or click the densitometer icon on the front. 



Choose the device that you have connected to the server then click ‘Begin Measuring’. Click ‘Finish Measuring’ when completed to free the instrument for use by other applications

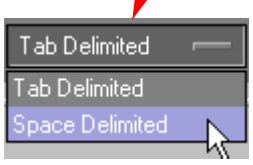
Enter the Yule Nielsen number for the paper you are reading if you know it. See note on Yule Nielsen later.





Flipping the Tab shows the reference targets for the paper and solids. Select the one that you want to read and use your densitometer to enter the values.

These values are used for displaying the Dot Area. You can also display the paper corrected densities.



You can export the list of density readings to a file. This can be either in Tab delimited or Space delimited and you can choose whether you save as CMYK or KCMY.

Choose the format you require and click the ‘Export Densities’ button

Once you have some readings in the list you can export these to a file in either tab or space delimited and either CMYK or KCMY. If you have entered values for the Reference targets, selecting an entry in the list will display the appropriate % tint values. i.e. Enter the paper density, then enter the solid density for say Cyan. Then measure a Cyan patch and the respective Cyan tint value is shown on the Dot area next to Cyan. Also if you select the ‘Paper Corrected’ check box in the Densities section, the densities in the text boxes are paper corrected densities i.e. the density values for each of the four colours read for paper are subtracted from the read values under Colour Info. The values in the list are not corrected and are the real read values.

To clear the list press the ‘Delete All’ button.

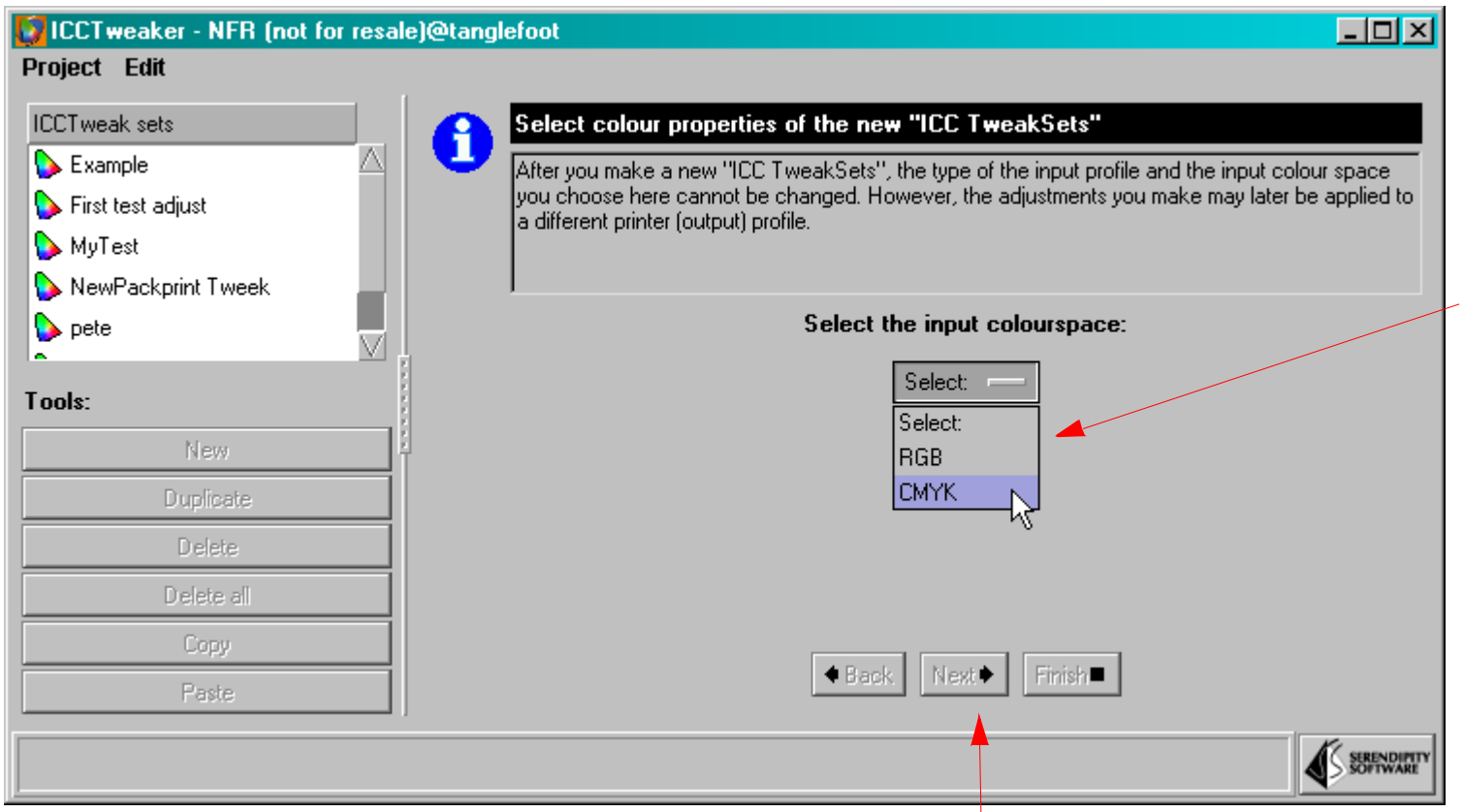
ICC Tweaker

There is another new application called the ICC Tweaker. This gives you the ability to adjust very specifically certain colours that do not get mapped properly by the ICC profiles. This is a common problem where not all colours always get mapped. This application gives you the ability to enter the value of the colour you want to change and how much you want to affect it.

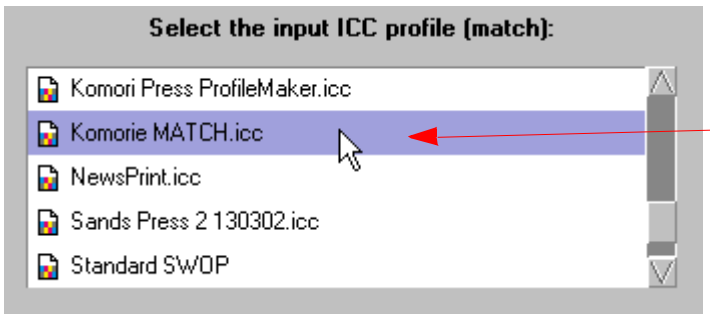
Start the ICC Tweaker either by choosing the application from the launch menu on the Launch Pad or from the front panel button. 

When the window first appears you are presented with a list of existing tweak-sets. You can either select one of these or create a new tweak-set. These next steps take you through creating a new tweak-set.

Select ‘New’ from the Project Menu and you will be prompted through each stage of creating a tweak-set.

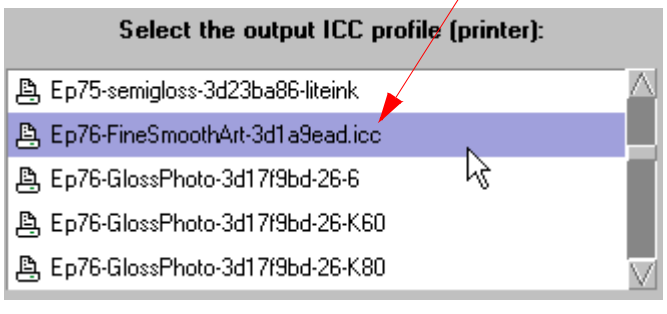


Firstly, select the colour space that you are working in.

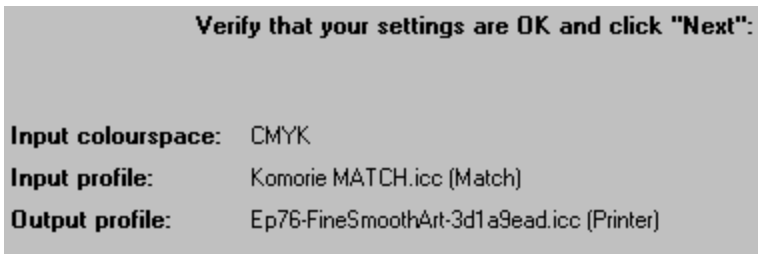


Then click ‘Next’ and you will be asked to choose a Match Profile

After clicking ‘Next’ again you will be asked to choose a Printer Profile

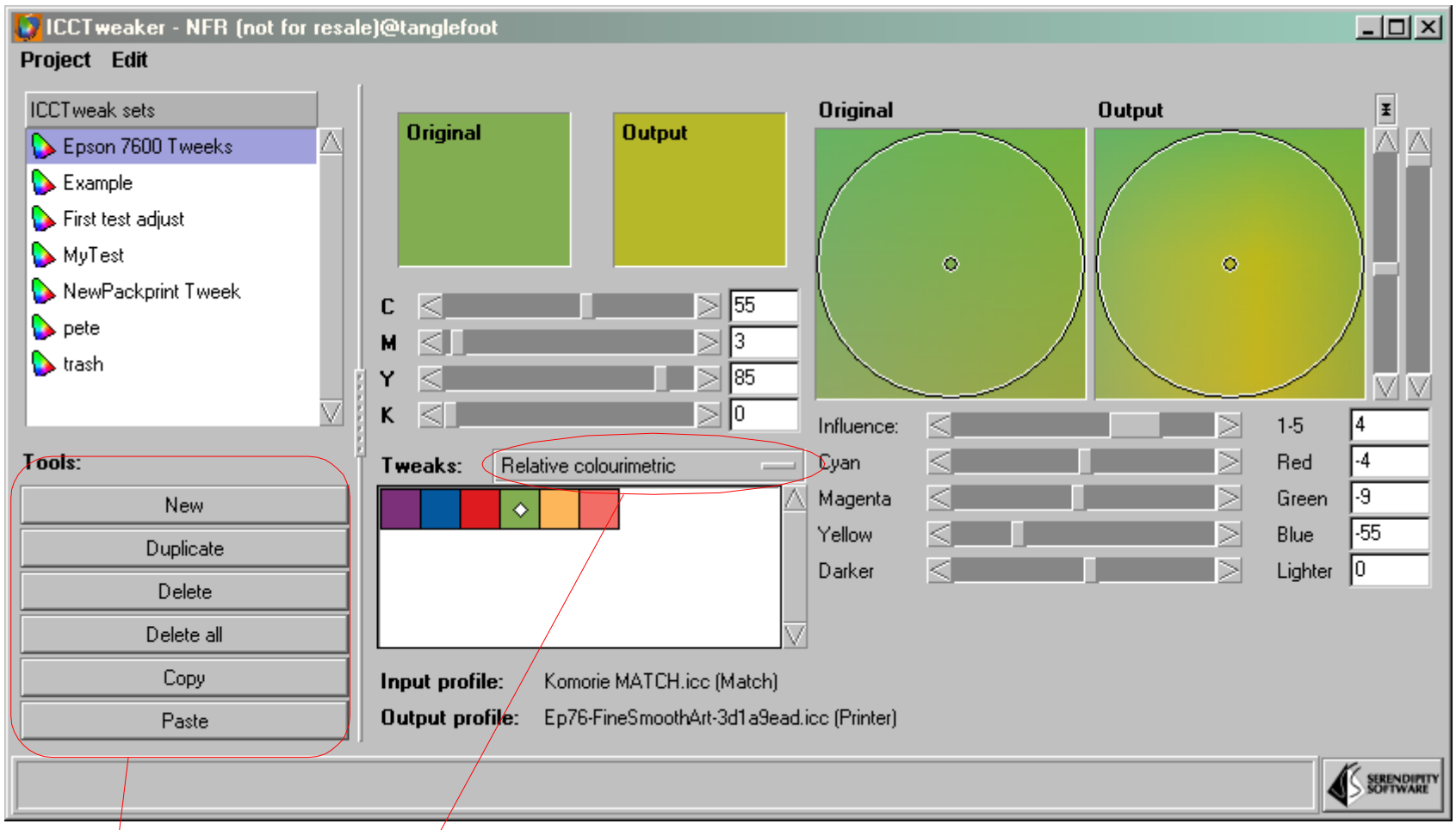


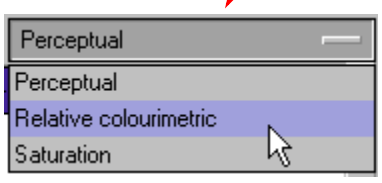
After pressing ‘Next’ you will be presented with a summary of your choices. You can go back and change them if you wish. If you are happy click ‘Next’



You will then be asked to enter a name for the tweak-set after which you can click the Finish button.

Once you have entered all the relevant data the tweak window will allow you to manipulate your colours.





Choose the rendering Intent that you want to make your set for.

New creates a new colour

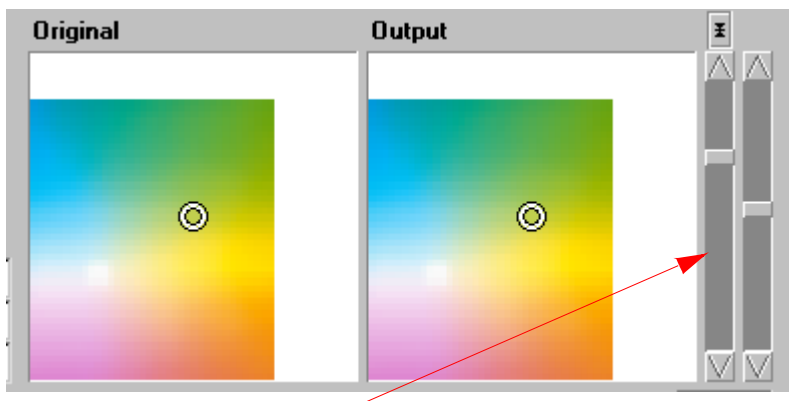
Duplicate makes an exact copy of the currently selected colour

Delete removes the colour

Delete all removes all the colours

Copy makes a copy of the selected colour or colours,

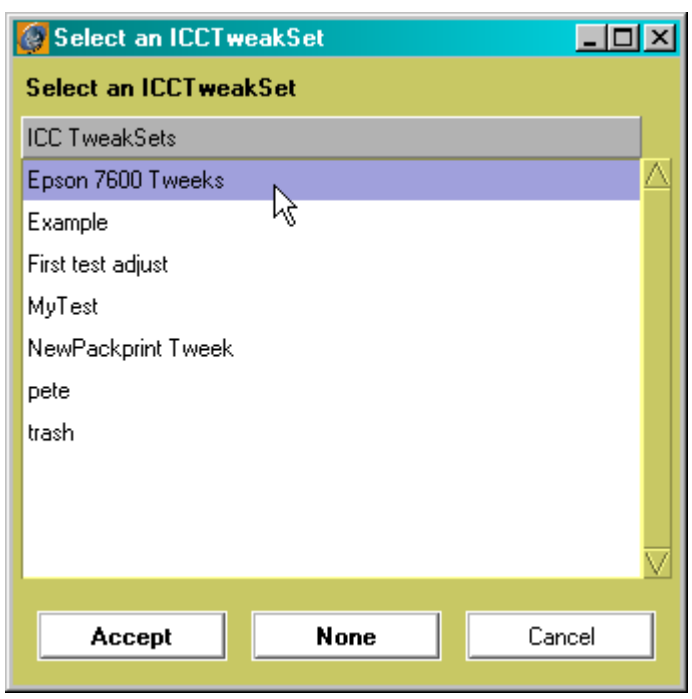
Paste pastes the colour or colours that are in the copy buffer.



The sliders to the right of the of the window show the portion of the gamut that you are affecting. The slider on the right zooms in and out of the colour space. Here you can see we have zoomed out quite a bit. The slider on the left shows the lightness. Moving up shows the lighter part of the gamut and down the darker point.

Once you have created the colours for one rendering intent you can select them individually, or multi-select with the use of shift or control key, copy them, change to a different rendering intent and paste them. Once you have your colours created, save the set under the project menu. You then need to select the tweak-set to be used in your pagesetup. Under the colour management selection you will see a new button which allows you select your tweak-set.

In the pagesetup click the ICC Tweak Set button and select your newly created tweak-set from the Chooser. Accept the choice and Save the pagesetup. The set will be use during the icc mapping from output to input and make any adjustments necessary.



New Calibration Process

This section will describe the steps required in the new calibration process. It will utilise two new applications, the Paper Profile Modifier and the Lineariser and is based around ICC profiles. However, if you prefer not to use icc profiles then the initial stages are the same.

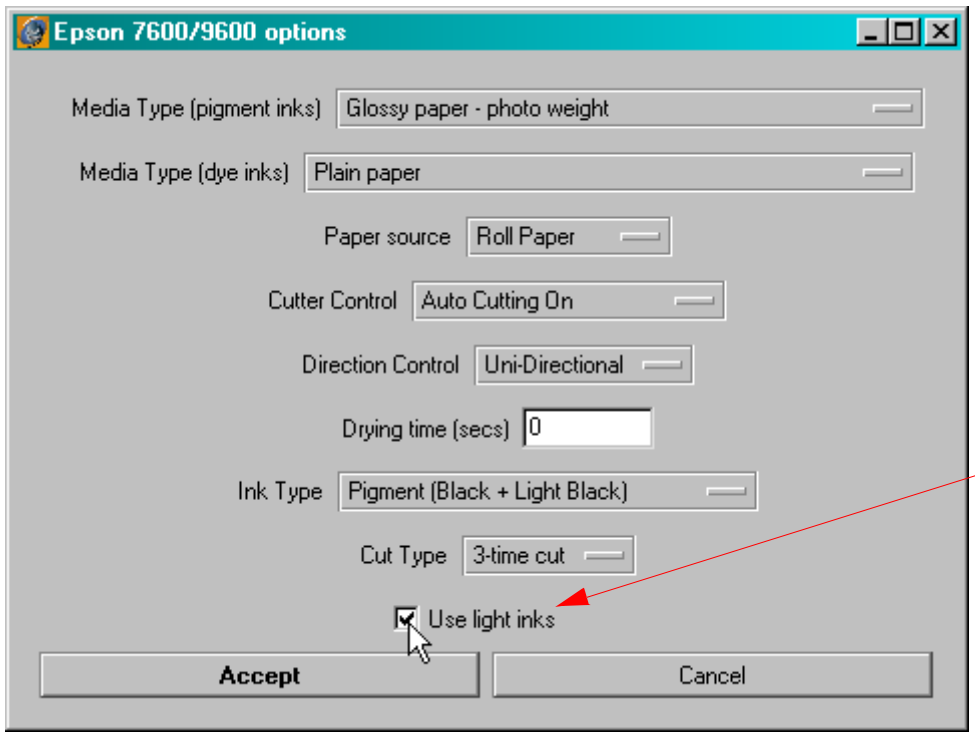
To summarise the process, the steps are as follows:

1. Select an appropriate Paper Profile.
2. Check the ink limits
3. Create a Linearisation curve
4. Make an ICC profile.
5. Minor adjustments.

1) The Paper Profile

It all starts with the paper profile. This is a profile of the ink and paper combinations which vary between manufacturers and models. Paper profiles are provided by Serendipity Software or an approved dealer. These normally come as a database file and needs to be loaded through the Database Manager. Once they are loaded into the system, select your pagesetup you are going to calibrate and check that the configuration is correct.

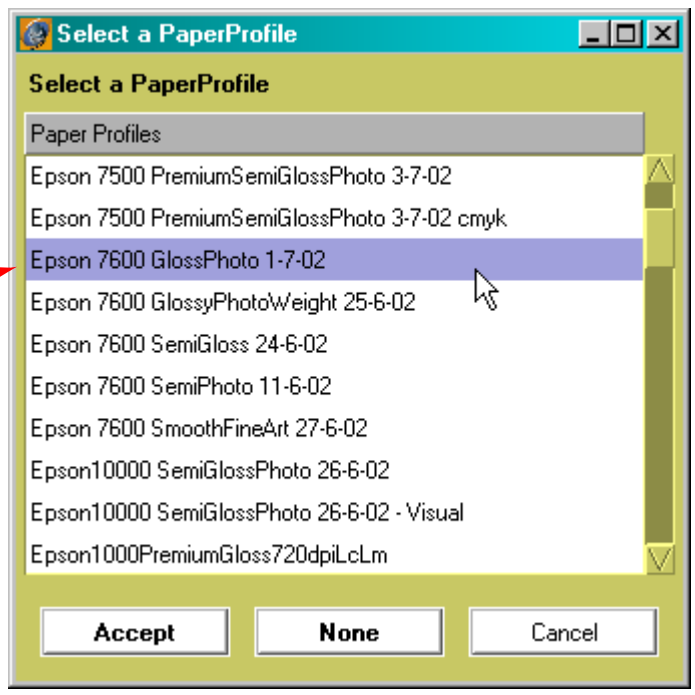
Note: The Light Cyan and Light Magenta is no longer selected through the Colourspace setting on the main pagesetup window. Instead, select the 'customise' button and enable the 'Use light inks' option.



Enable 'Use light inks' for light cyan and light magenta. Also for new blacks in the new Epson 7600/9600 printers.

Make sure that you have the correct paper configured and the resolution and colour space is correct. Select the paper profile for your type of machine by selecting the 'Paper Profile' button under the colour management section.

Click the Paper Profile button to bring up the profile chooser. Select the paper profile for your printer and paper combination and press 'Accept'.

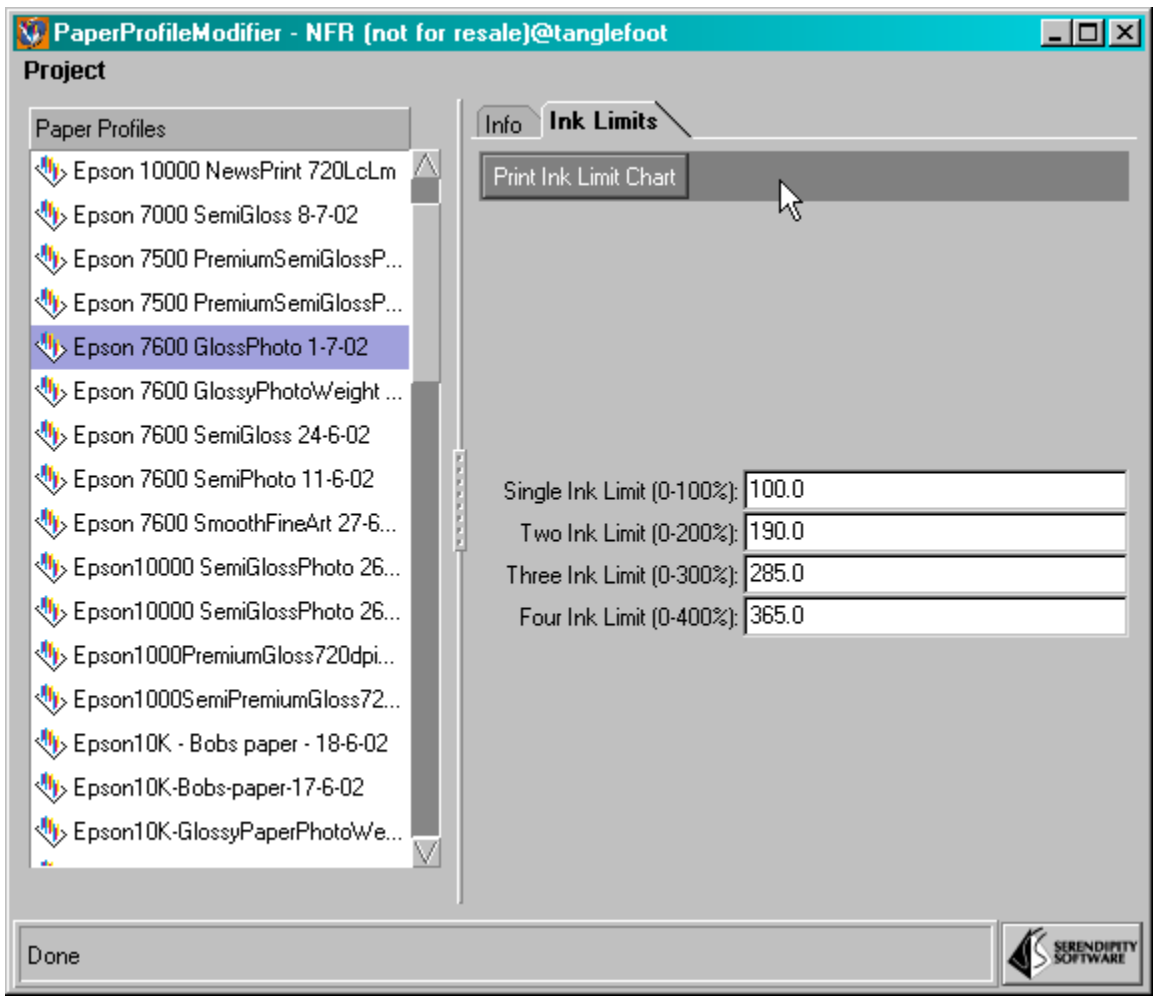


Once selected, save the pagesetup. You are now ready to check Ink Limits.

2) Ink Limits

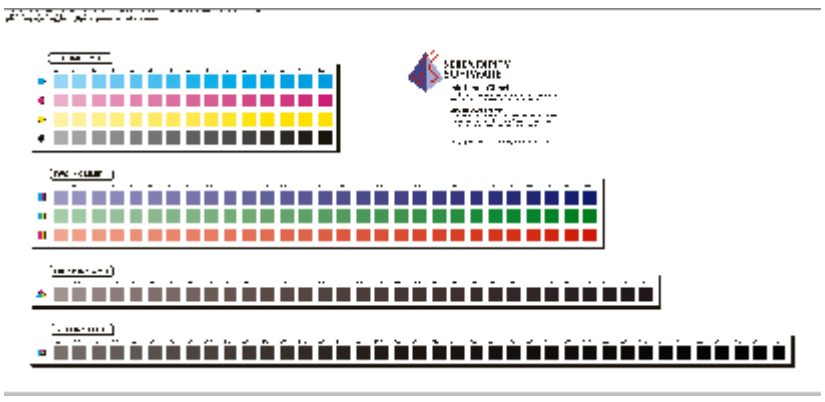
This section sets the ink limits for the paper. You may not need to complete this section as the Paper profile will already have some ink limits set. We are covering this so you can adjust them if you need to.

Select the Paper Profile Modifier from the Launch Pad. 



This shows the current ink weights set in the paper profile.

Print the chart out by clicking the Print Chart button and selecting the pagesetup that you are calibrating. The chart looks like this.



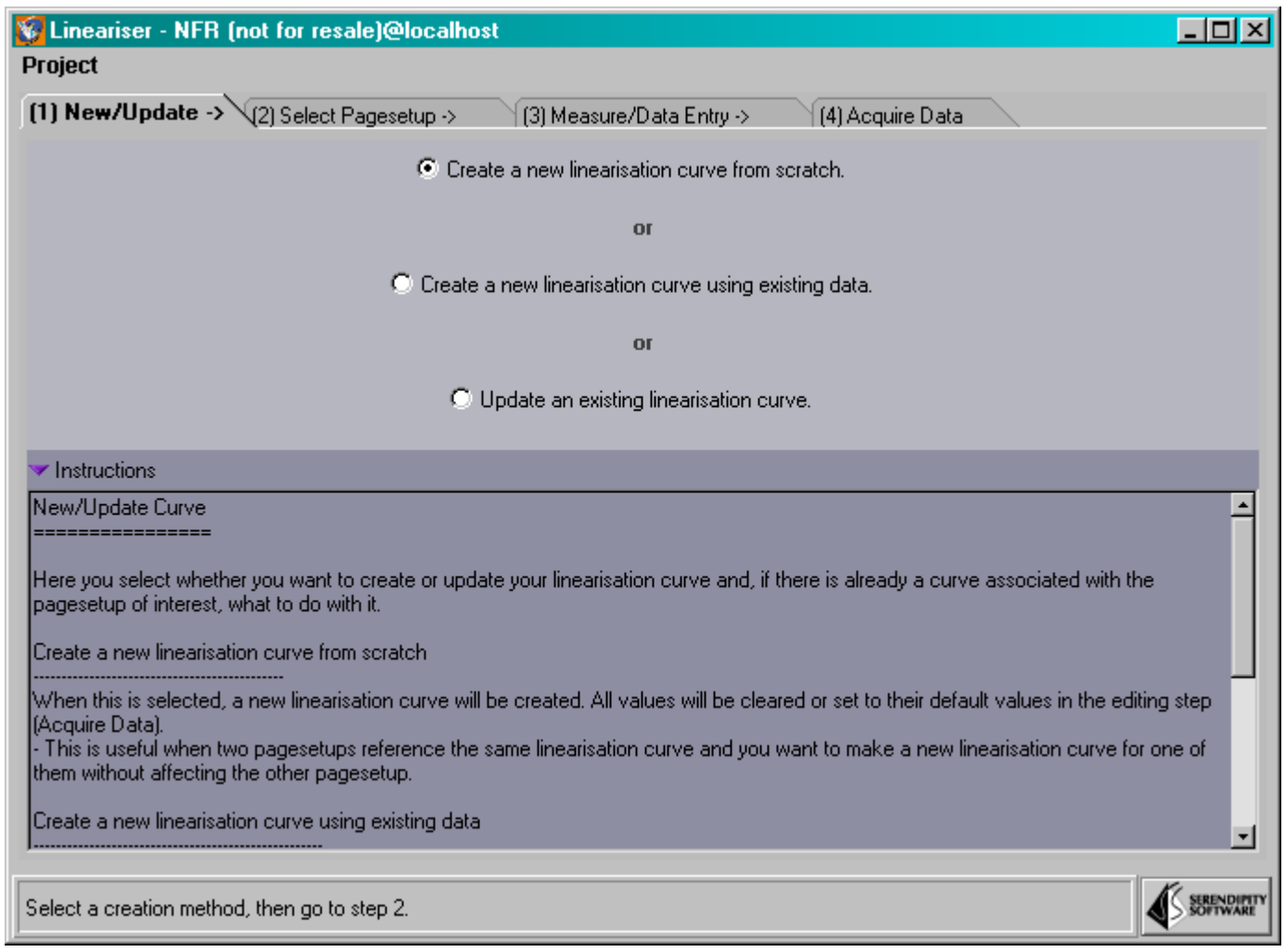
Some of the patches will come out wet and some dry. The ink limits set are the point where the most amount of ink can be placed on the paper without flooding or over saturating. Sometimes you will see a mottling effect so this is too much ink and will result in a poor profile. It is a good idea to check this chart as soon as it has been printed before it has had time to dry. This way you get an accurate assessment of the printers ability of placing ink on that paper.

Adjust the maximum ink limits if you need to and save the paper profile. If you do not want to overwrite the existing one, then choose save as and give it another name. Make sure that you select this new paper profile in the pagesetup though.

3) Linearisation

Here you create a curve that linearises your paper and ink combinations. To start the lineariser, select the lineariser button from the front of the Launch Pad. 

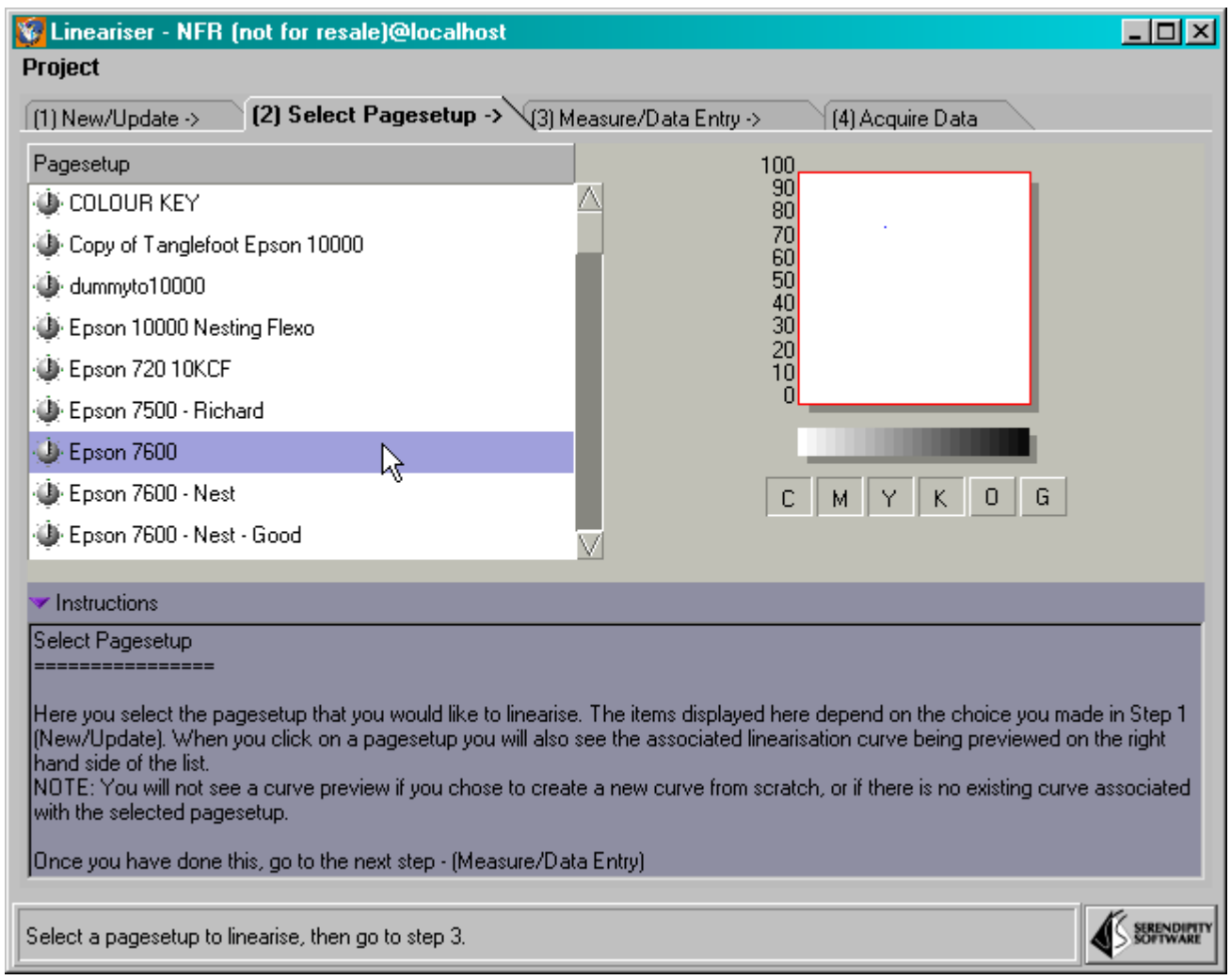
This takes you through a step by step process to create a linearisation curve for your device. Step through the tabs following the instructions. You cannot proceed from one tab to the next without making a selection. Message are displayed at the bottom of the window and there are some instructions in the bottom half.



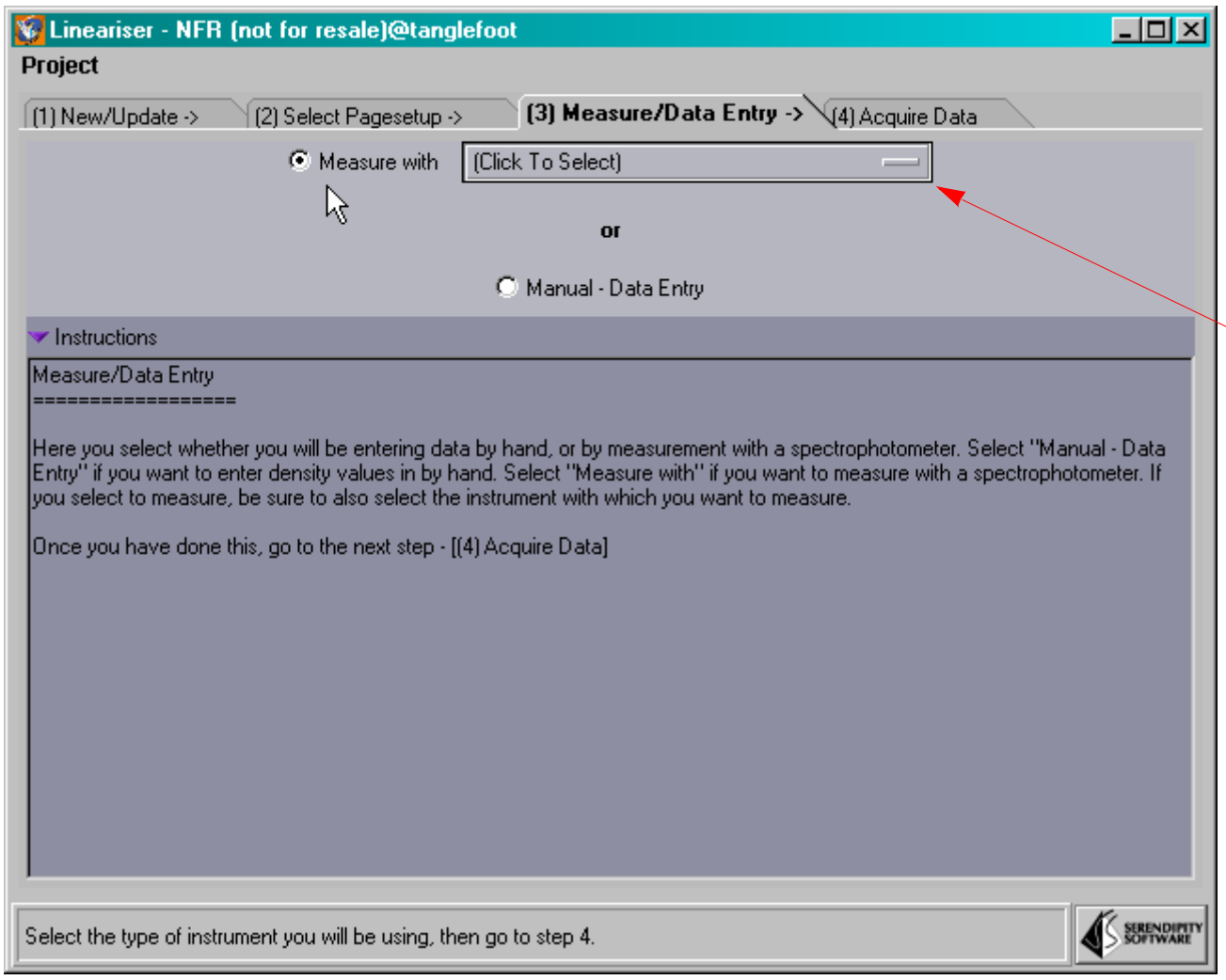
There are three options on the first tab.

Create a new linearisation curve from scratch - This starts from the beginning to produce an entirely new curve.
Create a new linearisation curve using existing data - Use existing readings but create a new curve so you do not overwrite the one you have.
Update an existing linearisation curve - Change an existing curve.

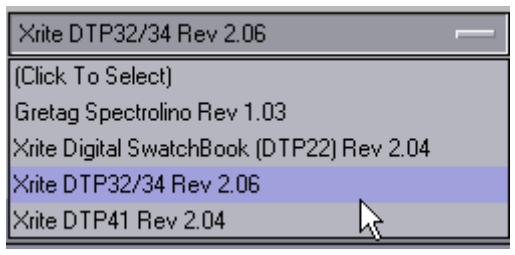
Choose the first option to create a curve from scratch.



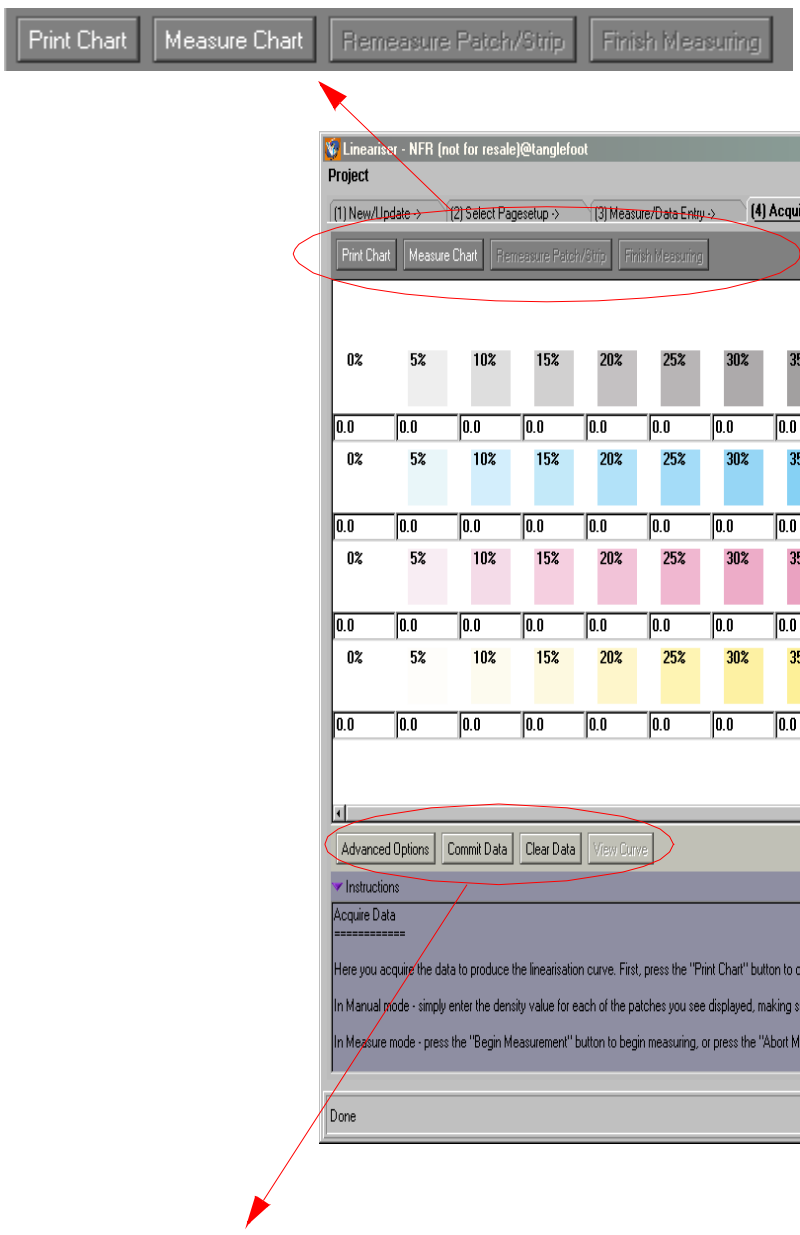
Select the pagesetup that you are currently calibrating, then move to the next tab.



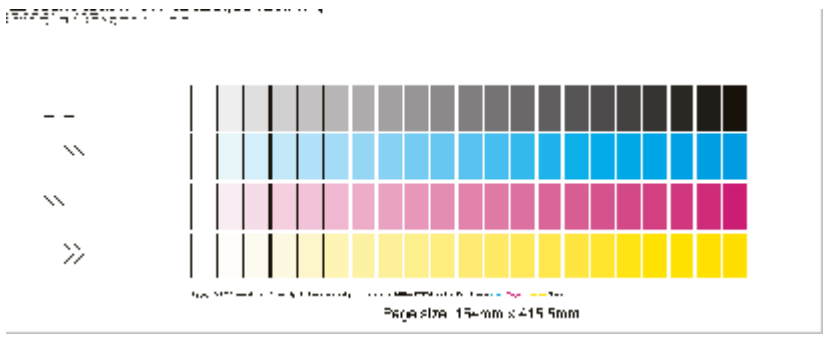
Select the on-line device connected to your server.



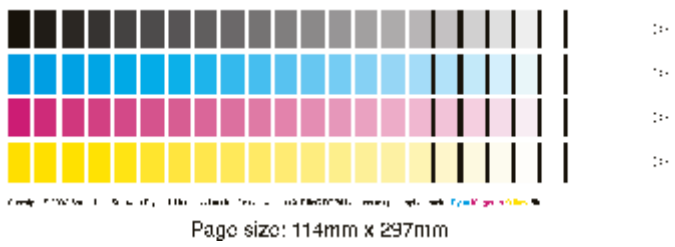
Once you have selected the device you have attached move to the next tab. If you do not have a device connected to the serial port of the server then choose ‘Manual Data Entry’.



Click the Print Chart button to output the linearisation chart. The chart depends on the device chosen in tab 3 as it suites the instrument you are using to read the patches. The chart is automatically sent to the pagesetup chosen in tab 2.



This is a chart for an Xrite DTP34

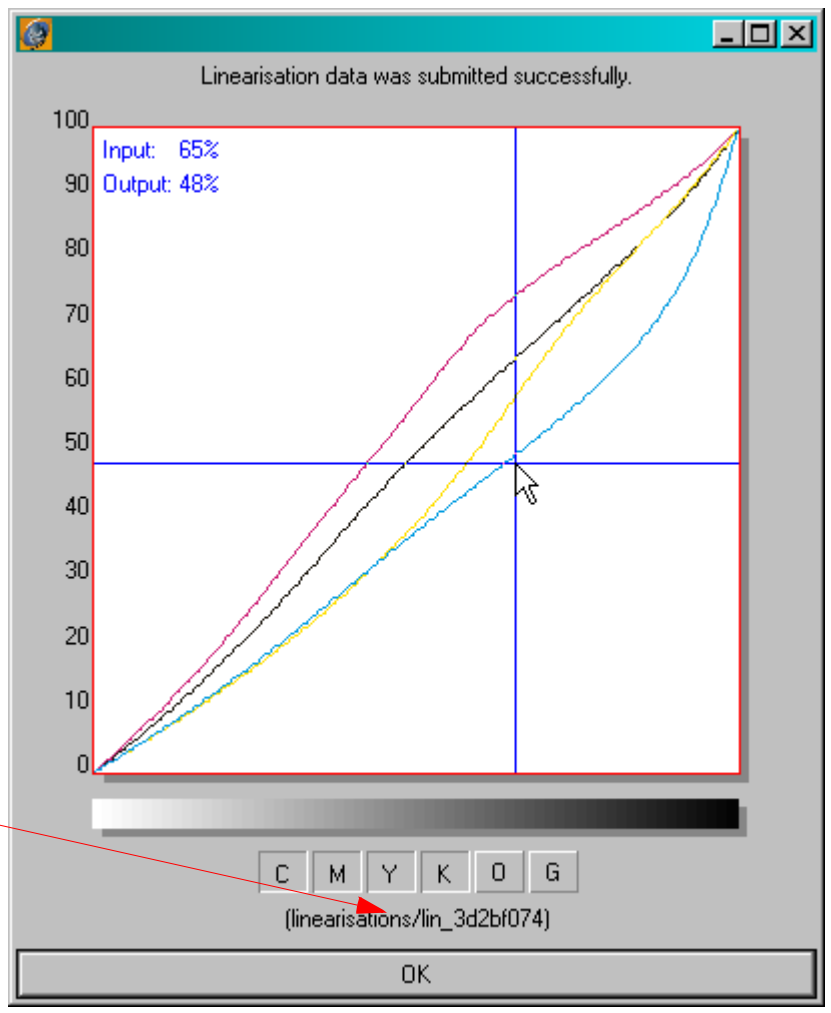


This is a chart for an Xrite DTP41

When the chart is printed leave it for a short time to stabilise before reading. If you are using an on-line device select the ‘Measure Chart’ option. The server will then look for your selected device. Once it finds it will report at the bottom of the lineariser window that it is ready for the black strip. Read the black strip and wait until the server reports that it is ready for the Cyan strip. Repeat until all of the colours have been read. If there is a bad reading at any time the graphical user interface will tell you and get you to re-read the strip.

Once all the strips have been read you are prompted to ‘Commit the data’.

After reading the strips successfully commit the data to the server. This brings up the window showing the characteristics of the linearisation curve.



The name is automatically assigned to the curve so it is unique. It also automatically gets attached to the pagesetup.

To see the that the linearisation curve has been attached to the pagesetup simply select the pagesetup you are calibrating again to update the interface. You will see your new curve attached.

If you need to re-measure a strip, select the strip and click the Re-measure Patch/Strip.The server will check for your instrument again and once found get ready to measure.

4) Make your ICC Profile

You are now ready to profile your printer. This is the same as before only there is a linearisation curve attached.

5) Minor Adjustments

After you have your profiles for your printer and run a press job and assess it. There may be some minor adjustments required. These would either be by applying a correction curve which would change the weights of individual (process) colours or by way of a Gradation curve, which is applied to all process evenly. For example, if you wish to make the overall proof lighter you would apply a process dot gain curve. If you wanted to adjust the weight of the black then you would alter the black curve in the gradation editor and apply it in the correction LUT.

General Notes

Some general comments and notes about the new release.

Database Manager

The database manager has changed the format of the file it creates for archiving to make it more memory efficient. This means that archives created with the database manager on v2.5.3 cannot be loaded into the database manager in this version. If you need to restore a database that you archived in the older version to the current release, you can do it with the old client. Here's how:-

Start the V2.6 server.
Run the client from the 2.5.3 version and start the database manager.
Load the archive that you created in 2.5.3.
Select the item you want to restore and add them to the database (which is v2.6)
Quit the 2.5.3 client and start the v2.6 client for normal operation.

Note: This is the only time you should run an old client with a new server, otherwise you will get errors reported.

Hexachrome

The Roland is now fully supported to use all 8 colour inks. This works by converting the incoming file to CMYKOG by way of the ICC Profile. You cannot print in six colours and pass through BlackMagic ICC engine to output. To create the targets for ICC profile you save as a single file DCS 2.0 with hexachrome comments defining the plates which works as it does not go through the ICC engine. You can save any file in this way for printing but you will have to use the Gradation editor to create curves for calibration. This can be done for all six colours now.