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# ProofReady Plugin for Epson Printers

Version 3.4r3

January 2007

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*ProofReady Plugin for Epson Printers*

Version 3.4r3: January 2007

Part number: GG.EPSONPLUGIN.34r3

Document issue: 102\_hw

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## HighWater Designs Limited

1-6 St. George's Business Park,  
Alstone Lane,  
Cheltenham, GL51 8HF,  
UK.

Telephone: +44 1242 542100

Fax: +44 1242 251600

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# ProofReady Plugin for Epson Printers

This document describes the ProofReady plugin for Epson printers version 3.4r3, for use with a Torrent RIP, version 5.3 or later.

This plugin is provided with pre-configured colour setups and calibration profiles that enable instant colour management, hence the name ProofReady. The plugin is available for the RIP running on:

- Pentium-based processors using Windows NT, Windows 2000 or Windows XP.
- Macintosh computers, including Mac OS X (support for Mac OS X requires Torrent RIP version 5.5r1w or later).
- Macintosh computers running Mac OS X on Intel processors.

See the *Torrent User's Guide* for full details on platform requirements.

## 1. Introduction

The ProofReady plugin allows the RIP to provide page images to a supported Epson printer. The printer can be connected directly to the computer running the RIP or through a suitable network or interface adapter, as specified in this document. You can also print to file and transfer this file for output to a printer.

The following printers are supported but it may also be possible to use other models produced to be directly compatible with these printers:

- Epson Stylus Colour 3000 (sheet-fed or roll-fed)
- Epson Stylus Pro 5000
- Epson Stylus Pro 7000/7500 (sheet-fed or roll-fed)
- Epson Stylus Pro 9000/9500 (sheet-fed or roll-fed)

Profiles have been supplied for use with HDS and EDS screening. To use EDS screening performed by the plugin, you must choose an EDS device type (see Section 4.2 for details). You can also install a password protected, optional plugin known as HEDS1 to use in-RIP EDS screening, which has lower memory and printer buffer requirements than EDS screening performed by the plugin. Note that you must install the HEDS1 plugin if you wish to use EDS screening on a Mac OS X platform, because the Mac OS X version of the ProofReady plugin cannot perform EDS screening.

## 1.1 Requirements

If you intend to produce large format or high-resolution pages you may need to add extra physical memory (RAM) and allow sufficient disk space. To use the **Multiple (Parallel mode)** of the RIP with large files, use a computer fitted with at least 128 MB of RAM. You may also need to use the **single (if required)** mode of the RIP if using EDS (Error Diffusion Screening) and printing large format pages.

Typically, if you use EDS screening you need to set the printer buffer to eight times the size of the printer buffer required for standard HDS (Harlequin Dispersed Screening). For example, to allow the preview of large pages and to optimize the transfer of data to the printer, increase the **Printer buffer** in the Configure RIP dialog box to 4096 KB or larger if using standard screening, or 32000 KB or larger if using EDS screening. Increase the **Disk space left for system** in the Configure RIP Options dialog box to approximately 10 MB.

**Note:** If you use in-RIP EDS screening, as opposed to EDS screening performed by the plugin, the system requirements are the same as for standard HDS screening. Unless explicitly stated, all references to EDS screening in this document refer to EDS screening performed by the plugin.

If using a Macintosh computer the **Minimum memory left for system** in the Configure RIP Options dialog box must be at least 10000 KB. To avoid memory warnings and to increase performance assign approximately 64 MB of memory to the RIP application. To do this use the menu option **File > Get Info** and display the memory information. Set the preferred size to your chosen value.

These requirements are summarized in the table below:

Requirements	Macintosh + standard screening	Macintosh + EDS screening	PC + standard screening	PC + EDS screening
System RAM	128 MB	128 MB	128 MB	128 MB
Printer buffer	4096 KB or larger	32000 KB or larger	4096 KB or larger	32000 KB or larger
Disk space left for system	10 MB (approx.)	10 MB (approx.)	10 MB (approx.)	10 MB (approx.)
Minimum memory left for system	10000 KB	10000 KB	—	—
Macintosh Application memory	64 MB (approx.)	64 MB (approx.)	—	—

**Table 1** System configuration

The computer must have a suitable interface with which to drive the printers. See Section 3 on page 9 for a summary of possible connection methods. Describing the details of hardware installation for the printers and external hardware is outside the scope of this manual. See the manufacturer's documentation for details.

The supplied package includes colour management profiles for use with HDS Super Fine screens. To use these profiles HDS Light or HDS must be enabled. Colour management profiles are also provided for use with EDS screening.

These profiles also require a colour management option such as HIPP (Harlequin ICC Profile Processor) or Torrent ColorPro (v6.0 release or later of the Torrent RIP).

## 1.2 Capabilities of the plugin

The plugin has the following capabilities:

- Instant colour management using supplied profiles.
- PhotoInk (CMYKcm) 6-colour output on appropriate printers.
- A choice of resolution for the output page image for all media sizes and types supported by the model of printer in use.
- User choice of output quality.
- Availability of Harlequin screening techniques (including EDS).
- Preview of the screened output (not including EDS).

## 1.3 Limitations

The ProofReady plugin generates an output colour format that the printer can accept. This format is 6-colour PhotoInk composite or CMYK composite, as required by the relevant printer, and screened using one of several screening options.

The 6-colour PhotoInk format imposes the following restrictions:

- No use of trapping using EasyTrap. You must use TrapWorks 5.5r0 or later or TrapPro to trap PhotoInk formats. Note that TrapWorks and TrapPro treat light inks as separate colours rather than creating a single trap for all inks of the same colour. For example, Cyan and Cyan light are trapped separately.
- No use of overprints in versions 5.1 and 5.1r1.

The CMYK format imposes no such restrictions.

The plugin cannot be run on a Macintosh computer that has NuBus slots only. This limitation is typically restricted to Macintosh computers that were manufactured before 1996.

## 2. Software installation

HighWater strongly recommends that you install this plugin in a new installation of the RIP. In particular, you are very likely to experience irregular behaviour if you install version 3.4r2 or later of the plugin in an installation where you have previously installed a Stylus, or Plotters plugin, or an earlier version of this plugin.

There are several stages to the installation of a working system. These are:

- Install any required operating system support.
- Install the RIP, if required.
- Install the plugin.

## 2.1 Installing the operating system support software and printer

Do not install software supplied with the printer on a computer running the RIP unless you wish to use the printer directly from the operating system. The RIP operates independently of software installed to work with the operating system. If you do try to use both applications, you are likely to get spurious messages from the operating software about paper out or similar error conditions.

There are a few exceptions:

- You must install software if you wish to use a Universal Serial Bus (USB) port on your Macintosh computer through an adapter cable that drives a parallel port on the printer. This software is supplied with the adapter cable, the Epson USB/Parallel Adapter; it is not a standard accessory for the printers.
- You must install software if you wish to use the USB port on your computer to connect to the USB port on a device. This software is usually supplied with the output device.  
**Note:** Installing Macintosh software to support the USB to USB connection method may cause an extensions conflict. If this occurs, refer to “Troubleshooting and tips” on page 35 for guidelines on resolving this problem.
- You must install software if you wish to use an Epson optional Ethernet card. This software configures settings such as the IP address of the printer and is supplied with the device.

Follow the manufacturer’s recommendations about the order of installing hardware and software. Make any test prints that the procedure suggests in order to test that the support software and printer are working correctly.

Before you send real output to your newly-installed printer, follow any procedures that the user guide for the printer suggests to ensure proper ink flow and correct print head alignment.

## 2.2 Installing the ProofReady plugin manually

Ensure that the Torrent RIP is installed and set appropriate configuration options for the RIP using the guidelines given in “Requirements” on page 5. If using EDS screening or large paper sizes, try setting the **Printer buffer** to 32000 KB or larger. (Refer to the Torrent RIP installation guide for your platform to see the requirements and procedure for installing the Torrent RIP.)

To install the ProofReady plugin manually:

1. Exit the Torrent RIP, if it is running.
2. Copy the `epsonplg` folder into the `Devices` folder within the RIP’s `sw` folder.

If you have correctly installed the plugin, a line similar to the following will appear in the RIP monitor when you next start up the RIP:

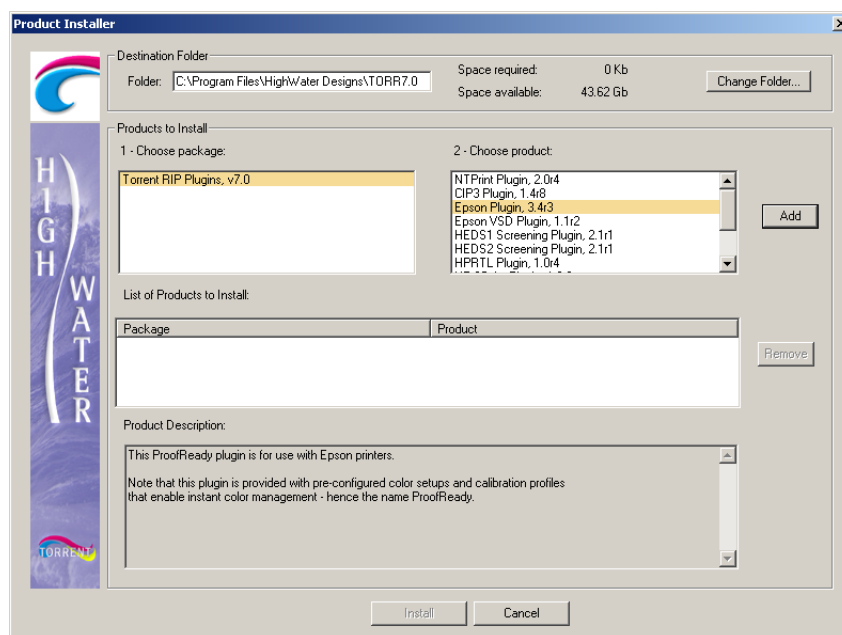
```
ProofReady - Epson Plugin Version 3.4r3 - Copyright (c) 1999-2005 Global Graphics
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```

If your computer is already connected to your output device, refer to “Getting started” on page 10. Otherwise see “Connecting to the printer” on page 9 for details of connection methods.

## 2.3 Installing the ProofReady plugin using the product installer

The procedure below describes how to use the product installer to install the Epson ProofReady plugin (ensure that the Torrent RIP is already installed on your system before commencing the installation):

1. To start the installation procedure close the Torrent RIP, if it is running.
2. Insert the Pre-Press Solutions CD 3 into the CD-drive. The CD's web interface launches automatically in your browser and provides a full list of the CD's contents.
3. Scroll down to the **Proofing Plugins** section and click on either the Windows or Macintosh icon, as appropriate.
4. On the next screen, scroll down to the **Epson ProofReady Plugin v3.4r3 for Stylus Colour 3000 and Stylus Pro 5000, 7000, 7500, 9000, 9500** option, and click on the link to install the plugin.
5. A File Download dialog appears. Select either **Run this program from its current location** and click on the **OK** button, or click on the **Open** button. (If you see a security warning, click on the **Yes** button.)
6. Next, the Product Installer is displayed:



**Figure 1.** The Product Installer application

7. Check that the destination folder matches the location of your RIP. If necessary, click the **Change Folder...** button to select the correct folder.
8. To install the Epson plugin select the following options:  
     Package: **Torrent RIP Plugins, v7.0**  
     Product: **Epson Plugin, 3.4r3**
9. Click **Add** to add the plugin to the list of products to install.
10. When you have finished adding products to the install list, click **Install**.



11. The installer copies the plugin file(s) into the relevant locations within the RIP installation folder. At the end of the copying, the installer displays a Product Installer window with the message **Installation complete**. Click **OK** to close the window and exit the installer.
12. If you have correctly installed the plugin, a line similar to the following will appear in the RIP monitor when you next start up the RIP:

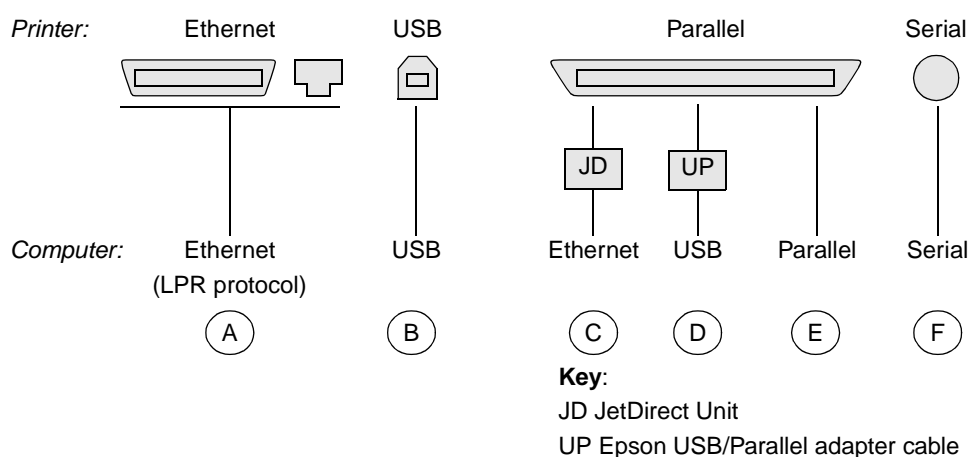
**ProofReady - Epson**  
**Plugin Version 3.4r3 - Copyright (c) 2001-2005 Global Graphics Software**  
**Ltd. All Rights Reserved.**

Note that you must set appropriate configuration options for the RIP using the guidelines given in “Requirements” on page 5.

If your computer is already connected to your output device, refer to “Getting started” on page 10. Otherwise see “Connecting to the printer” below for details of connection methods.

### 3. Connecting to the printer

The following figure, table, and notes show possible methods for connecting Epson printers to various platforms. (Some printer interfaces are optional or available on a restricted range of Epson models.)



**Figure 2.** Printer connection methods

This table shows which of the methods, A through F, are supported by the platforms on which the output plugin is available. Note that currently, only network and file output is supported on platforms running Mac OS X.

Platform	Epson 3000	Epson 5000	Epson 7000 Epson 7500	Epson 9000 Epson 9500
Macintosh				
PowerPC pre G3	(A), (C), F	(A), (C), F	(A), (C)	(A), (C), F
G3/G4/iMac	(A), (C), (D), F*	(A), (C), (D), F*	(A), (B), (C), (D)	(A), (C), (D), F*
PC Intel				
Windows NT	(A), (C), E	(A), (C), E	(A), (C), E	(A), (C), E
Windows 2000	(A), (C), (D), E	(A), (C), (D), E	(A), B, (C), (D), E	(A), (C), (D), E
Windows XP	(A), (C), (D), E	(A), (C), (D), E	(A), B, (C), (D), E	(A), (C), (D), E

### 3.1 Notes on figure and table

In the table, letters in brackets indicate that the printer interface is optional or that the cable requires software on the computer running the RIP. For example, an internal 10/100 Base-T type B Ethernet card is optional on all printers.

F\* indicates that the availability of a serial port depends on the model of the Macintosh computer.

The lettering order also suggests the relative speed (and convenience such as networked access) of the connection methods. In general, method A or the nearest listed letter shows the most effective connection method available for a given combination of printer and platform.

**Note:** The optional Ethernet cards for the Epson printers use a protocol (LPR) which does not provide bidirectional communication. Consequently, error messages cannot be relayed from the printer using this connection method.

## 4. Getting started

Before you can output to a device you must enable the use of HDS and HIPP or ColorPro, as well as the device.

If you have installed your plugin into version 5.3r1 or later and you have been supplied with a password file or password files, copy the password file(s) into the **Passwords** folder within the **sw** folder. When you next start the RIP, all device types for the enabled printer will be available for selection in the Page Setup dialog box. You can then create a page setup, as described on page 11. In some cases you may need or wish to create device types. See “Creating device types” on page 11 for details.

If you have installed the plugin into earlier versions of the RIP, or you have not been supplied with password files, you must enable the devices and colour management by following the steps in “Entering passwords”.

### 4.1 Entering passwords

Follow the steps below to enable colour management and devices.

**Note:** In order to set HDS Super Fine screening as the default screening used by devices, you must enable HDS or HDS Light before you enable devices. See “Halftone screen selection” on page 16 for details of supplied screen sets.

1. Enable the use of HDS or HDS Light by entering the password in the Enable Feature dialog box.  
Use the **Torrent > Configure RIP** menu option and click **Extras**. Choose **HDS** or **HDS light** from the list in the Configure RIP Extras dialog box. Click **Add** to display the Enable Feature dialog box. Enter the password and click **OK**.
2. Enable your chosen device(s).  
For example, to enable the Epson 7500, choose the entry **Epson, Stylus Pro 7500**, click **Add** to display the Enable Feature dialog box, and enter the password. Click **OK**.
3. Enable the use of HIPP or Torrent ColorPro (v6.0 release or later of the Torrent RIP) as described in step 1. Click **OK** twice to exit the Configure RIP dialog box.

If you have a problem with passwords, see “Problems with passwords” on page 42.

Each device has multiple device types, which specify the use of different features such as roll-fed or sheet-fed media handling. The first time you enter a password for an Epson printer, all supported device types for that printer are made available for selection in the Device Manager and in the **Device** menu in the Page Setup dialog box. For example, if you enable the Epson 5000, all Epson 5000 device types become available, including the `stylus5000_Roll`, `stylus5000_Roll_EDS` and so on. You can then create a page setup for a device type as described in “Creating a page setup” on page 11.

If you enable another printer, you must make your chosen device type available for selection in the Page Setup dialog box before you can create a page setup. See “Creating device types” for details.

## 4.2 Creating device types

Roll-fed devices are distinguished from sheet-fed devices by the inclusion of the suffix `_Roll`. For example, the Epson 7500 has the device types `stylus7500` and `stylus7500_Roll`. The name of device types that use EDS screening includes the suffix `_EDS`, for example: `stylus7500_Roll_EDS`.

If the **Device** menu in the Page Setup dialog box does not contain the device that you require, you must use the Device Manager to create such a device:

1. Use the menu option **Torrent > Device Manager** to open the Device Manager. Alternatively, click the Device Manager icon next to the **Device** menu in the Page Setup dialog box.
2. Depending on your platform, choose either `epsonplg.i32` or `epsonplg` from the **Plugin** menu and click **New**.
3. Choose the device type you require from the **Type** menu in the Device Manager Edit dialog box and enter a name for the device in the **Name** text box. If you use the same name as the device type, it must match the use of uppercase and lowercase letters.
4. Click **OK**. The device will be listed in the Device Manager and become available for selection in the Page Setup dialog box.

You can then create a page setup using this device, as described on page 11.

## 4.3 Creating a page setup

Once your desired device types are available for selection in the Page Setup dialog box, you can create a page setup for the device.

The way in which you create a page setup depends on the Torrent RIP version that you are using. In the v6.0 release or later of the Torrent RIP, instant colour management is possible by simply selecting a ProofReady profile. See Section 4.3.2 on page 14 for details.

In former RIPs, instant colour management is possible by selecting a supplied calibration profile that includes a default colour setup. See Section 4.3.1 below for details.

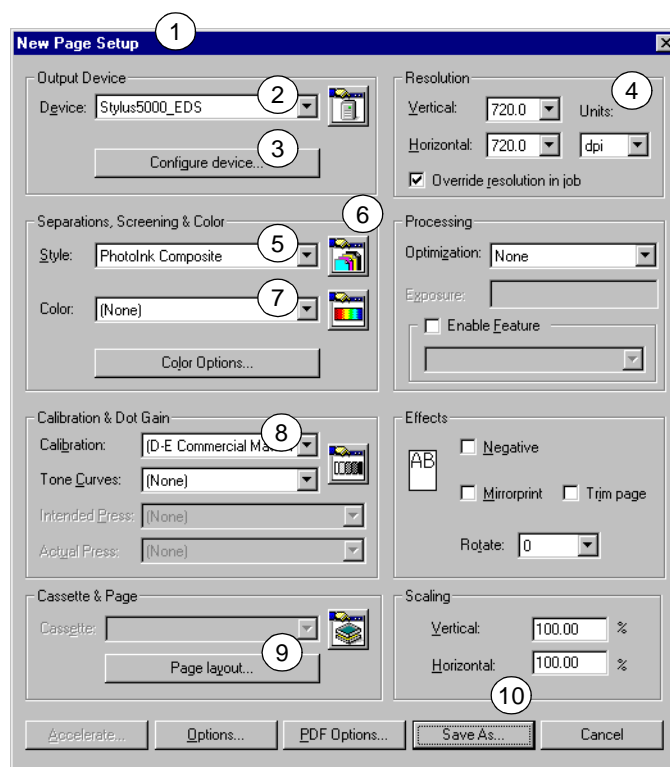
**Note:** In v6.0 release or later RIPs, an extra level of control has also been added to the configuration of ProofReady plugins. There are now three ways in which the ProofReady plugin can be used in such RIPs:

- Users can use automatic colour management by simply selecting a profile from the **ProofReady** menu and using default settings, as described in Section 4.3.2 on page 14.
- Users can choose a **ProofReady** profile and change the default settings used by creating a new separations style and a new 'ProofReady' colour setup and selecting them from the **Style** and **Colour** menus. This option allows users to change settings, such as those for recombine and overprinting, while using the default ProofReady profiles. See Section 10 on page 26 for further details.
- Users can create a ColorPro colour setup, which allows them to configure all the colour management settings, including the input and output profiles used. Users must choose (**None**) from the **ProofReady** menu to enable the selection of a ColorPro colour setup. See Section 11.3 on page 34 for further details.

### 4.3.1 Creating a page setup in pre-v6.0 release RIPs

To create a ProofReady page setup in versions of the Torrent RIP prior to the v6.0 release, you need to select a supplied calibration profile that includes a default colour setup, as described in the procedure below.

For each numbered step of the procedure the corresponding numbers in Figure 3. highlight where choices are made in the New Page Setup dialog box



**Figure 3.** Creating a page setup in pre v6.0 release RIPs

- ① Open the Page Setup Manager and click **New**.

- ② Choose the device required from the **Device** menu.

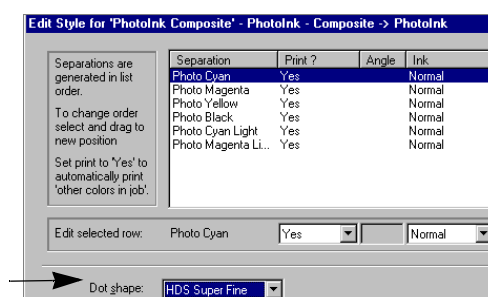
**Note:** If the device you require is not in the **Device** menu, see “Creating device types” on page 11.

- ③ Click **Configure Device** to modify configuration settings as desired. See “Device configuration” on page 17 for details.

If using a supplied calibration profile choose the **Enhanced Microweave** option from the **Quality** menu, because the profiles were created using this setting.

- ④ Choose the desired resolution from the **Vertical** menu. This sets the **Horizontal** resolution to be the same. For example, If you are forced to choose 1440 x 1440, this is set to 1440 x 720 when your file is processed. See page 27 for details.
- ⑤ Choose either **CMYK Composite** (for Epson Stylus Colour 3000) or **PhotoInk Composite** (for all other devices) from the **Style** menu.
- ⑥ If using HDS screening, check in the Edit Style dialog box that screening is set to its default value of **HDS Super Fine**.
- Otherwise skip to step ⑦.

To open the Edit Style dialog box, click the Separations Manager icon. Click **Edit** in the Separations Manager and check the screening option in the **Dot shape** menu. Click **OK** twice to return to the Page Setup dialog box.



- ⑦ Choose (**None**) from the **Colour** menu.

**Note:** Selecting a calibration profile or calibration set includes a default colour setup. You can choose an option from the **Colour** menu if you wish to use a colour setup that you have previously created. See “Creating a HIPP or ColourPro colour setup” on page 34 for details.

- ⑧ Choose a calibration profile from the **Calibration** menu that matches the currently selected paper type and resolution (as specified in step ④).

For example, (**D-E Commercial Matte 720**) is a profile for Dupont/Epson Commercial Matte Proofing Paper based on a resolution of 720 x 720 dpi. See “Supplied profiles” on page 15 for a full list of supplied calibration profiles.

For optimum results you can choose a calibration set that has been generated for the actual printer rather than for a reference printer. See “Calibrating the printer” on page 30 for details.

- ⑨ Click **Page Layout** to specify the positioning of the page, using the margin and centering controls.

**Note:** If you are using a sheet-fed device, you must refer to details on how to control top and bottom margins provided in the Page Layout section on page 28.

- ⑩ Click **Save As** and enter a page setup name in the **Save As** text box. Click **Save** in the Save Setup dialog box and then **OK** in the Page Setup Manager.

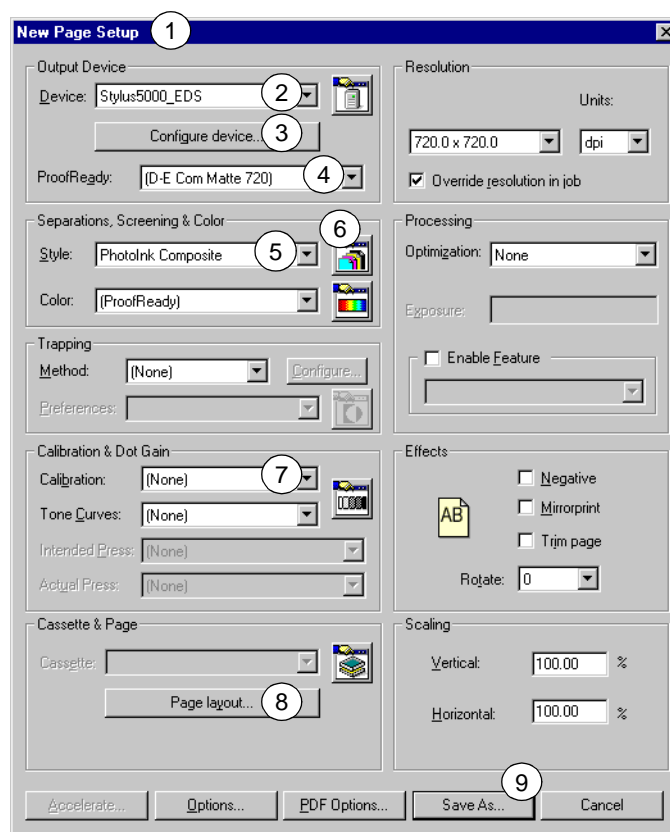
You can use this page setup when printing to produce colour managed output.

**Note:** When printing on a sheet or roll-fed device the paper source must match the paper source setting on the front of the printer. Otherwise, if a printer is loaded with a roll of paper but the paper source is set to sheet the printer may treat the roll as if it were a single sheet. When printing, the printer then attempts to feed to the end of the roll.

### 4.3.2 Creating a page setup in v6.0 release or later RIPs

To create a ProofReady page setup in the v6.0 release or later of the Torrent RIP, you simply need to select a ProofReady profile, as described in the procedure below.

For each numbered step of the procedure the corresponding numbers in Figure 4. highlight where choices are made in the New Page Setup dialog box.



**Figure 4.** Creating a page setup in v6.0 release or later RIPs

- ① Open the Page Setup Manager and click **New**.
- ② Choose the device required from the **Device** menu.

**Note:** If the device you require is not in the **Device** menu, see “Creating device types” on page 11.

- ③ Click **Configure device** to modify configuration settings as desired. See “Device configuration” on page 17 for details.

If using a supplied calibration profile choose the **Enhanced Microweave** option from the **Quality** menu, because the profiles were created using this setting.

- ④ Choose a profile from the **ProofReady** menu that matches the currently selected ink/paper type. The correct resolution for the profile is automatically selected and should not be changed.

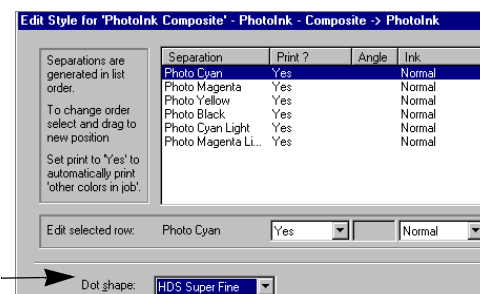
For example, (D-E Commercial Matte 720) is a profile for Dupont/Epson Commercial Matte Proofing Paper based on a resolution of 720 x 720 dpi. See “Supplied profiles” on page 15 for a full list of ProofReady profiles.

**Note:** When you select a ProofReady profile, a default (**ProofReady**) colour setup is automatically selected in the **Colour** menu. Choose (**None**) from the **ProofReady** menu if you wish to use a ColorPro colour setup that you have created, as described in Section 11.3 on page 34.

- ⑤ Choose either **CMYK Composite** (for Epson Stylus Colour 3000) or **PhotoInk Composite** (for all other devices) from the **Style** menu.
- ⑥ If using HDS screening, check in the Edit Style dialog box that screening is set to its default value of **HDS Super Fine**.

Otherwise skip to step ⑦.

To open the Edit Style dialog box, click the Separations Manager icon. Click **Edit** in the Separations Manager and check the screening option in the **Dot shape** menu. Click **OK** twice to return to the Page Setup dialog box.



- ⑦ Choose (**None**) from the **Calibration** menu.

**Note:** Selecting a **ProofReady** profile includes a default calibration profile. For optimum results you can choose a calibration set that has been generated for the actual printer rather than for a reference printer. See “Calibrating the printer” on page 30 for details.

- ⑧ Click **Page Layout** to specify the positioning of the page, using the margin and centering controls.

**Note:** If you are using a sheet-fed device, you must refer to details on how to control top and bottom margins provided in the Page Layout section on page 28.

- ⑨ Click **Save As** and enter a page setup name in the **Save As** text box. Click **Save** in the Save Setup dialog box and then **OK** in the Page Setup Manager.

You can now use this page setup when printing to produce colour managed output.

**Note:** When printing on a sheet or roll-fed device the paper source must match the paper source setting on the front of the printer. Otherwise, if a printer is loaded with a roll of paper but the paper source is set to sheet the printer may treat the roll as if it were a single sheet. When printing, the printer then attempts to feed to the end of the roll.

## 5. Supplied profiles

The following table lists the paper types for which calibration and colour profiles have been provided. Letters in the table indicate the resolution for which a profile is available. The supplied profiles are available for resolutions of 720 x 720 dpi (A), 1440 x 720 dpi (B), and 360 x 360 dpi (C). The use of two screen sets is also supported; HDS Super Fine and EDS. (See Section 5.1. for details on screen sets.)

If you need to use the printer in another configuration, you must obtain your own calibration and colour profiles.

**Note:** Some paper types are named differently in different markets. The UK: and US: prefixes in the Paper Type column show where these differences are known.

The name of the profile appearing in the RIP is the text that appears in typewriter font in the Paper Type column followed by the resolution, all enclosed in parentheses. For example, a profile for Epson Photo Paper at 720 x 720 dpi is (**Photo Paper 720**).

Paper Type	Part Number	3 0 0 0	5 0 0 0	7 0 0 0	9 0 0 0	7 5 0 0	9 5 0 0
Epson Photo Quality Ink Jet Paper <b>PQ Ink Jet Paper</b>	S041048, S041061, S041062, S041067, S041068, S041069, S041070, S041079, S041171	A B C	C				
UK: Epson Photo Quality Glossy Paper US: Epson Glossy Paper <b>PQ Glossy Paper</b>	S041123, S041124, S041125, S041126, S041133, S041151	A B					
Epson Photo Paper <b>Photo Paper</b>	S041134, S041140, S041141, S041142, S041143, S041145, S041156, S041271, S041272	A B					
UK: Epson Glossy Photo Paper (Heavyweight) US: Epson Glossy Paper (Heavyweight) <b>Glossy Photo Hvywt</b>	S041224, S041225, S041226, S041227			A B			
Dupont/EPSON Commercial Matte Proofing Paper <b>D-E Commercial Matte</b>	S041201, S041202, S041203, S041204	A B	A B				
Dupont/EPSON Commercial Proofing Paper <b>D-E Comm Proof</b>	S041160, S041161	A B					
Epson Glossy Paper - Photo Weight <b>Glossy Photo Weight</b>	S041388, S041389					A B	
Epson Premium Glossy Photo Paper <b>PGlossy Photo Paper</b>	S041390, S041392					A B	
Epson Presentation Matte Paper <b>Presentation Matte</b>	S041221, S041220, S041295			C			

## 5.1 Halftone screen selection

The supplied profiles have been generated for use with either HDS Super Fine or EDS screening. Alternative screen sets are available but they may produce poor colour output if used in conjunction with the supplied profiles.

The Epson 3000 prints using the standard CMYK process colour inks. The standard set of CMYK screens installed in the RIP is available for use.



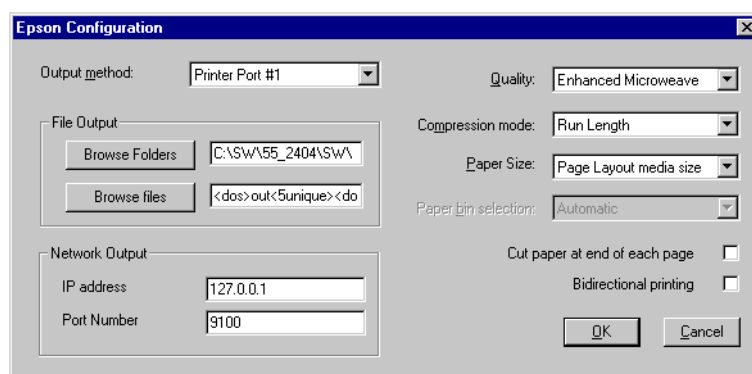
The Epson 5000, 7000, 7500, 9000 and 9500 print using six inks, for which the RIP supplies density values by conversion from CMYK. As well as the conventional Cyan, Magenta, Yellow, and Black inks, there are Light Cyan and Light Magenta inks. The light inks produce improved highlight rendition.

The RIP supplies a set of screens specially designed for use with six inks. Each of these six-ink halftone screens ensures that the total ink coverage is limited to a maximum of 400%. These halftone screens are:

EDS	This is one of the screens used to produce the supplied profiles. It produces the highest quality output for inkjet printers.
HDS Super Fine	This is one of the screens used to produce the supplied profiles. If using a supplied profile based on this screen, ensure that this option is selected from the Edit Style dialog box accessed from the Separations Manager.
HDS Fine	This is an alternative to HDS Super Fine, producing a coarser screen than HDS Super Fine.
HDS Medium	The Medium, Coarse, and Super Coarse variants of HDS are only recommended as special effects screens.
HDS Coarse	
HDS Super Coarse	
Chain	See “Using Chain screening” on page 42 for details of recommended settings when using Chain screening.
Euclidean	It is recommended that HPS is turned on and that a screen frequency of 80 lpi is used with this screen.

Refer to the *Torrent User's Guide* for further details of screens supplied with the RIP.

## 6. Device configuration



**Figure 5.** Epson Configuration dialog box

**Output method**

The options that appear in this menu are the various methods of connecting the output plugin to the physical printer, together with the print to file option. If you choose **Network** you must specify the correct IP address and port number in this dialog. If you choose **File** you must specify a valid location to produce the file, as well as a valid file name template.

For Windows platforms, the standard options are: **Network**, **File**, and **Printer Port #1**. If your computer is equipped with a USB port, you may have an extra entry, such as **USB Root Hub**. This entry is not an appropriate choice for connecting to a printer; do not select it.

For Classic Macintosh computers, the standard options are: **Network**, **File**, **Port: Printer** and **Port: Modem**.

For Mac OS X computers, the standard options are: **Network** and **File**.

On all platforms apart from Mac OS X, you will see an extra entry if you are driving an output device with a USB port or you have installed an adapter cable to convert between USB output and parallel interface input on the printer. Software supplied with the adapter cable or the output device should allow you to choose a name; for example, you might set up an entry called **Epson USB**.

**File Output: Change**

The text box alongside this button shows the location where the plugin will produce the output file.

The initial folder is the **sw** folder, which is a subfolder of the RIP application folder. Click the **Change** button to display the Select Folder dialog box where you can navigate to and select any folder visible to the computer running the RIP. Alternatively, on Windows only, you can edit the text if you know the exact location of an existing folder.

**Note:** You can send files to a printer using Windows print spooling by installing Windows printer drivers on a PC print server, and by entering the name of the *print server* in this text box. See “Sending files to a printer using Windows printer drivers” on page 43 for full details.

**File Output: File template**

The text box alongside this button shows the file name template used to name an output file. (This file is suitable for sending directly to the printer.)

The default file name template is `<dos>out<5unique><dot>epf`. This template produces a file name that is cross platform (8.3 file name) and suitable for multi-page jobs. It produces file names of the format `out00001.epf`, `out00002.epf` and so on. See “Output file naming” on page 21 for details on creating a file name template.

**Note:** You can send files to a printer using Windows print spooling by installing Windows printer drivers on a PC print server, and by entering the name of the *printer* in this text box. See “Sending files to a printer using Windows printer drivers” on page 43 for full details.

**Network Output: IP address**

This text box shows the network address of the print server. This address is a configurable property of a JetDirect unit or similar device. Enter the network address of the print server that you are using. If your network supports the use of names, you can enter a name and this will be resolved to the IP address.

**Network Output: Port Number**

The text box alongside this button shows the number of the port you wish to use. If you have installed an optional 10/100 Base-T type B Ethernet card the **Port Number** must be set to 515. If sending output to a single printer using a JetDirect unit the **Port Number** must be set to 9100.

Some print servers can drive several printers simultaneously and the different physical connections or ports have their own numbers (which may vary with the type of server). For example, on a JetDirect unit with three output ports, the physical ports named 1, 2, and 3 have port numbers 9100, 9101, and 9102.

The RIP supports the use of another printer connected to the same print server. For example, two computers running the RIP and driving the same print server can address any compatible printer connected to that server.

**Quality**

The options that appear in this menu are methods of driving the printer, which offer combinations of speed and image quality which may depend on the printer's capabilities.

If using supplied calibration sets and profiles it is recommended that you use the **Enhanced Microweave** option, otherwise choose according to the following criteria:

Choose **Enhanced Microweave** when you need optimum quality and are prepared to wait longer for the printed image.

Choose **Faster Microweave** if you want fast output and colour quality is not a high priority. For example, you should use this mode when producing positioning proofs.

Choose **Standard Microweave** if you wish to compromise between speed and quality of output.

**Compression mode**

The options that appear in this menu are methods of coding the data sent to the printer.

**None** sends the data uncompressed, so the data size is always a predictable value though sometime larger than it need be.

**Run Length** performs a lossless compression that enables the exact data to be recreated. For many images, using **Run Length** will reduce the size of the data and the time taken to transmit it. For some very complex pages containing large areas of fine detail, it may take longer to send a page coded with **Run Length** than to send the same page coded with **None**.

**Paper Size**

This menu appears in versions of the RIP prior to the v6.0 release. To specify your paper size in the v6.0 release or later of the Torrent RIP, you must use the controls in the Page Layout dialog box, as described on page 28.

The options that appear in this menu are the sizes of paper supported by the plugin and the printer, as well as the option to create a custom paper size. There is a small unimageable margin around the edge of all media, which varies according to the printer model and media size. Refer to your printer documentation for details.

The dimensions for the standard paper sizes are listed in Table 7 below. All the standard paper sizes are also available as transverse paper sizes, for example **A4 Transverse**. The dimensions of these paper sizes are reversed, which means that you must choose a

transverse paper size if you have installed the paper in your printer in a landscape orientation. Landscape is the long edge of the paper leading into the printer and portrait is the short edge of the paper leading into the printer.

You can create a custom paper size by selecting the **Page Layout media size** option from this menu and specifying the dimensions of the paper size in the Page Layout dialog box. To open this dialog box, click **Page layout** in the Cassette & Page section of the Page Setup dialog box. Enter dimensions for the paper in the **Media Width (MW)** and **Media Length (ML)** text boxes. If using a roll device, the **Media Length (ML)** text box is grayed out. Note that clipping may occur if you change the paper size in a page setup that used a custom paper size. See page 37 for full details.

You can control the positioning of the imaged job on the media by using the controls in the Page Layout dialog box. See page 28 for details.

**Note:** You must also select the same paper size using the switches on the paper tray of the printer. If you fail to make consistent settings, the output may appear in an unexpected position on the page and be clipped.

Paper Size	Dimensions (inches)	Dimensions (mm)
B5	7.2 x 10.1	182 x 257
Letter	8.5 x 11	215.9 x 279.4
A4	8.27 x 11.69	210 x 297
A4 Extra	9.15 x 12.57	232.3 x 319.3
B4	10.1 x 14.33	257 x 364
Ledger	11 x 17	279.4 x 431.8
US-B	11 x 17	279.4 x 431.8
A3	11.69 x 16.54	297 x 420
A3 Extra	12.57 x 17.41	319.3 x 442.3
Super A3	13 x 19	329 x 483
B3	14.33 x 20.28	364 x 515
A2	16.54 x 23.39	420 x 594
US-C	17 x 22	431.8 x 558.8
B2	20.28 x 28.66	515 x 728
US-D	22 x 34	558.8 x 863.6
A1	23.39 x 33.11	594 x 841
B1	28.66 x 40.55	728 x 1030
A0	33.11 x 46.81	841 x 1189
US-E	34 x 44	863.6 x 1117.6
Super A0	35.98 x 50.87	914 x 1292
B0	40.55 x 57.32	1030 x 1456

**Table 2** Paper size names and dimensions

Paper Size	Dimensions (inches)	Dimensions (mm)
Super B0	44.02 x 62.20	1118 x 1580
A2 (420 mm) Roll	16.54 (wide)	420
24" Roll	24 (wide)	610
36" Roll	36 (wide)	914
44" Roll	44 (wide)	1118

**Table 2** Paper size names and dimensions**Paper bin selection**

The options in the **Paper bin selection** menu specify the paper source and are only available when using the Epson Stylus Pro 5000.

**Automatic** automatically selects the paper bin which contains the paper size specified in the Device Configuration dialog box. If the paper bins do not contain the specified paper size then an appropriate alternative is selected.

**Note:** You must also ensure that the switches on the front of the printer for the paper size and type are set correctly, when choosing the **Automatic** option.

- **Paper bin 1/Paper bin 2** specifies which paper bin the printer should use.
- **Manual Feed** sets the printer to expect paper to be manually fed.

**Cut paper at end of each page**

If using a roll-fed device you can select this check box to set the printer to cut paper at the end of each page. You must also ensure that the **Roll Auto Cut** option is selected from the Printer Setting menu on the control panel of your printer.

**Bidirectional printing**

Select this check box to use bidirectional printing, which will decrease the time taken to print each page but may also reduce the quality. When printing to an Epson 3000 device, this check box is automatically selected and disabled because this device only supports bidirectional printing.

**6.1 Output file naming**

The **Browse Files** text box within the Epson Configuration dialog box enables you to specify the automatic generation of an output file name using a template of fixed text and tags.

Most tags are content tags, representing variables such as the date and time a job is processed; the other tags allow you to reject names that would be illegal in a specified operating system. The maximum length of variables can be specified by preceding the tag name with an integer. For example, `<5jobname>` truncates the job name to a maximum of five characters. Tags that produce numeric values are truncated from left to right, whereas tags that produce alphanumeric strings (strings containing the characters a-z, A-Z, and 0-9) are truncated from right to left. See “Examples of tag usage” on page 23 for further details.

Fixed text can be part of the file name stem or extension. For example, `stem_<3unique><sepname><dot>epf` would generate a file name of the form: `stem_000Cyan.epf`, in which `stem_` can be any identifying text.

Try to use a file name extension that does not clash with any established convention. The extension `epf` is a suggestion only and is formed from the initial letters of *Epson Printer File*.

**Note:** This file naming scheme does not provide useful file names derived from job names that contain double-byte characters.

## 6.2 Content generating tags

The following tags are available and can be used in any order:

Tag	Description
<code>&lt;colorant&gt;</code>	The colour space of the device, such as <b>DeviceCMYK</b> , <b>DeviceRGB</b> , or <b>PhotoInk</b> .
<code>&lt;colorname&gt;</code>	The name of the separation, such as <b>Cyan</b> .
<code>&lt;date&gt;</code>	The date when the job is processed, in the format <b>YYYYMMDD</b> , unless a truncated form is specified.
<code>&lt;dot&gt;</code>	Separates the stem of the file name from the file extension, and appears as a period character ( . ) in the file name. For example, <code>stem&lt;dot&gt;ext</code> appears as <b>stem.ext</b> . The use of the <code>&lt;dot&gt;</code> tag enables the verification of the stem and extension lengths.
<code>&lt;exposure&gt;</code>	The exposure setting, a device specific integer.
<code>&lt;job#&gt;</code>	The job number allocated by the RIP. Automatic numbering means that successive jobs have incremented job numbers: 000, 001, 002, 003, and so on.
<code>&lt;jobname&gt;</code>	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.
<code>&lt;jobname1&gt;</code>	The page buffer name without the page number prefix, and using only alphanumeric characters (a-z, A-Z, 0-9). White space characters are <i>not</i> used.
<code>&lt;page#&gt;</code>	The page number (allocated by the RIP), within the current job. For example: 002.
<code>&lt;prefix&gt;</code>	The page number prefix from the page buffer name, such as <b>1.</b> , <b>2.</b> , and so on.
<code>&lt;time&gt;</code>	The time when the job is processed, in the 24-hour format <b>HHMMSS</b> , unless a truncated form is specified.
<code>&lt;unique&gt;</code>	A unique sequence number used to make file names unique when outputting files to a directory.
<code>&lt;xres&gt;</code>	The horizontal resolution of the page, as specified in the page setup.
<code>&lt;yres&gt;</code>	The vertical resolution of the page, as specified in the page setup.

**Table 3** Output file name tags

## 6.3 Checking tags

The plugin always checks the legality of an automatically generated file name against the requirements of the operating system on which the RIP and the plugin are running.

To enable portability of files from one operating system to another, you can also use tags to specify the operating system for which generated file names must be suitable. The use of these tags changes the rules by which a file name is deemed valid. The tags do not modify the file names generated, but cause error messages if the file name is invalid. See “Messages for file name templates” on page 40 for details.

For example, you can create the template `<dos>Averylongfilename.epf`, but an error is generated. This error occurs because DOS file names require the 8.3 format for stem and extension, which this template fails to meet by having 17 characters in its stem. Table 9 lists the operating system tags.

Tag	Description
<code>&lt;dos&gt;</code>	Verifies that the file name is a legal file name for the MS-DOS operating system.
<code>&lt;mac&gt;</code>	Verifies that the file name is a legal file name for the Macintosh operating system.
<code>&lt;unix&gt;</code>	Verifies that the file name is a legal file name for the UNIX or Linux operating system.
<code>&lt;win32&gt;</code>	Verifies that the file name is a legal file name for Windows operating systems: Windows 95, 98, ME, NT, XP, 2000 and 2003.

**Table 4** Operating system tags

## 6.4 Examples of tag usage

The following examples demonstrate the format of strings produced by individual tags. Some examples also show how the tags may be used in combination to form a template. The examples are based on these job details:

*Page buffer name:* 1. Uncalibrated Target: Epson 9000 4 -Color Target

*Date:* 12th of April, 2005

*Exposure:* 110

**Note:** 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 that a page buffer file is output), then multiple copies of the file are created. If the template contains just static tags (such as `<jobname>`, where the job name remains constant), then a single output file is created because previous files are overwritten.

### `<colorant>`

This tag includes the colour space of the device in the file name string.

For example, the template `<colorant><dot>epf` produces a file name of the form `PhotoInk.epf` for a device using a PhotoInk colour space.

### `<colorname>`

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`. If a monochrome style is used this is indicated by the string `Gray`.

### `<date>`

The template `<date><dot>epf` produces the file name `20050412.epf`. You can remove the year information by using the tag `<4date>` to produce the file name `0412.epf`.

**<dos>**

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>epf**, 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>epf**, which produces the file name **Uncalibr.epf**.

**<dot>**

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>.epf** would cause an error because the dot is removed as an illegal character and **epf** is then considered part of the file name stem.

**<exposure>**

You can use this tag to include the exposure setting of a page in the file name.

For example, based on the job details above, the template **<exposure><dot>epf** produces the file name **110.epf**.

**<job#>**

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 file name 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>**

This tag ensures that only legal operating system characters are used in the job name.

For example, in the RIP running under any Microsoft Windows operating system, the template **<jobname><dot>epf** produces the file name **Uncalibrated Target Epson 9000 4-Color Target.epf**. 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>**

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>epf** produces the file name

**UncalibratedTargetEpson90004ColorTarget.epf**. The colon and white space characters are removed from the file name, because they are not alphanumeric characters.



**<mac>**

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>epf** produces the file name **Uncalibrated Target Epson 9**, in which the colon has been removed.

**<page#>**

You can use this tag to include the page number in the file name string.

For example, the template **<page#><dot>epf** produces a file name of the form **001.epf**. It is advisable to use this tag with the job number tag to differentiate between the same pages of different jobs.

**<prefix>**

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, this tag produces the string **1**.

**<time>**

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>**

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>**

The use of this tag verifies that the file name is suitable for use in the UNIX or Linux 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>.epf** produces the file name **UncalibratedTargetEpson90004-ColorTarget.epf**, in which the colon and white space characters have been removed.

**<win32>**

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>epf** produces the file name **Uncalibrated Target Epson 9000 4-Color Target.epf**, in which the colon has been removed.

**<xres>**

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 1440 x 720 dpi and 720 x 720 dpi by using this tag. This tag produces a string such as 1440 or 720, depending on the horizontal resolution.

**<yres>**

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 1440 x 720, this tag produces the string 720.

## 7. Routine use

Details on general usage of the plugin are provided under the following headings:

- “Page Setup settings” on page 26—explains the choices in the page setup dialog box.
- “Roaming page buffers” on page 29—offers details on previewing output to PhotoInk devices.

### 7.1 Page Setup settings

To send output to a device or file you must create a page setup. This involves two main steps. Firstly, you must choose your device from the **Device** menu in the Page Setup dialog box and configure the device as described in “Device configuration” on page 17. Secondly, you must set the desired page setup options to complete a page setup.

The page setup controls that you generally need to consider are described below. See the *Torrent User’s Guide* for further details.

#### Device

The **Device** menu offers a list of supported device types.

If the device type that you require is not available in this menu, see “Creating device types” on page 11.

#### ProofReady

This menu appears in the v6.0 release or later RIPs. You can choose a ProofReady profile from this menu which uses a colour setup and calibration profile for a particular paper, ink and resolution combination. See “Supplied profiles” on page 15 for further details.

When you select a profile from this menu, the correct resolution is automatically set and should not be changed. A default (**ProofReady**) colour setup is also used. If you wish use a colour setup that you have created, choose (**None**) from this menu. See “Creating a HIPP or ColourPro colour setup” on page 34 for details on how to create your own colour setup.

#### Style

By default, there is only one option in the **Style** menu in the **Separations, Screening & Colour** section of the Page Setup dialog box.

For the Epson 3000 the choice is:

- **CMYK Composite**

For the Epson 5000, Epson 7000/7500 and Epson 9000/9500 the choice is:

- **PhotoInk Composite**

Make the choice offered; it suits the format required by the printer.

You can create other styles using the Separations Manager. Refer to the *Torrent User's Guide* for details. See "Using Chain screening" on page 42 if you have problems with Chain screening.

## Colour

In versions of the Torrent RIP prior to the v6.0 release, the selection of a supplied calibration profile, or a calibration set created on the basis of a supplied profile, includes a default colour setup. Set **Colour** to (**None**) if you wish to use the default colour setup. You can use the supplied colour profiles to create your own colour setup, as described in Section 11.3 on page 34. Section 11.2 on page 33 describes the production and installation of your own profiles, which you can then use to create a colour setup.

In the v6.0 release or later of the Torrent RIP, the selection of a profile from the **ProofReady** menu includes a default (**ProofReady**) colour setup. You can use the supplied colour profiles to create your own colour setup, as described in Section 11.3 on page 34. To use your own colour setup, you must choose (**None**) from the **ProofReady** menu.

You can also create a **New 'ProofReady' Setup** if you wish to use a **ProofReady** profile but modify some of the default settings, such as those for overprinting. To create a **New 'ProofReady' Setup** you must access the Colour Setup Manager with a **ProofReady** profile selected. The options are the same as those for a **New 'No Colour Management' Setup**, as described in the *Torrent User's Guide*.

## Resolution

You can either choose the desired resolution from a drop-down menu or from the **Vertical** and **Horizontal** menus, depending on the RIP version you are using.

Choose resolutions that satisfy your desire for speed of output (lower resolution) or quality (higher resolution).

If you use a profile based on a specific resolution, ensure that the resolution matches.

**Note:** If you change the resolution settings in the **Vertical** or **Horizontal** menus, the same resolution automatically appears in the other menu. This prevents you from selecting unavailable resolutions. For example, you can select 360 x 360, but not 360 x 720. If you wish to output at 1440 x 720, you must select 1440 x 1440 in these menus and the resolution is changed to 1440 x 720 when the file is processed. A message confirming this change is displayed in the RIP monitor.

## Calibration

You can select a calibration profile or calibration set from the **Calibration** list in the **Calibration & Dot Gain** section (See Section 5 on page 15 for details of the supplied calibration profiles.)

In versions of the RIP prior to the v6.0 release, the selection of a calibration profile or calibration set includes a default colour setup, unless you choose an alternative from the **Colour** menu. Note that if you choose an alternative colour setup, ensure that it is suitable for the paper type, ink and resolution.

In the v6.0 release or later of the Torrent RIP, the selection of a profile from the **ProofReady** menu includes a default calibration profile. Set **Calibration** to **(None)** if you wish to use the default calibration profile. For optimum results you can choose a calibration set that has been generated for the actual printer rather than for a reference printer. See “Calibrating the printer” on page 30 for details.

### Page Layout

The margins and centering options control where the imaged job appears on the media. There is a small unimageable margin around the edge of the media, which varies according to the printer model. Refer to your printer documentation for details. The positioning of the job is also different for roll and sheet-fed devices.

**Roll-fed**                      When the device is roll-fed, the page defined by the job is located at the top-left of the sheet, unless you set a non-zero **Left Margin** or select the **Center page on Media Width** check box. You can also set both the **Top Margin (TM)** and the **Bottom Margin (BM)**. If you increase the **Bottom Margin (BM)** on a roll-fed device this adds space to the bottom of the page.

**Sheet-fed**                      When the device is sheet-fed, the origin of the page defined by the job is located at the bottom-left of the sheet. However, in the Page Layout dialog box of some versions of the RIP, only the **Top Margin (TM)** is editable with a default value of 0.00 inches. If these default settings were applied the job would be located at the top-left of the sheet. To prevent this, the **Top Margin (TM)** is applied as the **Bottom Margin (BM)**. If your version of the RIP needs to swap these values a message confirming this is displayed in the RIP monitor window.

If you increase the **Bottom Margin (BM)** on a sheet-fed device, space cannot be added to the bottom of the page. This means that the space available on the sheet is reduced.

The use of the media controls depends on the RIP version that you are using:

#### Pre v6.0 release RIPs:

The **Page size** represents the frame within which text and images are printed. Whereas **Paper Size** (specified in the Epson Configuration dialog box) is the size of the medium printed on. In order to print unclipped pages the page size must not exceed the paper size. Because the **Paper Size** is specified in the Epson Configuration dialog box, you do not need to specify the **Media Width** or **Media Length**, unless creating a custom paper size.

**Note:** The **Page size** that you can choose here is only important if you print a job that does not specify its own page size. Such jobs are rare, but include EPS files and the job created by the menu option **Fonts > Proof Fonts**.

v6.0 release or later RIPs:

The **Page size** represents the frame within which text and images are printed. Whereas **Media Size** is the size of the medium printed on. In order to print unclipped pages the page size must not exceed the media size.

From the **Media Size** menu choose either a standard media size or **Other** to use the **Media Width (MW)** and **Media Length (ML)** text boxes to specify a custom media size. If using a roll device, the **Media Length (ML)** text box is grayed out.

When you select a standard paper size, its dimensions are shown in the **Media Width (MW)** and **Media Length (ML)** text boxes. All the standard paper sizes are also available as transverse paper sizes, for example **A4 Transverse**. The dimensions of these paper sizes are reversed, which means that you must choose a transverse paper size if you have installed the paper in your printer in a landscape orientation. Landscape is the long edge of the paper leading into the printer and portrait is the short edge of the paper leading into the printer.

Make all other settings as normal, following the suggestions in the *Torrent User's Guide*.

## 7.2 Roaming page buffers

You can view page buffers on screen using the standard RIP tools, but some things are potentially confusing when you are viewing PhotoInk page buffers:

- The title bar of the Roam window displays asterisk ( \* ) characters, where you might expect to see letters representing the colours in the page buffers. This is normal when the colour system is not Gray, RGB, or CMYK.
- Objects that are drawn in shades of colours, for which there are two or more inks in use, disappear only when you turn off the display of both inks. For example, when the cyan component uses both Photo Cyan and Photo Cyan Light, some of the cyan component remains visible until you use the Roam Options dialog box to turn off both inks.
- When using Roam to preview output, the image displayed has poor colour fidelity. In particular, the image may appear less saturated. This is because the Roam preview does not account for the dot gain that occurs when printing.
- The output from an HDS and an EDS device appears differently in Roam. HDS screening can be previewed whereas output from an EDS device is seen in contone. This is because the plugin performs EDS screening after creating the page buffer that is viewed in Roam.
- When viewing a page that uses a resolution of 1440 x 720 dpi the aspect ratio is maintained, which may cause the file to appear elongated.

## 8. Colour management

This section describes the processes involved in colour management, including:

- “Calibrating the printer” on page 30.
- “Creating and installing ICC profiles” on page 33.
- “Creating a HIPP or ColourPro colour setup” on page 34.
- “Using the Harlequin Full Colour System (HFCS)” on page 34.

For more information on managing colour in the Torrent RIP, see *Harlequin Colour Production Solutions User’s Guide* (for details on HIPP and HFCS) and *Torrent ColorPro User’s Guide* (for details on Torrent ColorPro).

### 8.1 Calibrating the printer

We recommend calibrating the printer for each device type and paper/resolution that you use. To provide a useful starting point the plugin is supplied with a number of calibration profiles which define the ideal or ‘reference’ state for the printer. The profiles are installed in `...RIP_folder\SW\Config\Devices\DevCalibration\`, one for each device type.

The response of your printer (the ‘user printer’) may differ from the reference printer. To obtain optimum output quality you need to calibrate the printer so that it responds in the same way as the reference printer. The adjustments needed to correct the user printer so that it matches the reference printer are defined in a calibration set. The supplied calibration profiles are distinguished from user-generated calibration sets by being enclosed in parentheses, like these ( ).

The way in which you calibrate your device depends on the Torrent RIP version you are using. For details on calibration in the v6 release, see Section 11.1.1 on page 30. For details on calibration in supported pre v6 release RIPs, see Section 11.1.2 on page 32.

#### 8.1.1 v6 release calibration procedure

To ensure accurate calibration, it is recommended that three targets are printed and measured. For subsequent recalibrations, an accurate profile can be achieved with one pass, as described in Section 11.1.3 on page 32. Before you begin calibrating, load the correct paper and initialize the printer according to the manufacturer’s instructions.

##### Print and measure an initial target

1. Create a page setup in the Torrent RIP with the following options:
  - **Device**—select the correct device
  - **ProofReady**—select (None)
  - **Calibration**—select the paper/resolution type
2. In the Torrent RIP, click **Output > Print Calibration** to open the Print Calibration window. From the list, choose your page setup then click **Print uncalibrated target**.
3. Measure the printed target with *Genlin*, or your preferred calibration program. (*Genlin* is installed with the Torrent RIP and is described fully in the *Torrent User’s Guide*.)

4. In the Torrent RIP, click **Output > Calibration Manager** to open the Calibration (Dot Gain) Manager. In the Manager click **Device** and select the correct device, and then click **New** to open the 'Edit uncalibrated target for...' window.
5. In the 'Edit uncalibrated target for...' window, click **Profile** and select the correct paper/resolution type. All other options should be left at their default settings (ensure **Force solid colours** remains unchecked).
6. In the **Name** field, enter an appropriate name for the initial profile, for example **D-E Commercial Matte 720-1** and click **Import > Import** to read the calibration data.
7. Click **OK** until all open windows are closed.

#### Print and measure a second target

1. Open your page setup (the one you used to print the initial target). From the **Calibration** list, select the calibration profile you just created (**D-E Commercial Matte 720-1**) then click **OK** to close the page setup window.
2. Open the Print Calibration window. Select your page setup and click **Print calibrated target** (note this time you are selecting *calibrated* target). Measure the printed target.
3. Open the Calibration (Dot Gain) Manager. Select the appropriate device and choose the calibration profile that you made with the initial target.
4. Click the **Copy** button to create a duplicate of the profile. From the list select the copy and click **Edit from calibrated target** to open the 'Edit calibrated target for...' window.
5. Change the name of the profile to **D-E Commercial Matte 720-2** and click **Import > Import** to add the calibration set.
6. Click **OK** until all open windows are closed.

#### Print and measure a final target

1. In the RIP, open your page setup and from the **Calibration** list select **D-E Commercial Matte 720-2**. Click **OK** to close the window.
2. Open the Print Calibration window. Select your page setup and click **Print calibrated target**. Measure the target with *Genlin* or your favorite calibration program.
3. Open the Calibration (Dot Gain) Manager. Select the device and the calibration set you created for the second target.
4. Click the **Copy** button to create a copy of the profile. Select the copy and click the **Edit from calibrated target** button.
5. Name the profile **D-E Commercial Matte 720-F**, to indicate it is the final calibration set. Click **Import** to read the calibration data, and click **OK** to add the calibration set to the Calibration Manager. You should remove all the intermediate calibration sets from the Calibration Manager to avoid choosing the wrong profile in a page setup.
6. Modify your page setup so that it uses the final calibration set.

### 8.1.2 Calibration procedure for pre v6 release RIPs

The calibration procedure described here is for supported pre v6 release RIPs. Perform the calibration procedure for each device type and paper/resolution that you use. Recalibrate the printer at regular intervals to maintain accuracy, as described in Section 11.1.3 on page 32. Before beginning a calibration, load the correct paper and initialize the printer according to the manufacturer's instruction.

1. Create a page setup in the Torrent RIP with the following options:
  - **Device**—select the correct device.
  - **Calibration**—select the paper/resolution type.
2. In the Torrent RIP, click **Output > Print Calibration** to open the Print Calibration window. From the list shown, choose your page setup then click **Print uncalibrated target**.
3. Measure the printed target with *Genlin*, or your preferred calibration tool. (*Genlin* is installed with the Torrent RIP and is described fully in the *Torrent User's Guide*.)
4. In the Torrent RIP, click **Output > Calibration Manager** to open the Calibration (Dot Gain) Manager. In the Manager, click **Device** and select the correct device, and then click **New** to open the 'Edit uncalibrated target for...' window.
5. In the 'Edit uncalibrated target for...' window, click **Profile** and select the correct paper/resolution type. All other options should be left at their default settings (ensure **Force solid colours** remains unchecked).
6. In the **Name** field enter a name for the profile, for example **D-E Commercial Matte 720** and click **Import > Import** to read the calibration data, and then click **OK** until all open windows are closed.
7. Modify your page setup so that it uses the named calibration set.

### 8.1.3 Recalibrating the printer

You should periodically recalibrate the printer to ensure consistent output results, as follows:

1. Click **Output > Print Calibration** to open the Print Calibration window. Select the appropriate page setup and click **Print calibrated target**. Measure the printed target.
2. In the RIP, click **Output > Calibration Manager** to open the Calibration (Dot Gain) Manager window and select the calibration set used in the page setup.
3. Click **Edit from calibrated target** to open the 'Edit calibrated target for...' window. Click **Import > Import** to read the calibration data and **OK** to save the profile. You may want to enter a new name for the profile to indicate it is an updated profile, for example **D-E Commercial Matte 720-Date**.
4. Modify your page setup so that it uses the new calibration set.



## 8.2 Creating and installing ICC profiles

The creation and installation of an ICC profile involves these processes:

- Creating a suitable page setup
- Printing and measuring ICC profiling target to produce an ICC profile
- Installing the ICC profile in the RIP

When creating a page setup to use for printing profiling targets you have two main options:

**Raw State**      You can create a page setup that contains no colour management data:

### **Pre v6.0 release RIPs**

In this case both the **Colour** and **Calibration** menu options in the page setup must be set to **(None)**.

### **v6.0 release or later RIPs**

In this case both the **ProofReady** and **Calibration** menu options in the page setup must be set to **(None)**, and you must choose **(No colour management)** from the **Colour** menu.

**Note:** The printer in this 'raw state' may not be a suitable basis for creating profiles.

**Golden State**      You can use a temporary calibration profile or calibration set in your page setup that supplies a reference state for the printer.

The option that you choose affects the ICC profile and how you import it.

Having created a suitable page setup, use it to print the ICC profiling target and measure it using an appropriate software package.

The exact procedure you should use will vary from package to package, but it is possible to give some general hints:

- **Total area coverage:** For some paper types the total area coverage should be limited. This depends on the paper, ink type, resolution and screening used, but a good guide is to limit the coverage to 320% for uncoated papers and to 400% for coated papers. Some experimentation may be required to determine the optimum setting.
- **Black generation:** Because the printer does not have a light black ink, any black ink that is imaged in highlight regions is visible 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.

Having created the ICC profile, install it using the menu option **Colour > Install ICC Profile**. In the **Linear Calibration From** menu in the Install ICC Profile dialog box choose either:

- **Linear** if the page setup you used contained no colour management data (raw state); *or*
- The name of the calibration profile or calibration set that you used in the page setup (golden state). The calibration data is incorporated into the ICC profile when you import it. This means you can delete the temporary calibration profile or calibration set once you have imported the ICC profile.

You can create a colour setup using this profile (see Section 11.3 for details).

### 8.3 Creating a HIPP or ColorPro colour setup

“Getting started” on page 10 demonstrated how the selection of a calibration profile (pre v6.0 release RIPs) or a ProofReady profile (v6.0 release or later RIPs) automatically includes a default colour setup to provide instant colour management. The colour profiles used in the default colour setups are also available for the creation of your own colour setups. Alternatively, you could also create a colour setup using imported ICC profiles. See “Creating and installing ICC profiles” above for further information. Creating your own colour setup allows you to specify the input profiles as well as other colour setup options.

Follow these steps to create a colour setup:

1. Choose the menu option **Colour > Colour Setup Manager**.
2. Choose the device for which you want to create this colour setup from the **Device** menu.  
For example, choose **stylus9000\_EDS**.
3. Click **New** or **New ‘ColorPro’ Setup**, depending on your RIP version.
4. If using a pre-v6.0 release RIP, click **Create** in the ICC (HIPP) section of the Create Colour Setup dialog box.
5. In the New Colour Setup dialog box, choose the options for the colour setup you are creating.  
For example, choose **3M Matchprint** for the CMYK input profile and **sRGB** for the RGB input profile and then choose **D-E Commercial Matte 720** as the output profile.
6. Choose **(->Default)** from the **ICC Rendering Intents** or **Main intent** menu, depending on your RIP version.
7. Set the remaining options as desired. For details of these options see the *Harlequin Colour Production Solutions User’s Guide* or the *Torrent ColorPro User’s Guide*.
8. Click **Save As** to save this colour setup.
9. Enter a name for the colour setup in the **Save As** text box in the Save Setup dialog box. Click **Save** and then **OK** to close the Colour Setup Manager.

You can use this colour setup in a page setup. A list of colour profiles provided is given in “Supplied profiles” on page 15.

## 8.4 Using the Harlequin Full Colour System (HFCS)

In versions of the RIP prior to the v6.0 release, the Harlequin Full Colour System (HFCS) can be used to create a colour setup, as described in the *Harlequin Colour Production Solutions User's Guide*.

Take care to select an appropriate profile for the paper being used and ensure that the resolution and screening settings are as required by the profile.

When using HFCS there is no need to install ICC profiles for the printer because HFCS will automatically produce colour rendering dictionaries from the data contained in the selected profile. Should you wish to do so, however, it is possible to install and use ICC profiles with HFCS in the same way as with HIPP.

## 9. Troubleshooting and tips

This section describes messages that may appear in the RIP monitor window and offers troubleshooting advice and tips on how to maximize your use of the plugin. If you have difficulty understanding any message, report the exact message to your support organization.

**Note:** Most of these messages appear in the RIP monitor window and are preceded by details of the plugin and device that you are using. For example:

```
ProofReady - Epson (Stylus7000_EDS)
Message...
```

### 9.1 Miscellaneous messages

The following is a general list of error messages or warnings that may appear in the RIP monitor window:

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

When printing using large paper sizes or high resolutions a VM Error may occur. 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. If this occurs we recommend that you increase the Band size in the Configure RIP options dialog box to 1024 KB.

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

This error message appears if you have created a device type using a name similar to the name of the device type on which it is based. If you use the same text to name the new device as that used to label the device type, you must match the use of lowercase and uppercase characters in the device type label. To prevent this error, open the Device Manager, select the device and click **Edit**. In the Device Manager Edit dialog box, change the name of the device to something completely different.

```
*****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
```

This message may occur when using the RIP running on either Windows NT with service pack 6 or 6a or Windows 2000. It is due to the way these operating systems deal with memory requests.

You can ignore the warning message because performance is not affected in this case. If you wish to remove this error message, two possible solutions exist. You can revert back to using service pack 5 if you are working on Windows NT. Alternatively, you can reduce the amount of memory available to the RIP. This may however affect the performance of the RIP, depending on the total amount of memory that you have available.

**Wrong data format for device(Depth 1 vs 8, Channels 4 vs 4)**

This message can appear if you try to output a page buffer generated for an EDS device using an HDS device, or vice versa. The RIP displays this error message and disables output in the Output Controller/ Monitor dialog box.

If you wish to output the page buffer, select it from the **Active Queue** list and click **Info** to change the **Output device** to either an HDS or EDS device, depending on the device that the page buffer was originally created for. Click the **Disable output** check box to enable output.

Alternatively, you can delete the page buffer by selecting it and clicking **Remove**.

**Wrong data format for device(Depth 1 vs 1, Channels 4 vs 6)**

This message can appear if you try to output a page buffer generated for a CMYK device to a PhotoInk device, or vice versa. The RIP displays this error and disables output in the Output Controller/Monitor dialog box.

If you wish to output the page buffer, select it from the **Active Queue** list and click **Info** to change the **Output device** to either a PhotoInk or CMYK device, depending on the device that the page buffer was originally created for. Click the **Disable output** check box to enable output.

Alternatively, you can delete the page buffer by selecting it and clicking **Remove**.

**%%[ Error: ioerror; Offending Command: renderbands ]%%**

This message can appear if you are using a Macintosh computer and are trying to create a page buffer over 2 GB in size. Typically, this error may occur if using an EDS device to output to large roll-fed devices. To prevent this error message, change the **Page buffering** to **single (if required)** mode within the Configure RIP dialog box. To open the Configure RIP dialog box, use the menu option **Torrent >Configure RIP**.

Alternatively, use HDS screening instead of EDS screening.

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

This message can appear if you try to use HDS screens listed in the Edit Style dialog box before enabling the use of HDS or HDS light. In this case, you must enable HDS or HDS light in the Configure RIP Extras dialog box and then re-submit your job.

## 9.2 Printer-specific messages and symptoms

In most cases, you can clear any problems during output by aborting the output from the RIP, then clearing any partly printed media from the printer. Here are some messages and other symptoms that require different cures:

**Ink levels K 80, C 10, M 10, Y 10, LC 99, LM 99**

This message is a warning rather than an error message. It appears periodically and reports as a percentage the amount of ink available in the printer. To prevent the 'Ink out' error message you should monitor these ink levels.

**Warning: Top and Bottom Margin values will be swapped.**

This warning informs you that your version of the RIP needs to swap values specified in the Page Layout dialog box for the top and bottom margins to correctly deal with sheet-fed devices. The warning ensures that you are aware of this issue, as described on page 28.

**Warning - no image in the printable region**

This warning is rare and only appears when an image smaller than the unprintable area is positioned at the edge of the media so that it is completely clipped. In this case, the job is processed but the output page will be blank.

**Resolution changed to 1440 x 720**

This message confirms that the 1440 x 1440 resolution setting in the Page Setup dialog box has been changed to 1440 x 720. The reason why you cannot select 1440 x 720 in the Page Setup dialog in some RIPs is explained on page 27.

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

This message can appear if you create a page setup that uses a custom paper size and you edit the page setup so that it uses a larger, standard paper size. If this is the case, clipping may occur because the media values in the Page Layout dialog used for the custom paper size are still associated with this page setup and in this instance they specify the maximum paper size. You can either change the media values in the Page Layout dialog box so that they are larger than the paper size chosen in the Configure Device dialog box, or you can create a completely new page setup.

**Print buffer is too small to output this page**

This message can appear during output. To prevent this error, use **File > Configure RIP** to display the Configure RIP dialog box. Set the number shown for **Printer Buffer** to 32768 KB or more.

**Note:** You may also see a similar message while using Roam or Reduced Roam. The cure is the same.

**Failed to allocate BandsCache; not enough memory**

If this message occurs, try increasing the **Minimum memory left for system** and the **Memory for the RIP** by multiples of 1 MB. On a PC platform, both of these options are in the Configure RIP Options dialog box, accessed by choosing **Torrent > Configure RIP** and clicking **Options**.

On a Macintosh platform, you must use the menu option **File > Get Info** to configure the memory for the RIP. You can then set the preferred size to your chosen value.

**Not enough system memory to output this page**

This message can appear during output when the RIP is not supplying enough memory for the needs of the operating system on the computer. Set **Minimum memory left for system** to 10000 KB. You may need to set a higher figure for large page sizes.

On Macintosh computers, depending upon when the memory shortage is detected you may also see the operating system display a warning dialog box or the computer may hang before being able to display a message.

Printer communication failed - is it off line ?

Printer communication failed - check status

These messages can appear for several reasons during output. The printer may be off-line because of operator actions or because it needs more ink or media. This message may also occur because of a problem with the link between the computer and printer. In all cases, check the status of the printer and the connection.

With roll-fed devices, this message may occur because of a problem with paper alignment, which is accompanied by an error message on the printer. If the paper is not straight, remove the paper and reload it so that the right and bottom edges are straight and in line with the rows of punch holes on the printer.

On Macintosh computers only, this message may also appear if another application or background service such as disk-sharing is active during output from the RIP and requires a lot of resources. Avoid such competing uses of the Macintosh wherever possible.

Printer communication failed ( error details )

Unable to connect to printer ( error details )

The text and numbers in parentheses varies, depending on the reason why the RIP cannot connect to the printer. The final number is the error code generated by the operating system and can be used by GGS to determine the exact cause of the connection failure.

Retrying printer connection [Failed to connect to socket 300, 10065]

This message can appear if the printer has no power supply. In this case you simply need to check the power supply and ensure the printer is switched on.

Printer communication failed (Paper empty : 103, 1768)

Paper out

These messages can appear if the printer has run out of media. To prevent this error ensure that the printer has sufficient media to complete a job.

Unable to connect to printer (No printer power : 101, 0)

This message can appear if you are using the parallel port connection method on a Windows NT platform and the printer has no power supply. Check the power supply to the printer and ensure that the printer is switched on.

Job is aborting - printer will print all data it has already been sent

This message can appear during output. It is not a separate error, only an indication of how the RIP and the printer are recovering from an error reported in an earlier message.

Cannot open selected output method ( method details )

This message may appear with a variety of text replacing *method details*. The text varies according to the method of output that you chose in the Epson Configuration dialog box and the exact problem. This text should help you diagnose the problem. If you have difficulty understanding any message, report the exact message to your support organization.

**Note:** The above message may appear when using the Epson 7000 if both the parallel port and the USB port are connected to the printer at the same time. In this case, the parallel port is disabled by the USB port. To enable the use of the parallel port, unplug the USB connection at the printer. The printer will immediately process any page buffers.

Data printing through other interface  
 Cover open  
 Paper lever released  
 Paper jam  
 Ink out  
 Wrong paper or Paper type select not complete  
 Paper size /type check error  
 Problem with paper output  
 Waiting for user to press pause button  
 Initializing  
 Reload paper  
 Paper not straight  
 Paper not cut  
 Push lever down  
 Remove paper

These messages are relayed directly from the printer and should also appear in the control panel of your printer. See the manual for your printer for details on how to respond to these error messages.

#### Unknown error (7) reported by printer

This message appears if the RIP is unable to recognize the error reported by the printer. A brief error message may appear in the Output Controller/Monitor dialog box, which may help you diagnose the problem.

#### ***Pauses during output***

When printing wide images on the Epson 7000/7500 and the Epson 9000/9500, the print head may remain stationary for as long as ten seconds when operating with **Quality** set to **Enhanced Microweave**. This behaviour is normal.

#### ***Printer ejects paper before completing a page***

This behaviour is normal after the RIP has detected an error and displayed a warning message.

Otherwise, this behaviour is rare but may occur when using a Microsoft Windows platform and a parallel port to drive the printer. It may be due to the mode set for the parallel port, the printer cable, or some interaction between these items. Reset the printer before retrying the same page. If the problem persists, check the mode set for the port in the computer's BIOS: do not use EPP mode, particularly if you have a RIP security dongle attached to the same port. If the port is also in use for a dongle, move the printer to another parallel port. Finally, try a new bidirectional parallel printer cable.

#### ***Poor or erratic image quality***

Try to localize the problem. If there are any error or warning messages look at their causes and try the associated cures. If there are no messages, start by printing any test pages available on the printer itself, perhaps from a test or diagnostic menu. If the problem is not present in any of these tests, there is likely to be some problem or inappropriate setting in the page setup.

**No output**

Make sure that you are sending output to a printer that is properly connected, powered up, supplied with ink and media, and ready to receive data. Confirm that the printer itself is working by printing a test page, alignment test, or similar printer-based function.

**Output appears clipped**

When printing using large paper sizes or high resolutions a VM Error may occur. 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. If this occurs we recommend that you increase the Band size in the Configure RIP options dialog box to 1024 KB.

**PhotoInk colour management fails to preserve 100% process black**

When using a PhotoInk device type, the **Preserve 100% process black** colour setup option may not be honored. To prevent black from being colour managed in this instance, you should add a page feature to your page setup, which runs the following PostScript:

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

If necessary, refer to the *Torrent User's Guide* for details on creating and using page features.

**9.3 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 “Output file naming” on page 21). Suggestions are given to prevent these errors.

**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 “Examples of tag usage” on page 23.

**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 “Examples of tag usage” on page 23 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. If using the `<dot>` tag in conjunction with the `<unix>` tag this error would be generated. To prevent this error create a template such as `<unix><jobname>.epf` rather than using the `<dot>` tag.

**Full pathname too long for target platform**

This message appears when the full pathname (combination of the file path and the file name) is too long for the target platform. For example, in Windows operating systems the full pathname must not exceed 259 characters. To prevent this error, examine the number of characters in the **Browse folders** file path (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 **Browse Folders** text box within the Epson 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 delimiters.

#### 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, then 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>epf`, this error would occur once the file names `stem1.epf` through `stem9.epf` had been generated, because no further unique numbers are available.

## 9.4 Installing Macintosh software to support USB to USB connection

When installing Macintosh software to connect the USB port of a Macintosh computer to the USB port of an output device, your Macintosh computer may display a system error caused by an extensions conflict. Upon rebooting, you may be prompted to reboot with the extensions disabled (by holding down the shift key when rebooting). If this does not work you need to reboot using your System Disk.

Once you have successfully rebooted, open the **Extensions Manager** using the **Control Panel** option in the Apple menu and disable the files causing the conflict. The files causing the conflict are most likely to be **EPSON FWPrintExpert**, **EPSON FWPrintFamily**, and **EPSON FWPrintDriver**. You can disable these files by clicking on the corresponding check box so that the cross disappears.

## 9.5 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/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.)

#### Windows 2000/XP

Under Windows 2000/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 “bidirectional”, “compatible”, “unidirectional”, or “output only”. Do not choose any option where the description includes the words ECP or EPP.

**Note:** The WarpPCI card has been tested and its compatibility with the RIP is confirmed. In some cases this card may increase parallel port performance.

### 9.6 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

Alternatively, this number is also printed on the label of the external security device (dongle), but there are several numbers on this label. The serial number you require is the one listed after the word *Security*.

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 NT, 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 <b>Passwords</b> folder, which is a subfolder of the <b>sw</b> folder. See the <i>Torrent User's Guide</i> for further details.   |
| Password      | Use the <b>File &gt; Configure RIP</b> menu option to display the Configure RIP dialog box. Click the <b>Extras</b> button 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 <b>Add</b> to display the Enable Feature dialog box. Enter the password given to you by your supplier, and click <b>OK</b> . |

## 9.7 Using Chain screening

You may see patterning if you use Chain screening. To optimize output you should use specific settings in conjunction with Chain screening. The settings you should use are described in the procedure below:

1. Open the Separations Manager dialog box, using the menu option **Colour > Separations Manager**.
2. Click **New** if you wish to create a Separations style that uses Chain Screening or select the style which uses Chain Screening that you wish to **Edit**.
3. Check that **chain** is selected from the **Dot shape** menu.
4. Ensure that **Override angles in job** is not selected. Do not adjust the angles as the RIP will now use an optimum set of angles.
5. Ensure that **Override dot shape in job** and **Override frequency in job** are both selected.
6. Set the screen frequency to 80 lpi by changing the values in **Edit selected row**.
7. Ensure that **Use Harlequin Precision Screening** is not selected.
8. Set the remaining settings as desired.

To further improve output you should use colour management. See Section 12.8 below.

## 9.8 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 15. If the media or screening type that you wish to use is not supported by the supplied profiles, then 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.

## 9.9 Sending files to a printer using Windows printer drivers

You can send output to a printer using a networked PC acting as a print server, by creating an output file in the RIP and then sending this file to a PC print server. This method allows the use of Windows print spooling and transfers all control of the printer to the print server.

For the RIP running on a PC, you can enter the name of the print server and printer in the Epson Configuration dialog box when sending output to file.

For the RIP running on a Macintosh computer, you can send files by copying the file to a PC and then dragging it to the printer.

**Note:** You cannot send output files to a printer directly connected to a Macintosh computer. This is because Macintosh computers do not send printer files directly to a printer. Instead, Macintosh computers use an application associated with each file type.

### 9.9.1 Installing the Windows shared printer

You or your system administrator must install the appropriate Windows printer on the print server. For example, on Windows NT use **Start > Settings > Printers** and open the **Add Printer** icon. For details, see the description of the NT Print input method in the *Torrent User's Guide*.

The important points are:

- Choose the correct printer manufacturer and model. If the printer model is not listed, you may need to click **Have Disk** and provide a disk or CD-ROM supplied by the printer manufacturer.
- Make the printer shared and choose an appropriate **Share Name**.
- Make a note of the share name of the printer for use in the following RIP procedure.

### 9.9.2 Using the shared printer from the RIP

Once you have produced a shared printer:

1. In the RIP, edit the page setup you wish to use and open the Epson Configuration dialog box.
2. Choose **File** from the **Output method** menu.
3. Enter the name of the PC acting as the print server in the **File Output: Browse Folders** text box. For example, `\\PCPrintserver`.
4. Enter the share name of the printer in the **File Output: Browse files** text box. For example, `stylus7000`.
5. Set remaining options in the Epson Configuration dialog box and Page Setup dialog box as required and print a file using this page setup.

The RIP does not report the progress of the job; the print server provides this information.

## 10. Related documentation

For more details about the printer you are using, see the manufacturer's documentation supplied with the printer or the relevant product support section of the manufacturer's web site.

For more information about the RIP, see the *Torrent User's Guide*.

For more information about HCPS, see the *Harlequin Colour Production Solutions User's Guide*.

For more information about Torrent ColorPro, see the *Torrent ColorPro User's Guide*.