HP DesignJet 130 ProofReady Plugin

Version 1.0r1

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HP DesignJet 130 ProofReady Plugin

Version 1.0r1

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1 Introduction

This manual describes the HP DesignJet 130 ProofReady plugin for the Torrent RIP. Once installed, the plugin adds a selection of new output devices, colour profiles and calibration profiles to the RIP, each designed to produce optimum quality output for the HP DesignJet 130 printer.

HP DesignJet 130 plugin features:

- Support for common paper types at various print resolutions.
- Provides ProofReady colour profiles for instant, expert colour management.
- Provides calibration profiles for common paper types at various print resolutions.
- Supports a variety of halftone screens (depending on the device selected), including support for optional preview.
- Supports post-processing operations.
- Allows automatic file renaming using a template.
- Supports output to printer, file and network.

2 System requirements

To operate correctly, the HP 130 plugin requires the following system resources:

2.1 Windows

- Intel Pentium IV (or equivalent).
- Microsoft Windows 2000, 2003, XP Professional or Home Edition.
- 256 MB of RAM (in addition to basic memory requirements for your RIP).
- Connection interface, either:

  IEEE 1284-compliant bidirectional parallel port. Check your BIOS is set to use bidirectional mode (however, this is not recommended due to poor performance).

  HP JetDirect J6057A 10/100Base-TX print server supporting TCP/IP, Appletalk, DSL/LLC and IPX/SPX protocols.

  USB 1.1 (USB 2.0 compliant).

2.2 Apple Mac

- PowerPC G4 or Mac Intel.
- Mac OS X v.10.2.8 (Classic Mac is not a supported platform).
- 128 MB of RAM with virtual memory turned on (in addition to basic memory requirements for you RIP).

3 Installing the plugin

Follow the instructions in this section to install the HP 130 printer plugin in your Torrent RIP.

3.1 Installing with the Product Installer

1. Close the Torrent RIP if it is running.
2. Open the plugin files that have been supplied to you. Depending on your operating system, run one of the following programs:

   `install.exe` (Windows)

   `install-macosx.app` (Mac OS X)

3. In the Product Installer dialog (Figure 1), specify a destination folder for the plugin files, by entering the path to your Torrent RIP folder, for example:

   `C:\Program Files\HighWater Designs\TORR7.2`

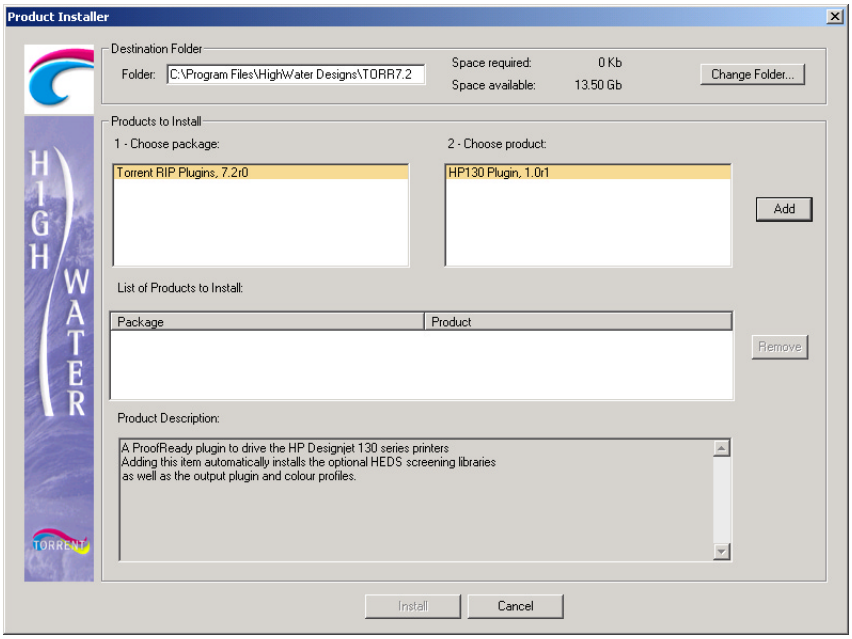

Figure 1 HP 130 plugin installer

4. To add the HP 130 plugin, select **`HP130 Plugin, 1.0r1`** from the Product list (labelled "2. Choose Product" in the dialog above), and click **Add**.
5. With this release of ProofReady plugins you no-longer need to separately select and install HEDS screens; the installer will automatically install any screening required by the selected plugin.
6. To begin installing the selected products to your specified RIP folder, click **Install**, and click **OK** to finish installing. To use your new plugins you must first enable them in the Torrent RIP. This process is described in Section 3.3 on page 6.

3.2 Location of plugin folders

Table 1 shows the correct Torrent RIP installation folders for the HP 130 and supplied screening plugins. This information is provided for reference only. Unless instructed by your support provider, you should not move these folders or delete information contained in them or the plugins may cease to function correctly.

Source folder	Description	Destination folder
\hp130\	HP 130 plugin	…\<*RIP-folder*>\SW\Devices\
\HEDS1\ \HEDS1\ExtraStart\HEDS1Init\	HEDS1 screening	…\<*RIP-folder*>\SW\Screenin …\<*RIP-folder*>\SW\Sys\ExtraStart
\HEDS2\ \HEDS2\ExtraStart\HEDS2Init\	HEDS2 screening	…\<*RIP-folder*>\SW\Screenin …\<*RIP-folder*>\SW\Sys\ExtraStart

Table 1 Default installation folders for supplied plugins

3.3 Enabling plugins in the Torrent RIP

After installing the plugin files into your RIP, you must enable them in the Configure RIP Extras dialog before they can be used. To do this, you will need your HP 130 plugin password, as supplied to you, as well as passwords for colour management and screening plugins which may be required.

To enable the HP 130 plugin, colour management and screening plugins in the RIP, do the following:

1. Select **Torrent > Configure RIP > Extras** to open the Configure RIP Extras dialog:

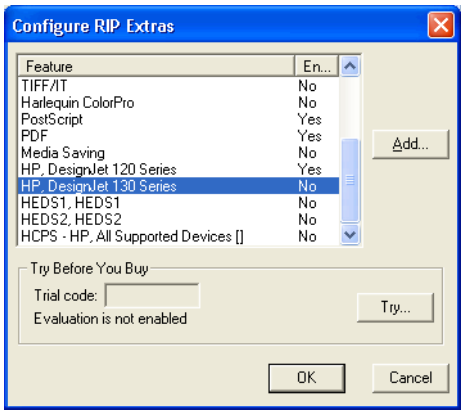

Figure 2 Configure RIP Extras dialog

2. From the list of RIP extras that are available to you, select **`HP, DesignJet 130 Series`** and click **Add**.

3. In the Enable Feature dialog (Figure 3), enter your HP 130 plugin password and click **OK**.

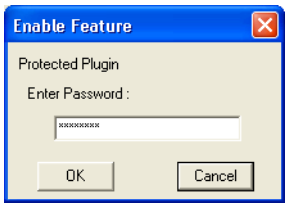

Figure 3 Enable Feature password dialog

The HP 130 plugin has now been enabled in your RIP, as indicated by **Enabled Yes** in your extras list.

4. If it is not already enabled and you want to use the ProofReady profiles supplied with the plugin, you must enable **Harlequin ColorPro** or **HIPP**, depending on the version of RIP you are running. Choose the appropriate colour management plugin from the list, click **Add** and enter your colour management password.

5. Finally, if not already enabled in your RIP, enter passwords for the screening plugins used by the printer's output devices. Refer to Table 2 for a list of the printer's devices and the screens each supports.

6. When you have finished enabling the new RIP features click **OK** to close the Configure RIP Extras dialog, and **OK** again to close the Configure RIP dialog.

You can now create page setups which use the HP 130 devices to process jobs for the HP 130 printer, as described next.

4 Creating a page setup

This section describes how to create a page setup in your RIP that processes jobs for the HP 130 printer. The instructions provided are valid for Torrent v6.x and 7.x RIPs.

4.1 Page setup instructions

1. Select **Torrent > Page Setup Manager** to open the Page Setup Manager:

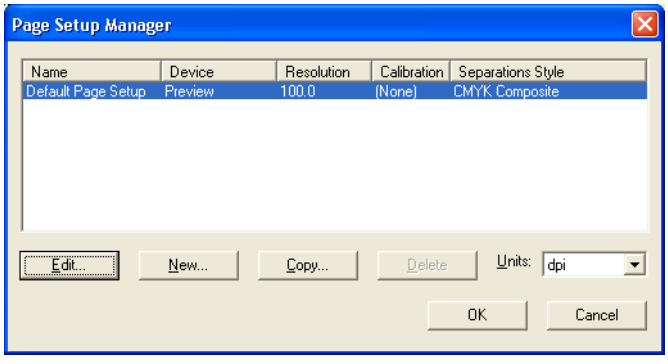

Figure 4 Page Setup Manager

2. In the Page Setup Manager, click **New** to create a new page setup (or **Edit** to amend an existing page setup). The New / Edit Page Setup dialog opens:

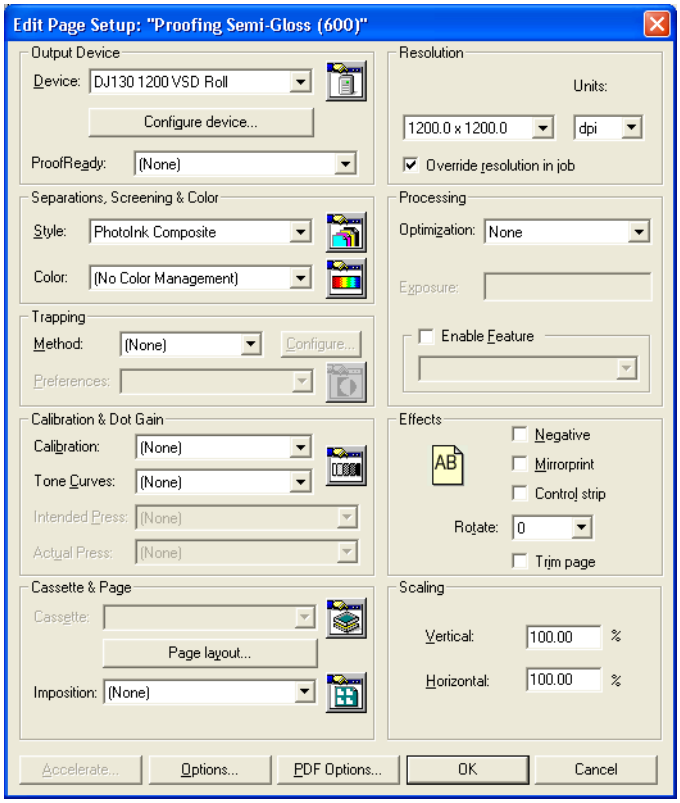

Figure 5 RIP Page Setup dialog

3. Enter information in the fields as follows:

- **Device**: Select a device from the list. The device you select will largely depend on the dot type, screening method and resolution you prefer to use. See Table 2 for details about which dot types are supported and the screening modes that are available.
- **ProofReady**: Select a ProofReady profile to use for colour-managed output. Your choice of profile will mainly depend on the paper type installed in your printer, but it may also be influenced by the output resolution you want to use. See Table 3 for details of ProofReady profiles that are available and the HP paper type and resolutions each has been optimized for.
- **Resolution**: This setting is automatically chosen by the ProofReady profile. Unless you have good reason to do so, do not change the resolution settings.
- **Style**: This setting is automatically chosen to suit the selected device. Do not change this setting.
- **Colour**: This setting is automatically chosen to suit the selected profile. However, if you wish to use your own colour profile, choose it instead from the list. See Section 9.3 on page 27 for a description of how to create your own colour setups.
- **Calibration**: Set this to **(None)**. Calibration is pre-defined by the ProofReady profile. However, to achieve even better results, you may wish to create your own calibration profile for the machine you are outputting using the correct paper. To do this, see Section 9.1 on page 22.

4. Click **Configure Device** to open the Configure Device dialog, which allows you to specify output options for the selected device. For example, it allows you to specify the output method (file, network (including a print server) or LPT1), media type, and output quality. For details on this dialog, see Section 5.1 on page 11.
5. Click **Page Layout** and choose the paper size installed in the printer. If the job is an EPS file or the job does not contain page size information (most jobs do), set the page size too.
6. If it is necessary to do so, you can adjust the positioning of the output on the media by adjusting the page margin values. See Section 4.2 on page 9 for details.
7. Click **Save As** and choose an appropriate name for your new page setup.
8. Click **OK** to close the Page Setup Manager.

The page setup has now been created and may be used to process jobs. Remember to create page setups for each type of paper that you use in your printer, choosing the device type and ProofReady profile to match.

4.2 Page Layout options

The options in Page Layout are used to specify your media size and page size when not defined in the job itself. Page size refers to the 'frame' into which the job is printed; media size refers to the size of the paper installed in the printer. To prevent clipping of your print, the page size must not exceed the media size.

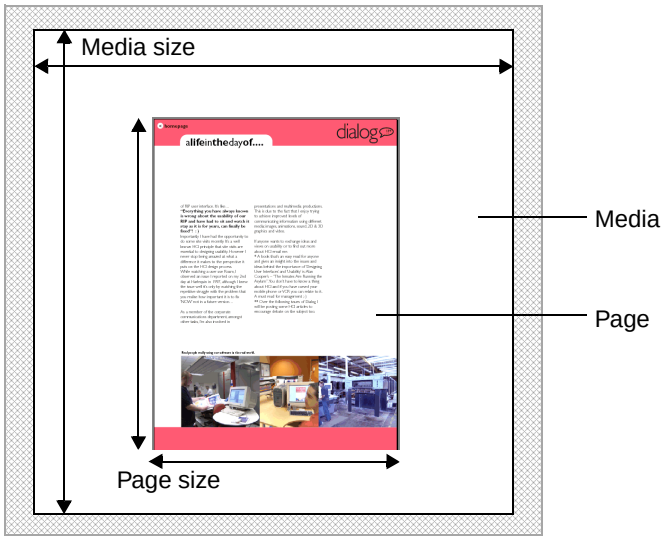

Figure 6 Media and page sizes

In most jobs, the page size has been defined in the page design and embedded in the PostScript language file. The page size in Page Layout has no effect on these types of jobs. In EPS files or other jobs where page size is not defined, you must select the correct page size from those listed in Page Layout.

When changing the margins be careful not to increase the margins beyond the limit of the media. Setting a value for the bottom margin beyond the media size on sheet fed devices will result in a loss of printable space on the media.

5 HP 130 output devices

The output devices installed by the HP 130 plugin are listed in Table 2. Refer to this table when deciding which device to use for a particular job. In most cases, your choice of device will be determined by your favoured dot shape to use for a particular job. If you are not sure which to use, refer to Section 6.3 on page 15 for a brief description of the various screening modes which are available for each dot shape. Initially, a little trial and error may be necessary before the optimum dot shape / screening mode is found.

> **Warning:** Output quality may be affected if the correct screening plugin (see Table 2) is not installed *and* enabled in your Torrent RIP.

Device	Dot type	Supported screening modes[1]	Colour mode
DJ130 300 SD Roll/Sheet	Single Dot Size (large dot)	**HDS Super Fine**, HDS Fine, HDS Medium, HDS Coarse, HDS Super Coarse, HEDS1, Chain, Euclidean	PhotoInk Composite (KCMYcm)
DJ130 600 SD Roll/Sheet	Single dot size (medium dot)	**HDS Super Fine**, HDS Fine, HDS Medium, HDS Coarse, HDS Super Coarse, HEDS1, Chain, Euclidean	PhotoInk Composite (KCMYcm)
DJ130 1200 SD Roll/Sheet	Single dot size (small dot)	**HDS Super Fine**, HDS Fine, HDS Medium, HDS Coarse, HDS Super Coarse, HEDS1, Chain, Euclidean	PhotoInk Composite (KCMYcm)
DJ130 300 VSD Roll/Sheet	Variable dot size[2]	**HEDS2**	PhotoInk Composite (KCMYcm)
DJ130 600 VSD Roll/Sheet	Variable dot size	**HEDS2**	PhotoInk Composite (KCMYcm)
DJ130 1200 VSD Roll/Sheet	Variable dot size	**HEDS2**	PhotoInk Composite (KCMYcm)

Table 2 HP 130 Plugin Device Details

[1]Default screening mode shown in **bold**.
[2]Supports small, medium and large dots.

5.1 Configuring HP 130 output devices

Use the Configure Device dialog (Figure 7) to change settings for the HP 130 output devices supplied with the plugin. To open the dialog, open the page setup which uses the device you wish to change and click **Configure device**.

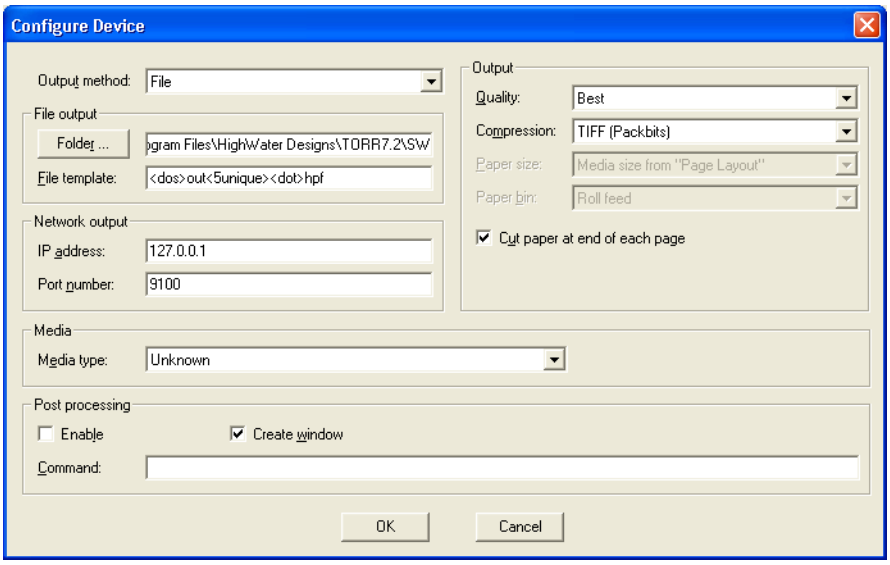

Figure 7 The Configure Device dialog

The Configure Device dialog contains the following options:

Output method Select **`File`**, **`Network`**, **`LPT1`**, or **`USB`** (if available) from the drop-down list to specify the job output method.

Choose **`File`** (the default) to output the processed job to the location specified in the File Output field.

Choose **`Network`** to output jobs to a print device (including a Windows Print Server) on your network whose address is specified in **IP address** field.

Choose LPT1 to output jobs to parallel printer port on your computer.

File output If you have selected **`File`** as the output method, enter the path to your output folder, or leave at the default setting: **`<RIP installation folder>\SW\`**.

File template If you have chosen **`File`** as the output method, you may enter tags and text here, to create a file naming template for your output files. See Section 7, “Output file naming” for a list of tags available.

Network output If you have chosen **`Network`** as the output method, enter the printer’s IP address or network name. If outputting to a print server, specify the address of your print server.

Port number If you have chosen **Network** as the output method, enter a port number for the printer. The following ports are supported by the plugin devices:

515. This port uses the LPR protocol to communicate with the printer. LPR does not support bidirectional communications; consequently, the printer is unable to communicate with the plugin, for example, to report that a printing error has occurred.

9100 This port supports HP's JetDirect protocol, which provides bidirectional communications with error reporting. If using a print server with multiple comm ports, set the port number thus: if the printer is attached to comm port 0, specify 910**0** as the port number; if the printer is attached to comm port 1, specify 910**1** as the port number, and so on.

Media Select from the drop-down list the paper type installed in your printer.

Quality Select **Best**, **Normal**, or **Fast** from the drop-down list to specify the print quality. **Best** is the default setting and produces the highest quality output. **Fast** produces the lowest quality, but is the quickest.

Compression Select **None**, or **TIFF(Packbits**) from the drop-down list to specify a data compression option.

With **None**, information is transmitted to the printer as raw, uncompressed data. With **TIFF(Packbits**), the data is compressed, resulting in faster transfer without affecting the print quality.

Paper Size Not supported. Use the options in Page layout to specify the media size installed in the printer. See Section 4.2 on page 9.

Paper bin Select **Paper tray 1**, **Manual feed front**, **Manual feed rear** or **Auto select** from the drop-down list to specify the location of the paper loaded in your printer.

With **Auto select**, the device automatically chooses the best paper to use, depending on the media sizes specified in Page layout. For a list of media supported by the printer, see your HP DesignJet 130 manual, or refer to HP's online Business Support Center.

Post processing

To use post processing commands, which are executed after a job has been processed, select the **Enable** check-box and enter your commands in the text box. See Section 8, "Post processing operations" for a list of supported commands.

5.2 Adding output devices

Depending on how the plugin has been supplied to you, some HP 130 output devices may not be available for selection in the Device list in a page setup dialog. Table 2 lists *all* the output devices that are available with the HP 130 plugin: if an output device you wish to use is not available, you may add it.

To add a print device, do the following:

1. Select **Torrent > Device Manager** to open the Device Manager:

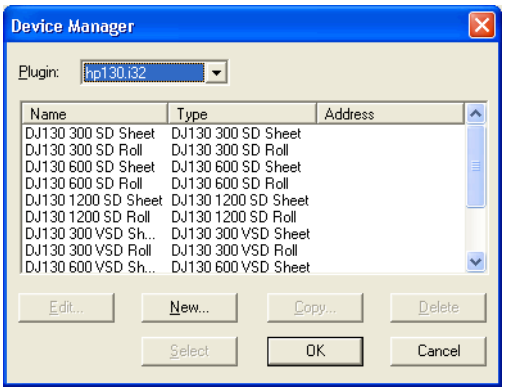

Figure 8 Device Manager

2. Select **`hp130.i32`** (Windows) or **`hp130`** (Mac OS X) in the Plugin drop-down list.
3. Click **New** to open the Device Manager Edit dialog box:

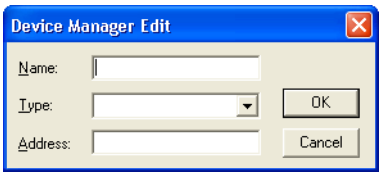

Figure 9 The Device Manager Edit dialog

- **Name**: Enter a name for your new device. We recommend that you enter a name that matches the Type selection, including the exact same combination of upper and lower case letters.
- **Type**: Select a device from the drop-down list to specify the device type you wish to add.
- **Address**: Ignore this option as it is not required.

4. Click **OK** to add your new device, and **OK** again to close the Device Manager dialog.

Your new device will now be available for selection in the **Device** drop-down list in the page setup dialog.

6 ProofReady profiles

The HP 130 plugin is supplied with several ProofReady colour profiles for ‘out-of-the-box’ colour management. Simply choose a ProofReady profile in your page setup, according to the paper type installed in your printer (see Table 3 for supported paper types), and colour will be automatically handled in the RIP to produce accurate, consistent and ‘pleasing to the eye’ output.

6.1 Supplied ProofReady profiles

Each ProofReady profile supplied with the HP 130 plugin has been created for a specific HP paper type at a specific resolution. For best results, you should always use the recommended paper, as listed in Table 3, and leave the resolution at the default setting.

Note: If the ProofReady profile drop-down list in not available in your page setup, you need to enable the ColorPro colour management option in your RIP.

ProofReady profile	Device	Paper type (HP Ref)	Resolution (dpi)
Proofing Semi-Gloss 600	DJ130 600 VSD	Proofing Semi-Gloss Paper (Q1966A)	600
Photo Proofing Gloss 600	DJ130 600 VSD	Premium Plus Photo and Proofing Gloss (Q5488A)	600
Photo Proofing Gloss 1200	DJ130 1200 VSD	Premium Plus Photo and Proofing Gloss (Q5488A)	1200

Table 3 HP 130 ProofReady profiles

6.2 Changing the default screening method

The screening mode used in an output device may be changed if the device supports alternative screens. Refer to Table 2 for a list of devices and the screens they support.

To change the screening method used by a device, do the following:

1. In the Torrent RIP, choose **Colour > Separations Manager** to open the Separations Manager.
2. From the Device list, select the HP 130 device that you want to configure.
3. From the Style Name list, select the style you want to change, and choose **Edit** to open the Edit Style dialog (Figure 10).
4. From the **Dot shape** menu, select the screening method you want to use.

5. Choose **OK** to make your selection, and **OK** again to close the Separations Manager.

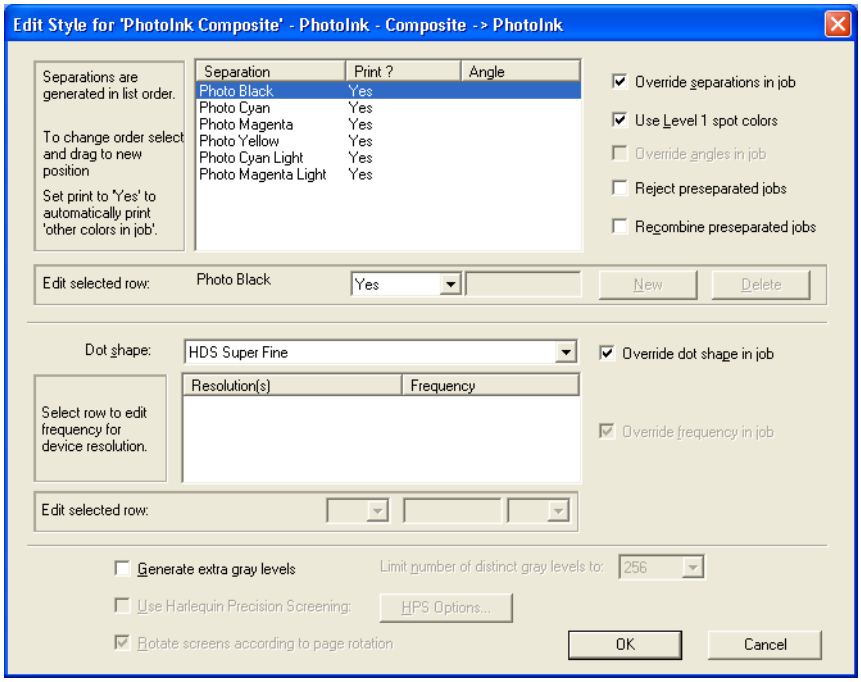

Figure 10 Edit Style dialog

6.3 Description of screening modes

This section briefly describes the assorted screening modes (also know as ‘dot shapes’) supported by the HP 130 plugin. Not every device that is installed by the plugin supports all dot shapes / screening modes. Table 2 lists the modes that each device supports, with the default mode shown in bold.

Euclidean This dot shape reduces dot gain in the shadow areas and is good for general purpose use (it is common in newspaper production, for example). The type of Euclidean screening used by the plugin uses an ‘inverse’ spot-function for the light inks. That is, the spot-function for Light Cyan is the ‘inverse’ of the spot-function for Cyan, and the spot-function for Light Magenta is the ‘inverse’ of the spot-function for Magenta.

HEDS1 HEDS1 (Harlequin 1-bit Error Diffusion Screening) is a frequency modulated (FM) screening method particularly suited to the production of proofs on inkjet printers. HEDS1 works well at low resolutions, since it does not use dot patterns, producing prints that are free from the moire effect. To use round HEDS1 screening, choose HEDS1 from the **Dot shape** drop-down list.

HEDS2 HEDS2 (Harlequin 2-bit Error Diffusion Screening) produces the highest quality output for inkjet printers.

Screens are produced with multiple dot sizes: small, medium and large. To use round HEDS2 screening, choose HEDS2 from the **Dot shape** drop-down list.

HDS HDS (Harlequin Dispersed Screening) provides better control, quality and performance than standard forms of screening.

The Medium, Coarse, and Super Coarse variants are only recommended as special effects screens. To use round HDS screening, choose HDS Super Fine / Fine / Medium / Coarse / SuperCoarse from the **Dot shape** drop-down list.

7 Output file naming

Using variable tags and fixed text you can set up a file naming template for your output files. Using a template ensures your output files will be named consistently and, depending on which tags you use, with appropriate job information to identify the output file correctly.

To implement your file naming template, add the appropriate tags and text (if needed) to the **File template** field of the Configure Device dialog for the device you wish to use.

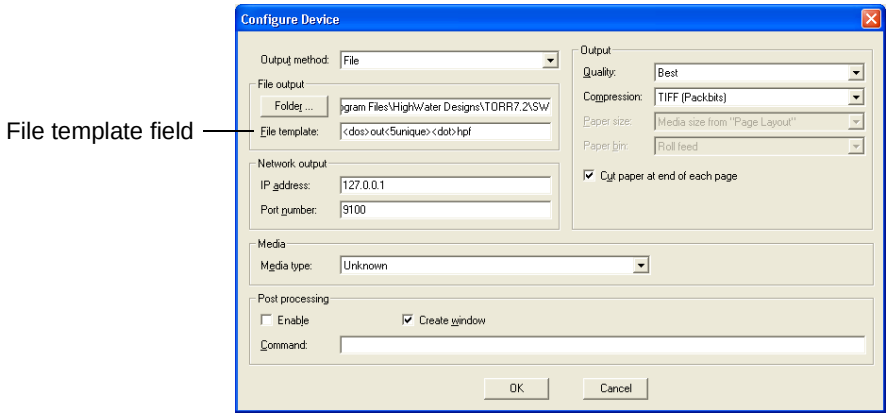

Figure 11 Configure Device dialog showing File template field

7.1 Tag usage

There are a few rules to keep in mind when using tags:

- You may limit the length of any expanded (derived) file name by using an integer before the tag. For example, **<5jobname>** limits the name to a maximum of 5 characters.
- Tags which produce numeric values are truncated from left to right.
- Tags that produce alphanumeric strings (strings containing the characters a-z, A-Z, and 0-9) are truncated from right to left.
- Fixed text can be part of the file name stem or extension. For example, *stem_***<3unique><sepname><dot>hpf** would generate a file name of the form: *stem_***000Cyan.hpf**, in which *stem_* can be any identifying text.
- The tags will not produce useful file names from job names that contain double-byte characters.
- When creating multiple copies of a file, the same page buffer provides tag information. If a template contains dynamic tags (such as **<time>**, where the value changes each time a page buffer file is output), multiple copies of the file are created. If the template contains just static tags (such as **<jobname>**, where the job name remains constant), a single output file will be created, as previous output files will be overwritten.

7.2 Available tags

Table 4 lists the file naming tags available to the HP 130 plugin.

Tag	Description
<ascii>	Limits the character set of the file name (from the point of the tag onwards) to ascii characters in the range 32 (0x20) to 126 (0x7E). Characters outside this range are discarded. To substitute invalid characters rather than discarding them, prefix the tag with the substitution character value in decimal.
<colorant>	The colour space of the device, such as **DeviceCMYK** or **DeviceRGB**. The tag includes the colour space of the device in the file name string. For example, the template **<colorant><dot>hpf** produces a file name of the form **DeviceCMYK.hpf** for a device using a CMYK colour space (4-colours) or a file name of the form **PhotoInk.hpf** for a device using a PhotoInk colour space (6-colours).
<colorname>	The name of the separation, such as **Cyan**. The tag **<colorname>** can be used to include the name of the separation in a file name, for example **Cyan**. You can include just the first letter of the separation by using the tag **<1colorname>**, which truncates the separation name to its first letter. If a composite style is used this is indicated by the string **Composite**.
<compression>	The form of compression used, such as **Packbits**. You can use this tag to include the form of compression used in the file name. For example, based on the job details above, the template **<compression><dot>hpf** produces the file name **Packbits.hpf**.
<date>	The date when the job is processed, in the format **YYYYMMDD**, unless a truncated form is specified. The template **<date><dot>hpf** produces the file name **20060129.hpf**. You can remove the year information by using the tag **<4date>** to produce the file name **0129.hpf**.
<dos>	Verifies that the file name is a legal file name for the MS-DOS operating system. The use of this tag verifies that the file name is suitable for use in a DOS operating system. Illegal characters such as a colon, and white space characters cause an error. For example, the template **<dos><jobname><dot>hpf**, would generate an illegal file name because the job name is greater than the eight characters allowed in DOS operating systems. Truncation can be forced by using the template **<dos><8jobname><dot>hpf**, which produces the file name **Uncalibr.hpf**.
<dot>	Separates the stem of the file name from the file extension, and appears as a period character (**.**) in the file name. For example *stem***<dot>***ext* appears as **stem.ext**. The use of the **<dot>** tag enables the verification of the stem and extension lengths. This tag separates the file name stem from the file name extension and enables the verification of their lengths. It is particularly necessary when creating file names compatible with DOS and Windows, otherwise the extension may be considered as part of the file name. For example, the template **<dos><8jobname>.hpf** would cause an error because the dot is removed as an illegal character and **hpf** is then considered part of the file name stem.

Table 4 File renaming tags

Tag	Description
<job#>	The job number allocated by the RIP. Automatic numbering means that successive jobs have incremental job numbers: 000, 001, 002, 003, and so on. You can use this tag to include the job number in the file name string. The default length of the number is three digits, so the first job number created with this tag would be 000, unless a different length is specified. You can specify the length of the job number by preceding the **<job#>** tag with an integer. For example, <**5job#**> creates job numbers five digits long. In multi-page jobs, use the **<page#>** tag as well as the **<job#>** tag to differentiate between the different pages of a job.
<jobname>	The page buffer name without the page number prefix and without characters illegal to the operating system. White space characters are used, if present in the job name. This tag ensures that only legal operating system characters are used in the job name. For example, in the RIP running under any Windows operating system, the template **<jobname><dot>hpf** produces the file name **Uncalibrated Target Default CMYK + spot colors target.hpf**. The colon character (**:**) is removed from the file name, because this is not a valid file name character for any version of Microsoft Windows.
<jobname1>	The page buffer name without the page number prefix, and using only alphanumeric characters (a-z, A-Z, 0-9). White space characters are *not* used. This tag ensures that only alphanumeric characters are used in the job name. For example, in the RIP running under a Windows operating system, the template **<jobname1><dot>hpf** produces the file name **UncalibratedTargetDefaultCMYKspotcolorstarget.hpf**. The colon, white space, and '+' characters are removed from the file name, because they are not alphanumeric characters.
<jobonly>	This gives the job name without the separation name in brackets, For example, where <jobname> would give **myjob(PANTONE Reflex Blue CVC)**, **<jobonly>** will give myjob.
<mac>	Verifies that the file name is a legal file name for the Macintosh operating system. The use of this tag verifies that the file name is suitable for use in a Macintosh operating system. Illegal characters such as an asterisk, colon and quotation marks cause an error. The maximum length of a file name is thirty-one characters (including the file extension). For example, using the template **<mac><28jobname><dot>hpf** produces the file name **Uncalibrated Target Default.hpf**, in which the colon has been removed.
<macosx>	Verifies that the file name is a legal file name for the Mac OS X operating system.
<page#>	The page number (allocated by the RIP) within the current job. For example, 002. You can use this tag to include the page number in the file name string. For example, the template **<page#><dot>hpf** produces a file name of the form **001.hpf**. It is advisable to use this tag with the **<job#>** tag to differentiate between the same pages of different jobs.
<prefix>	The page number prefix from the page buffer name, such as **1.**, **2.**, and so on. You can use this tag to include the page number prefix from the page buffer name in the file name string. For example, based on the page buffer name above, the template **<prefix><jobname><dot>hpf** produces the file name **1. Uncalibrated Target Default CMYK + spot colors target.hpf**.
<prefixonly>	You can use this tag to include the characters from the prefix before the full stop in the job name (that is, the prefix, not including the dot and space characters).

Table 4 File renaming tags *(continued)*

Tag	Description
<**quality**>	The quality setting, such as **Best**. You can use this tag to include the quality setting in the file name string. For example, based on the job details above, the template **<quality><dot>hpf** produces the file name **Best.hpf**.
<time>	The time when the job is processed, in the 24-hour format **HHMMSS**, unless a truncated form is specified. You can use this tag to include the time a file is processed in the file name string. For example, if printing to file at 15:39:36 (approximately 3:39 pm) this tag produces the string **153936**.
<unique>	A unique sequence number used to make every file different when placing output files in a folder. You can use this tag to generate a unique sequence number for the page. The default length of the number generated is four digits long, so the first number would be **0000**. The length of the number can be specified, as detailed in the example for the tag **<job#>**. When restarting the RIP, the unique numbering will attempt to restart at its initial value, for example **0000**. However, if a file exists with that number, the next available unique number is used.
<unix>	Verifies that the file name is a legal file name for the UNIX operating system. The use of this tag verifies that the file name is suitable for use in the UNIX operating system. Illegal characters such as an asterisk, colon, and quotation marks cause an error. The **<dot>** tag cannot be used with this tag because file names in UNIX are composed of a single string and are not considered to have separate file extensions. For example, using the template **<unix><255jobname>.hpf** produces the file name **UncalibratedTargetDefaultCMYK+spotcolorstarget.hpf**, in which the colon and white space characters have been removed.
<win32>	Verifies that the file name is a legal file name for Windows operating systems: Windows 95, Windows 98, Windows NT or Windows 2000. The use of this tag verifies that the file name is suitable for use in a Windows operating system. Illegal characters such as an asterisk, colon, or quotation marks cause an error. For example, the template **<win32><jobname><dot>hpf** produces the file name **Uncalibrated Target Default CMYK + spot colors target.hpf**, in which the colon has been removed.
<xres>	The horizontal resolution of the page, as specified in the page setup. You can use this tag to include the horizontal resolution of the page in the file name string. For example, you can differentiate between pages with a resolution of 600 x 600 dpi and 300 x 300 dpi by using this tag. This tag produces a string such as **600** or **300**, depending on the horizontal resolution.
<yres>	The vertical resolution of the page, as specified in the page setup. You can use this tag to include the vertical resolution of the page in the file name string. For example, on a page with the resolution 600 x 600, this tag produces the string **600**.

Table 4 File renaming tags *(continued)*

8 Post processing operations

After a job has been processed, the plugin can be made to trigger an operation on the *host* machine, like running a batch file or triggering an application, by using the relevant commands in the **Command** box and checking **Enable** in the Configure Device dialog (Figure 7 on page 11). Checking **Enable Window** instructs the device to open a window and run the command there.

In general, any action that can be triggered from a command line or within a batch file may be run from by the plugin. However, the following restrictions should be noted:

- Make sure you include the full path in the command to the application you are calling.
- The plugin can only launch applications / run batch files that are installed locally.
- The *expanded* command line must comply with the limitation on command line length imposed on the particular platform you are running on. In general, anything up to 125 characters is acceptable. You may limit the number of characters passed to the command from the substituting code by prefixing the code with an integer. For example, **%6j** passes just the first six characters to the application.
- Avoid using commands which require input from a user. Invariably, they are likely to fail, for one reason or another.

Tag	Description
%c	The current separation colour, represented by a string with a default length of one character. Typical separation names are **Cyan**, **Magenta**, **Yellow** and **Black**. Examples for the default length are: **C**, **Y**, **M** and **B**.
%d	The current date in the format YYYYMMDD, with a default string length of 8. For example, 26 May 2006 becomes: 20060526.
%f	The output file name, as created by the template specified in the **File Output: File Template** text box in the Configuration dialog box. For example: **out00001.hpf**.
%j	The current page buffer name as shown in the Output Controller/Monitor. For example: **1. Apple.ps**.
%n	The current job number; an integer that the RIP increments each time it processes a new job. For example: **15**.
%o	The full output directory path specified in the **File Output: Change...** text box. For example: **C:\Program Files\HighWater Designs\TORR7.2\SW\Output**.
%p	The current page number within the job. For example: **4**.
%r	The job resolution in dots per inch. For example: **300**.
%s	The current job name, after removal of all the characters that would be illegal in a file name. For example: **Appleps**.
%g	A fixed jobname using the following rules: 1. Skip over the leading **nn.** which the RIP prepends. 2. Remove all non-alphanumeric characters.
%t	The current time in the format HHMMSS, using the 24 hour clock. The default length is 6. For example, a time just after 7:30 pm would be shown: **193211**.
%x	The current file name suffix. For example: **hpf**.
%z	The current file name stem. For example: **out00001**.

Table 5 Post processing substitution codes

8.1 Command line monitoring

The RIP uses the monitor window to report the post processing commands that have been run. Typical output takes the form:

```
Running post-job command "C:\test\logfile.bat out00002.hpf 112442" in directory
C:\Program Files\HighWater Designs\TORR7.2\SW\Output
```

where:

C:\test\logfile.bat is a batch file

out00002.hpf is data used by the batch file. See **%f** in Table 5

112442 is the time (11:24) the job was processed. See **%t** in Table 5.

C:\Program Files\HighWater Designs\TORR7.2\SW\Output is the working folder specified in Device Configuration. See page 11. See **%o** in Table 5.

8.2 Troubleshooting post processing command

Your post processing commands might not execute as you would expect them to. If this is the case, there are a number of troubleshooting tips which you can follow:

- Open a command dialog and run the post processing command there.
- A substitution code may be being misinterpreted by your operating system. Try enclosing the substitution code in double quotes, for example **"%f"**.
- The total length of the *expanded* command line may be too long for your operating system to handle. Expanded means after the full text has been inserted for the substitution codes. All systems will support command lines up to125 characters; many support command lines considerably longer.
- For a thorough test of how commands behave when used at the command prompt, try running a batch file with the following content:

```
echo %1 %2 %3 %4 %5 %6 %7 %9
pause
```

9 Colour management

The HP DesignJet 130 plugin provides ProofReady profiles for ‘out-of-the-box’ colour management. The profiles adjust colour output to suit the resolution and paper type installed in the printer, ensuring that output is colour-accurate for whatever media settings are in use.

For more information on the Torrent RIP colour management solutions, see the *Torrent ColorPro User’s Guide*.

This section describes the complete colour management process, including:

- “Calibrating the printer” on page 22.
- “Creating and installing ICC profiles” on page 25.
- “Creating colour setups” on page 27.

9.1 Calibrating the printer

The plugin is supplied with a number of reference calibration profiles which define the output profile of an ideal or 'reference' HP 130 DesignJet printer. In your page setups, when you select a ProofReady profile, the correct calibration profile is automatically chosen by the plugin. However, for maximum output quality, we recommend that you produce calibration profiles for your *own* printer, and select these in the **Calibration** drop-down list in your page setups.

The reference calibration profiles supplied with the plugin are easy to identify, since they are labelled with parentheses; for example, **(Premium Photo 1200)**. The actual calibration profile files can be found in the following folder:

…\<*RIP_folder*>\SW\Config\Devices\DevCalibration

The steps for creating a calibration profile vary depending on the version of RIP you are running. See Section 9.1.1 for instructions on creating a calibration profile.

9.1.1 Creating a calibration profile

This section describes how to create your own calibration profiles for the HP 130 printer.

To perform the procedure correctly and ensure accurate calibration, three print / measure passes are required. Once the profile has been created, to maintain accuracy, it is recommended that you recalibrate periodically. However, the recalibration procedure requires only one print / measure pass and, so, is much quicker to perform. See "Recalibrating the printer" on page 25 for details.

To calibrate the printer, do the following:

1. Create a page setup that has the correct settings for the job you wish to process. In particular, it is important to select the following options correctly:
   - **Device**: Choose the device which matches the paper type you are using, as shown in Table 3.
   - **ProofReady**: Set this to **(None)**.
   - **Calibration**: Choose one of the 'reference' profiles—those shown in brackets—from the drop-down list. See Table 3 for details of the profiles supplied.
2. Save the new page setup. You will use it in the next step to print a calibration target.
3. Click **Output > Print Calibration** to open the Print Calibration dialog:.

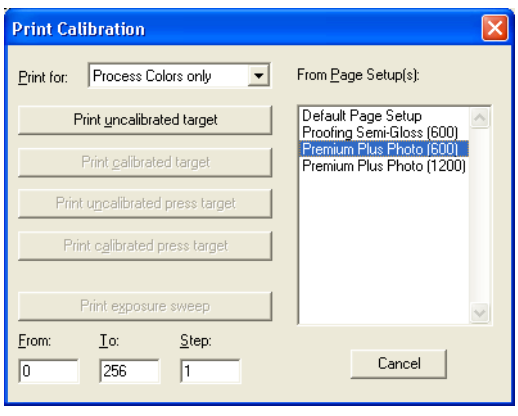

Figure 12 The Print Calibration dialog

4. From the list of page setups, select the page setup you want to use to process the target then click the **Print uncalibrated target** button to output the target to the printer. Wait for it to dry (this may take a long time) then measure the target with your calibration profiling tool. The resulting calibration profile file must be stored in the following RIP folder:

   …\<*RIP_folder*>\SW\Config\Devices\DevCalibration

   If you use *Genlin* to read the profile, the calibration file will be put here by default.

5. Open the Calibration (Dot Gain) Manager dialog (Figure 13) with **Output > Calibration Manager.**

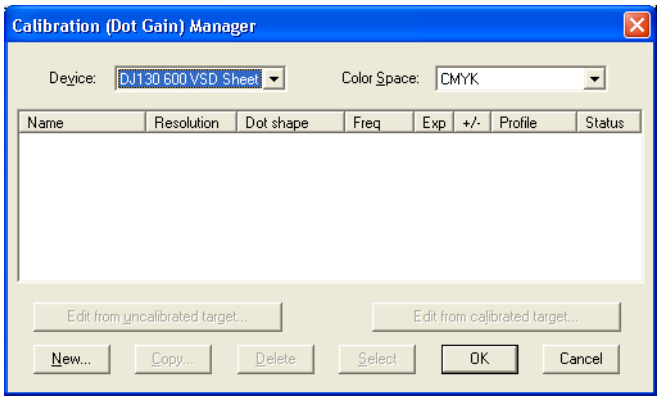

Figure 13 Calibration (Dot Gain) Manager

6. From the **Device** drop-down list, select the correct device, as chosen in the page setup you just used to output the target. Then click **New** to open Edit uncalibrated target dialog:

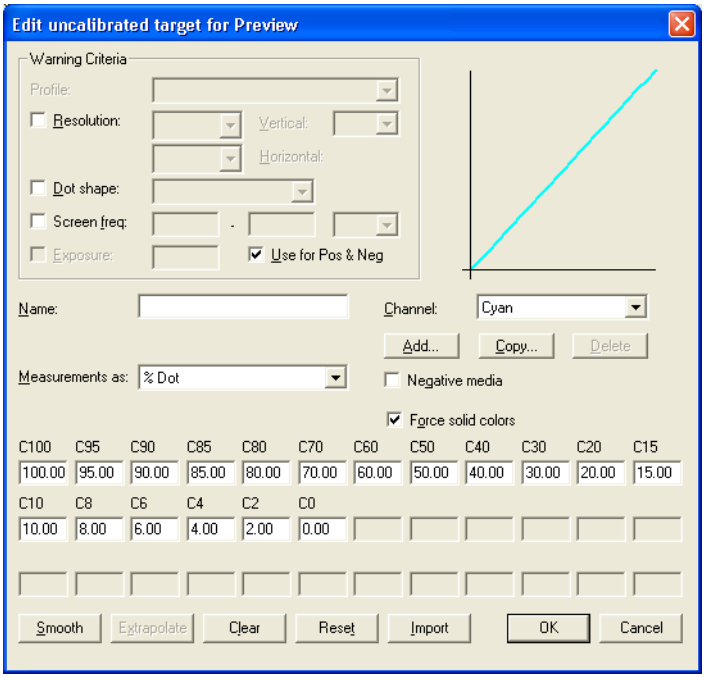

Figure 14 The Edit uncalibrated target dialog

7. Select the following options in the Edit uncalibrated target dialog:
   - **Profile**: Select the calibration profile from the drop-down list that matches the paper installed in your printer and the output resolution you are using.
   - **Force solid colors**: This option should *not* be checked.
   - **Name**: Enter a name for your calibration profile. For example, **`HP 130 Premium Plus Photo-`*`x`*** (where ***x*** indicates the current print / measure cycle, as in **`HP 130 Premium Plus Photo-1`**).
8. Click **Import > Import** to read the calibration profile. Then click **OK** to save the new profile using the name you have chosen.

   You have now created your first calibration profile. To ensure accuracy, use this profile to create another target then measure it to create a second profile, as described in the following steps.
9. Open the Page Setup Manager (**Torrent > Page Setup Manager**) and edit the page setup you used to process the initial calibration target (created in step 1). Select the new calibration profile from the Calibration drop-down list, for example, **`HP 130 Premium Plus Photo-1`**. All other settings can be left the same. Click **OK** implement the change you have made.
10. Open the Print Calibration dialog (Figure 12) and select your page setup. This time, click **Print calibrated target** (not 'Uncalibrated', as before).
11. Once again, measure the target and save the profile to:

    `…\<`*`RIP_folder`*`>\SW\Config\Devices\DevCalibration\`
12. Open the Calibration (Dot Gain) Manager. Select the correct device from the **Device** list. From the list of profiles, choose the calibration profile created in step 8 Then click **Copy** to create a copy of this profile, for example, **`HP 130 Premium Plus Photo-1 [1]`**.
13. From the list, select the copy (**`HP 130 Premium Plus Photo-1 [1]`**, for example) and click the button **Edit from calibrated target**.
14. Enter a new name for the profile in **Name** (for example, **`HP 130 Premium Plus Photo-2`**, to indicate this is the 2nd target profile) and click **Import > Import** to import the calibration data. Then click **OK** to save the profile.
15. Repeat steps 9–14 to create the third and final calibration profile, substituting **`HP 130 Premium Plus Photo-2`** for the profile instead. When saving the final profile, choose a name that indicates it is a finished profile, such as **`HP 130 Premium Plus Photo-F`**.

You may now use this final calibration profile in your page setups, and be confident the printer is calibrated correctly.

9.1.2 Recalibrating the printer

To maintain printer calibration accuracy, you should periodically recalibrate your HP 130 printer. This is particularly important if the paper, ink, or some other variable (including ambient room conditions) changes.

To recalibrate the printer, do the following:

1. Click **Output > Print Calibration** to open the Print Calibration window (Figure 12).

2. Select the correct page setup you are using to output to the installed paper, and click **Print calibrated target**.
3. Measure the target with *Genlin*.
4. Open the Calibration (Dot Gain) Manager (Figure 13) and select the calibration set assigned to the page setup. Then click **Edit from calibrated target**.
5. In the Edited calibrated target dialog, click **Import > Import** to read the calibration data. You may also wish to specify a new profile name, such as **`HP 130 Photo Gloss-Nov2006`**, to indicate the date the profile was updated.
6. Click **OK** to save the modified and updated profile. If you have changed the name of the calibration profile, remember to edit your page setups to use the new calibration profile. If you have not changed the name, you do not need to do this.

9.2 Creating and installing ICC profiles

To create and install a new ICC profile, do the following:

1. Create a page setup.
2. Print and measure an ICC target to produce an ICC profile and measure it using your ICC profiling package.
3. Install the ICC profile in your RIP.

1. ***Create a page setup:***

Create a suitable page setup to output the ICC target file, using the correct device for the paper installed in the printer (Table 3). Depending on how you want to use colour in your ICC profile, there are two ways to configure the colour management options in the page setup:

- *Raw state*: This page setup contains no colour management and is not recommended for creating ICC profiles. However, to select this state, choose **`(None)`** for **ProofReady** and **`(None)`** for **Colour** calibration in your page setup.
- *Golden state*: This page setup uses a temporary calibration profile which provides a good reference state for the printer and is the recommended method for creating ICC profiles. *SetGoldPro and SetGold* allow you to create a reference state for your printer (or you can create a linearization profile).

2. ***Print and measure an ICC target:***

Using your page setup, print the ICC target and measure it with your favorite profiling tool, then save the profile to a suitable location.

Some hints for obtaining better results:

- **Total area coverage:** For some paper types, the total area coverage should be limited. This depends on the paper, resolution and screening used, but a good guide is to limit the coverage to 280% for uncoated papers and to 340% for coated papers. Some experimentation may be required to determine the optimum setting.

- **Black generation:** The presence of black ink in highlights can, in some cases, be objectionable and can introduce an unnecessarily grainy appearance to some images. Select a setting which images black only in dark regions. (If it is not clear which settings will image black only in dark regions, select the minimum amount of black generation allowed by the ICC profiling package.)
- **Number of patches:** Although the number of colour patches printed and measured is not always a guide to colour quality, it is generally true that printing more patches produces better results for any given ICC profiling package.

3. ***Install the ICC profile in your RIP:***

The ICC profile can be installed using the Install ICC Profile dialog:

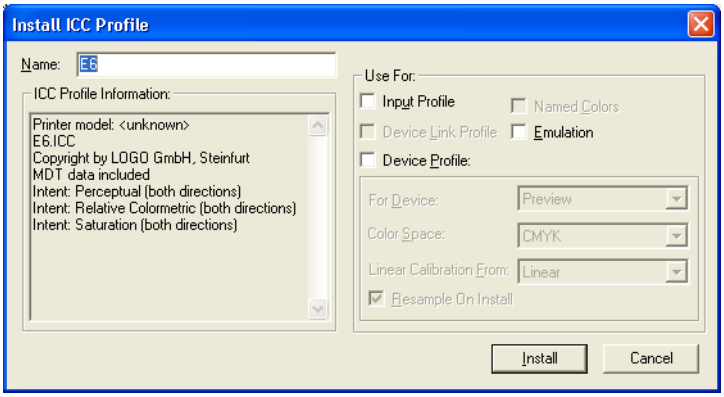

Figure 15 The Install ICC Profile dialog

In your RIP, select **Colour > Install ICC Profile** and select the profile created above that you wish to import. In the Install ICC Profile dialog, select the following options:

- **Device profile**: Check this option to add a profile for the output device.
- **For Device**: From the drop-down list select the device the ICC profile is to be used for.
- **Linear calibration from**: From the drop-down list select **`Linear`** if the page setup contained no colour management data, or the name of the *Golden state* profile used to create the target.
- The name of the calibration profile or calibration set that you used in the page setup (golden state).

After installing this profile you can use it to create a colour setup, as described next.

9.3 Creating colour setups

Using the Colour Setup Manager (Figure 16) and the options that are available in the New Colour Setup dialog (Figure 17), you can add your own colour setups to specify precisely how you want the colors in your jobs to be processed.

The plugin already contains colour setups which are invoked when a ProofReady profile is selected in a page setup. For most purposes these colour setups are perfectly adequate and will give excellent results. However, if you wish to create your own colour setups and use them instead, follow the steps below.

To create a colour setup in the Torrent RIP, do the following:

1. Select **Colour > Colour Setup Manager** to open the Colour Setup Manager:

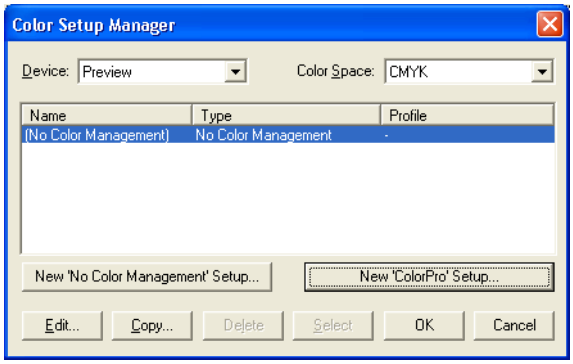

Figure 16 The Colour Setup Manager

2. Select the manager options as follows:
   - **Device**: Select from the drop-down list the HP 130 device you want the new colour setup to be used with.
   - **Colour Space**: Select from the drop-down list the colour space you want the colour setup to be used with.
3. Click **New 'ColorPro' Setup** to open the New Colour Setup dialog (Figure 17).

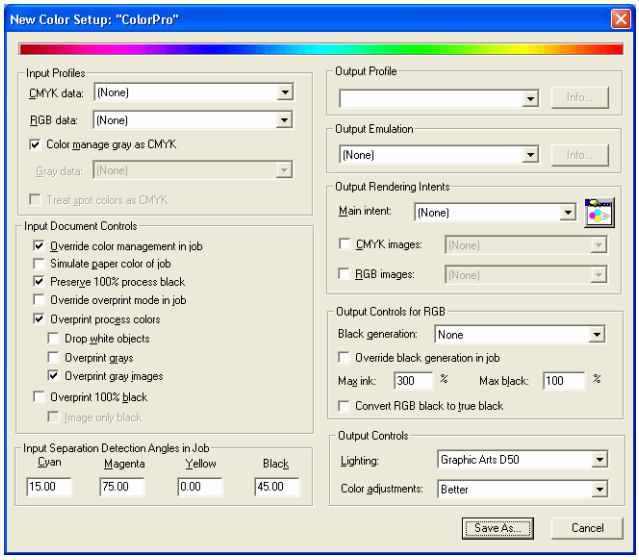

Figure 17 The New Colour Setup dialog

4. Specify your colour setup options. To correctly process the colour in your jobs, the following options need to be specified:
   - Input Profiles
   - Output Profile
   - Output Rendering Intents

   The other options are optional and may be left at their default settings or changed as required.

5. When you have made your selections, click **Save As** and enter a name for your new colour setup.

To use your new colour setup, select it from the **Colour** drop-down list in your page setup.

10 Troubleshooting

The HP 130 printer plugin for the Torrent RIP is an advanced piece of software which contains many configuration options and settings. When used in a bidirectional output mode (see Section 5.1, “Configuring HP 130 output devices” for details on setting up bidirectional output), the printer is able to report diagnostic warning and error messages to the RIP. These can be viewed in the console (the main RIP window), and are described in this section.

10.1 Error messages

%%[Error: VMerror; OffendingCommand: pagedevice]%%

Symptoms: May occur when printing on large paper sizes or with a high resolution. Some jobs may suppress the VM Error and print using the default page size specified in the Page Layout dialog box, so that the output appears clipped.

Solution: Increase the setting for band size in the Configure RIP options dialog box to 1024 KB.

%%[Error: undefinedfilename; Offending Command: run]%%

Symptoms: Occurs when a device type is used with a name similar to another device, or when a new device is created where the case of the letters does not match those used in the device type label.

Solution: Change the device name to something completely different. Open the Device Manager, select the device and click **Edit**. In the Device Manager Edit dialog box.

%% [Error: ioerror; Offending Command: setscreen] %%

Symptoms: Occurs when HDS screening is being used when HDS has not been enabled in the RIP.

Solution: Enable HDS or HDS Light (**Torrent > Configure RIP > Extras**), and then re-submit your job.

*******WARNING: Insufficient working set may result in paging and performance may be affected.**
*******Try logging on as a Power User or reducing the memory allocated to the RIP.**

Symptoms: May occur when using the RIP under Windows NT with service pack 6 or 6a or Windows 2000.

Solution: This message may be ignored since performance is unaffected and is simply caused by the way NT SP 6/6a and Windows 2000 handle memory requests. This message does not occur with NT SP5. Reducing the amount of memory available to the RIP may alleviate this warning; however, RIP performance may consequently be affected, depending on the RAM you have available.

Not enough system memory to output this page.

Symptoms: May occur when the RIP is using more memory than is necessary for safe operation of the operating system (OS). On Apple Macs you may also see the OS display a warning message, or the system may freeze before it displays the message.

Solution: On the Apple Mac, set the system option **Minimum memory left for system** to **10000 KB**. Large page sizes may need a larger value. For PC systems, add more RAM to the machine.

10.2 Printer-specific messages and symptoms

Many of the printer-specific warnings are informative messages, which can be ignored without any adverse effects. Other messages can often be cleared by aborting output from the RIP, clearing any used media from the printer and starting the job again.

Page Layout media size is less than the Configure Device paper size - clipping may occur.

Symptoms: May occur when a custom paper size page setup is used that is subsequently changed to use a larger paper size. Clipping may occur in the output as the media values used for the custom paper size are still associated with the page setup.

Solution: Change the media values in Page Layout so they are larger than the paper size selected in Configure Device, or create a completely new page setup.

Warning: Top and Bottom Margin values will be swapped.

Symptoms: May occur when sheet-fed devices are being used.

Solution: The message is output for information only and may safely be ignored. It occurs because the RIP needs to swap values specified in the Page Layout dialog box for the top and bottom margins, so it can deal with sheet-fed devices correctly.

Job output for *"job name"*, **sent on** <*date*> <*time*>

Symptoms: Occurs when the RIP has finished sending a job to the printer.

Solution: The message is for information only and can be ignored.

Job output for *"job name"*, **filename** *"full path name of output file"*, **finished on** <*date*> <*time*>

Symptoms: Occurs when the RIP has finished creating an output file for the job.

Solution: The message is for information only and can be ignored.

Printer communication failed (*error details* **)**
Unable to connect to printer (*error details* **)**

Symptoms: The RIP is unable to communicate with the printer, as described by the error details.

Solution: Refer to the error code for the cause of the failure.

Unable to open output (*error details***)**
Open error (*error details***)**

Symptoms: The RIP is unable to communicate with the printer, as described by the error details.

Solution: Refer to the error code for the cause of the failure.

Unable to create file - *"full path name of output file"*

Symptoms: The RIP is not able to create an output file for the job.

Solution: Make sure there is sufficient disk space for the output file. Also, make sure a file of the same name does not already exist, and that the disk is not read-only.

Unable to create file using path *"full path name of output file"* **and template** *"file name template"*

Symptoms: The RIP is not able to create an output file for the job.

Solution: Make sure the output path is valid and is writable. Also, confirm the template file name is valid, as specified in Configure Device.

Job output for *"job name"* **is aborting - Printer will print data that it has already received.**

Symptoms: This may occur after an error has been reported.

Solution: If the RIP aborted due to a problem with the parallel (LPT1) connection method, you may be prompted to retry or cancel the job. Click **Cancel** to abort the job and then check that the printer is switched on and connected using the correct cable.

Job output for *"job name"* **is aborting**

Symptoms: May occur when an output file is being written.

Solution: The message is for information only and can be ignored.

Job output for *"job name"***, aborted on** *<date> <time>*

Symptoms: Occurs after a job has been aborted.

Solution: The message is for information only and may be ignored.

Job output for *"job name"***, filename** *"full path name of output file"***, aborted on** *<date> <time>*

Symptoms: Occurs after a job has been aborted.

Solution: The message is for information only and can be ignored.

Job output for *"job name"* **using path** *"full path name of output file"* **and template** *"file name template"***, aborted on** *<date> <time>*

Symptoms: Occurs after a job has been aborted.

Solution: The message is for information only and can be ignored.

Printer ejects paper before completing a page

Symptoms: The page is ejected from the printer before it has finished printing.

Solutions: There are a number of possible solutions:

- Reset the printer and try printing the page again.
- In your PC BIOS, check the mode setting for the port. Do not use EPP mode, especially if a security dongle is attached.
- If your PC has a second printer port, try using this port instead.
- Swap the parallel printer cable for another one.

Poor or erratic image quality

Symptoms: The print quality is poor.

Solution: There are a number of possible solutions:

- Check the printer is operating correctly and is able to print a self-diagnostic test page. Your printer manual will have details on how to print a test page.
- Make a note of any error or warning messages issued by the RIP / plugin and use the recommended troubleshooting procedures, as described in this section, to fix the problem.
- Check the settings used in the Torrent RIP page setup. You may have used an inappropriate setting for resolution or print quality.

No output

Symptoms: No output from the printer.

Solution: Check the status of the printer: make sure it is online, powered and connected. Also, check ink and media are loaded and ready to be used. If necessary, print a self-diagnostic test page. Your printer manual will have details on how to print a test page.

Output appears clipped

Symptoms: Printed output may be clipped at the top, bottom or side of the page when printing with large paper sizes or high resolutions.

Solution: Increase the band size setting to **`1024 Kb`** in **Torrent > Configure RIP > Options > Band size for printing**.

PhotoInk colour management fails to preserve 100% process black

Symptoms: Black is not printed as 100% process black when a job is colour-managed.

Solution: To prevent black being colour-managed, add a page feature to your page setup that runs the following PostScript:

```
<</ReuseColorChains false>> setsystemparams
```

Refer to the *Torrent User's Guide* for details on creating and using page features.

Banding at 300dpi

Symptoms: Device pauses for a few seconds shortly after printing starts, resulting in a band in the first few inches.

Solution: Increase the band size setting to **2148 Kb** in **Torrent > Configure RIP > Options > Band size for printing**.

10.3 Messages for file name templates

This section details possible error messages that may appear in the RIP monitor window due to the use of incorrect file name templates (see Section 7, “Output file naming”). Suggestions are offered to prevent these errors from occurring.

`Filename too long for target platform`

This message appears when the combined file name stem and extension are too long for the target platform. For example, the combined length of the file name stem and extension must not exceed 255 characters on a Windows platform or 31 characters on a Macintosh platform. To prevent this error, use truncated tags, as shown in the example for the **`<dos>`** tag in Section 7.2 on page 17.

`File stem too long for target platform`

This message appears when the file name stem is too long for the target platform. To prevent this error, restrict the length of the stem by reducing the fixed text, or by using truncated tags. The example for the **`<dos>`** tag in Section 7.2 on page 17 demonstrates truncation.

`Extension too long for target platform`

This message appears when the file name extension is too long for the target platform. For example, file names in UNIX are not considered to have a separate file name extension. Using the **`<dot>`** tag in conjunction with the **`<unix>`** tag would generate this error. To prevent this error, create a template such as **`<unix><jobname>.hpf`** rather than using the **`<dot>`** tag.

`Full pathname too long for target platform`

This message appears when the full path name (combination of the file path and the file name) is too long for the target platform. For example, in Windows operating systems the full path name must not exceed 259 characters. To prevent this error, examine the number of characters in the file path of the output file (for example, **`C:\SW53\RIP\FILES\`**) and create a template in which the combined length of the file path and the file name do not exceed the limit for the platform.

`The path was not supplied`

This message appears when the file path is not specified in the **Change...** text box within the Configuration dialog box. To prevent this error, provide a valid file path.

`Unknown tag found in template`

This message appears when an unknown tag is found in the template. This is most likely due to a spelling error.

Tag delimiter not found

This message appears when a tag delimiter, either **<** or **>**, is missing from a tag. Check that all the tags have both delimiter characters.

An extension is required but not found

This message appears when a file extension is expected but is not specified in the template. For example, if using the **<dot>** tag, a file extension must be given.

File requested is not writeable

This message appears when trying to write to a file that already exists and that has read-only access. If you wish to overwrite the file, you must change the file permissions to provide write access.

Unique requested but not satisfied

This message appears when no further unique numbers are available. For example, if using the template **stem<1unique><dot>hpf**, this error would occur once the file names **stem1.hpf** through **stem9.hpf** had been generated, because no further unique numbers are available.

10.4 Messages for post processing

This section details possible messages that may appear during post processing (see Section 8, “Post processing operations”).

Running post processing command *"command"* **in folder** *"folder name"*

This is a progress message, confirming the command that is being run, and the working directory.

Post processing command failed - Cannot change directory to *"directory path"*

This error message appears when there is a problem changing to the specified directory that prevents the completion of the post processing. Check that the directory exists and that you have permission to access the directory.

Post processing command failed - *"status value"*

This error message appears when the post processing has been unsuccessful. The **"***status value***"** is the error code generated by the command or shell you are using and can be used by your system administrator to determine the exact cause of the post processing failure.

10.5 Parallel port performance and reliability

We are aware of several problems with parallel port behaviour when working with built-in parallel ports on PC platforms—where the hardware implementation and supported modes of operation have changed greatly over the development history of the PC.

For built-in parallel ports, there are different issues under Windows NT as opposed to Windows 2000 and Windows XP.

Windows NT

Under Windows NT, the data transfer rate of some parallel ports can be very poor. In most cases, the data rate achieved by the RIP is now as high as can be achieved by copying a file to the parallel port, but this rate is often less than you may expect to achieve. (Windows NT always uses the parallel port in a basic or compatible mode, regardless of BIOS settings such as those discussed next.)

Windows2000/Windows XP

Under Windows 2000 and Windows XP the parallel port driver can achieve higher data rates, especially when operated in ECP mode. Using this mode the operating system sometimes crashes or shuts itself down. You can avoid these problems by reconfiguring the parallel port in the BIOS to select the most basic configuration. The way to enter and change the BIOS configuration varies from machine to machine, as does the terminology used for the parallel port mode.

To avoid crashes, try using options with descriptions such as “bi-directional”. Do not choose any option where the description includes the words ECP or EPP.

10.6 Problems with passwords

If you have problems enabling a device or option you should confirm with your supplier the password or password file. They may provide you with a new password or password file. If this is the case, you may need to provide the serial number of your RIP. The RIP displays this number in the RIP monitor window when starting up, in the form:

`Serial number:` *`1234-56`*

You must also tell your supplier the *platform* for which you require the password or password file. The platform is the combination of operating system and processor type. For example, you might specify Windows 2000, and Intel processor (CPU).

Once you have a valid password or password file, follow the relevant steps:

Password file	Copy the password file into the **`Passwords`** folder, which is a subfolder of the **`SW`** folder. See the *Torrent User’s Guide* for further details.
Password	Use the **Torrent > Configure RIP** menu option to display the Configure RIP dialog box. Click **Extras** in the Configure RIP dialog box to display the Extras dialog box. Select the entry for the device or option that you wish to add, and click **Add** to display the Enable Feature dialog box. Enter the password given to you by your supplier, and click **OK**.

10.7 Patterning when not using colour management

You may see patterning in flat tint areas of black if you print without using any colour management. To avoid this problem, use the supplied calibration profiles and colour profiles, as listed on page 13. If the media or screening type that you wish to use is not supported by the supplied profiles, you need to create your own profile. If necessary, you can use the supplied profiles that are optimized for HDS Super Fine screening with all of the HDS screen sets.

10.8 Known issues

The following minor issues were noted during testing of the HP DesignJet 130 plugin. The issues described here do *not* affect the performance of the plugin, and are provided for your information only.

- Incorrect media type when US-B or US-B Transverse is selected.

  When either **`US-B`** or **`US-B Transverse`** is selected from the Page Layout media size list, Ledger Transverse and Ledger respectively are displayed instead. You may ignore this error, as the substituted paper has the same dimensions as the paper you selected.

- Long waiting time before the printed media is ejected.

  After printing on certain media types—usually glossy types or other heavy papers—the printer waits quite a while before ejecting the paper, displaying an hour glass in the printer's LCD panel at the same time. This is normal behaviour and is due to the printer waiting for the ink to dry before ejecting the sheet.