SCREEN

Creating a Future in Print

HQ-PC RIP Version 8.0

Software RIP

HQ-PC RIP

The RIP'ing solution that saves you time, money, and energy, while giving you outstanding quality

Screen's latest HQ-PC RIP, based on the powerful Harlequin Rip Scriptworks interpreter, enables your output devices to achieve the highest possible level of image quality. It features all the advances of PostScript 3, as well as the speed, reliability, and quality required to match the performance of Screen's fastest recorders, including the advanced PlateRite series of platesetters and the acclaimed Tanto and Katana imagesetters.

RIP'ing Solution

Choose your system

The HQ-PC RIP is supported by a wide range of flexible options that can be used with the RIP to make a system that suits the work you do and the way you do it. Several options enhance the RIP's functionality, including specialized color management, screening, trapping, and TIFF/IT-P1 input and output. Post-RIP imposition and in-RIP OPI are also possible. Purchase only the options you need, when you need them.

Choose your platform

Version 8.0 of the HQ-PC RIP is available for Windows systems. It is compatible with Windows 2003 and Windows XP.

This version boasts several new features, including:

- A new "PDF_fixed_background" page feature speeds up PDF processing by RIPping a background that is used repeatedly in the same document only once. This page feature improves performance by decreasing processing time.

- A new multi-threaded rendering feature enables the RIP to take advantage of hyperthreading and multi-core CPU architectures, as well as multiple processors, which improve RIP performance.

- Support for JDF Enabler. The Job Definition Format or JDF is an XML-based file format that is becoming the industry standard for the definition of job tickets in pre-press workflows. Its main purpose is to facilitate the exchange of information between printing applications and systems. JDF Enabler supports FlatWorker (can use only 1-byte character file name), Dynagram Dynastrip, Kodak (formerly Creo) Preps, Lithotechnics Metrix, Esko-Graphics Plato, and Mitsubishi Paper Mills Facilis.

- Improved color management in the RIP. The new color management engine provides improved functionality, including installing and processing ICC profiles instead of converting the profiles to PostScript, providing new color management operators to give better color control, and treating text as an object that can be tagged with its own rendering intent.

- Support for PDF/X-4, PDF 1.7, and HD Photo file types.

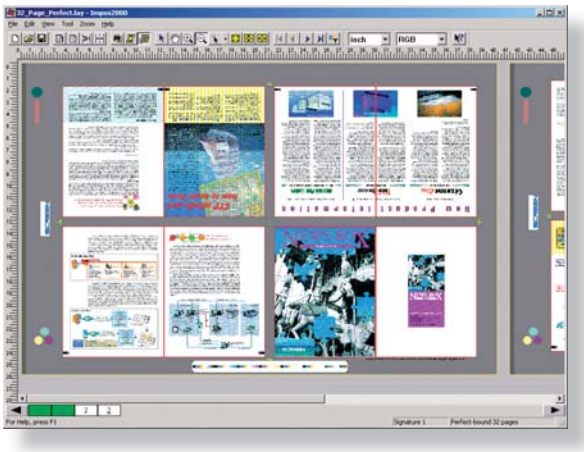
- Support for XPS Input. The HQ RIP processes XPS 1.0 documents and uses the RIP display list and rendering systems. XPS documents support ColorPro, TrapPro, etc. XPS supports several image file formats: TIFF 6.0, JPEG, PNG, and HD Photo.

- Support for the new PANTONE GOE color system, which includes more colors than the previous system.

- New Enfocus PitStop 4.0 lib/v7 preflight profiles. These preflight profiles include:
  - B&W v3.0
  - B&W + Spot v3.0
  - CMYK v3.0
  - CMYK + 1 Spot v3.0
  - Generic Office v3.0
  - Generic Press v3.0
  - PDF to Web v3.0
  - PDF/X-1a:2001 v5.0
  - PDF/X-1a:2001 v5.0 Verify
  - PDF/X-3:2002 v5.0
  - PDF/X-3:2002 v5.0 Verify
  - Soft Proof v3.0
  - PDF/X-1a:2003 v5.0
  - PDF/X-1a:2003 v5.0 Verify
  - PDF/X-3:2003 v5.0
  - PDF/X-3:2003 v5.0 Verify

  NOTE: The 2003 PDF/X profiles are new.

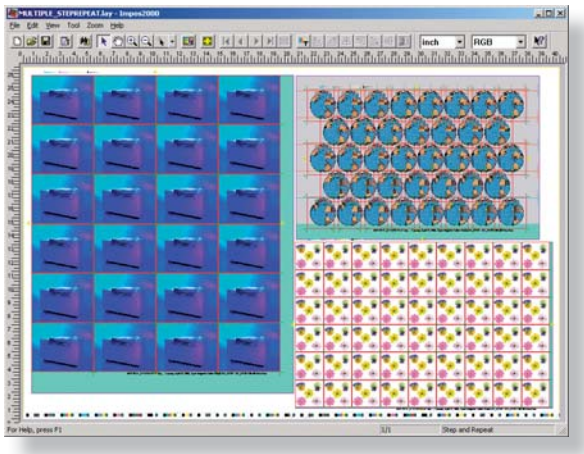
HQ RIP Components



impos2000 1-bit TIFF imposition continued

The impos2000 Client software has the following new features that allow users to:

- Automatically match back signatures to front signatures in Jumble mode.
- Divide perfect bound signatures into two partitions with different signature text and collation marks.
- Back up and restore images.
- Output a ".ply" file for completed flats, while excluding incomplete flats.
- Duplicate an image group in Jumble mode while preserving the images' relative positions.
- Move image groups in Jumble mode.
- Eliminate accidental image movement in Jumble mode with the "Move Modifier" feature.
- Center multiple images in Jumble mode using a bounding box.
- Measure the distance between an image control point and another defined reference point in Jumble mode.
- Place images according to exact measurements in Jumble mode.
- Display the image file name, size, and location in Jumble mode using the "Template Attributes" mode.
- Use the improved and expanded Jumble mode invisible grid.
- Define the matrix of a package imposition in Jumble mode.
- Fold more than two pages together into one unit, then stack many units together, using the perfect bound method. This binding method is called "Wrap2."
- Compensate for creep in Saddlestitch mode.
- Define sheet margins in relation to plate size.
- Define the starting signature number.
- Define page numbers in "Book" mode using the "Custom Page Number" feature.
- Group pages using the "Add Page Group" toolbar icon.
- Align images using the "Double-Burn" feature.
- Define custom mark status on selected signatures.
- Show a mirror collation mark on the back signature.
- Create check box custom marks.
- Create cross custom marks.
- Undo the last action performed.



PixelStream workflow (option)

The PixelStream Workflow Solution is a powerful and reliable system that combines all the elements of the digital prepress workflow into a single economical solution. It has everything required for trapping, imaging, rendering, imposing, and creating film or plates. Users can build up to this full workflow solution gradually by adding the desired optional modules.

The optional modules are:

- impos2000 imposition software
- TrapPro in-RIP trapping software
- in-RIP OPI image replacement software
- RIPnspector PostScript analyzer
- DCS 2.0 plug-in software that creates DCS 2.0 files for use with halftone proofing devices in the output of color-accurate halftone proofs
- InkProof software that generates CIP3 Print Production Format (PPF) files
- Contone TIFF, which produces TIFF images that can be used in proofs (LabProof) or to "pass through" to other systems. The impos2000 Server is used to create the final Contone TIFF image, but output is performed on another system.
- Contone PDF
- Contone PS
- TIFF/IT-P1 Input
- SPEKTA2 Screening (2400/350/650)
- SPEKTA 2400 Screening (2400/300/400)
- SPEKTA 1200 Screening for Newspaper Market (1200/150/151/200/201)
- Harlequin Dispersed Screening (HDS)
- Harlequin Chain Screening (HCS)
- Harlequin Micro Screening (HMS)
- AlphaLogic Screening (ALS)
- CRS Screening
- ColorPro
- impos2000/TIFF Low-Res Proof

PixelStream also is bundled with several imposition proofing plug-ins at no extra charge:

- A 1-bit TIFF output plug-in produces TIFF images from the impos2000 Server.
- RTL, EP2, and GARO plug-ins output high-quality proofs to HP, Epson, and Canon inkjet devices. These plug-ins can be used to descreen, where the plug-ins are responsible for retargeting screening by converting the high-resolution rastered data from the RIP to the native file format of the target plotter. The plug-ins create the descreened files to be sent to a directly connected plotter for printing. The EP2 plug-in can convert all of your image channels (CMYK and spot colors) to a single black channel.

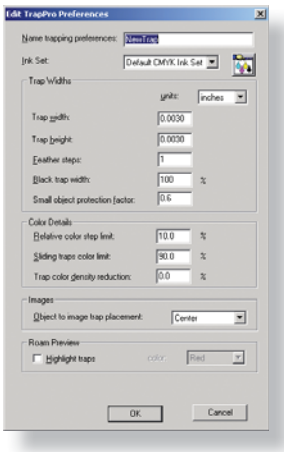
HQ RIP Components

HQ-PC RIP

The HQ RIP uses the Harlequin™ ScriptWorks interpreter, which over the years has proven to be the fastest, most configurable RIP on the market. The HQ-PC RIP is a high-performance PostScript-language-compatible raster image processor. It has a graphical user interface that is easy to use and it supports a wide variety of fonts and input formats. File formats include PostScript, EPS, HD Photo, XPS 1.0, TIFF 6.0, TIFF/IT-P1, JFIF, GIF, and JPEG. The HQ-PC v8.0 RIP also supports Portable Document Format (PDF) 1.7 or earlier files, without first converting them to PostScript. It supports PDF 1.7 features, such as transparency, JBIG2, 128-bit encryption, and referenced PDF. It supports PDF/X-1a, PDF/X-3, and PDF/X-4, which permit a single file to be distributed to one or more locations as color-managed or CMYK data ready for final print.

TrapPro (option)

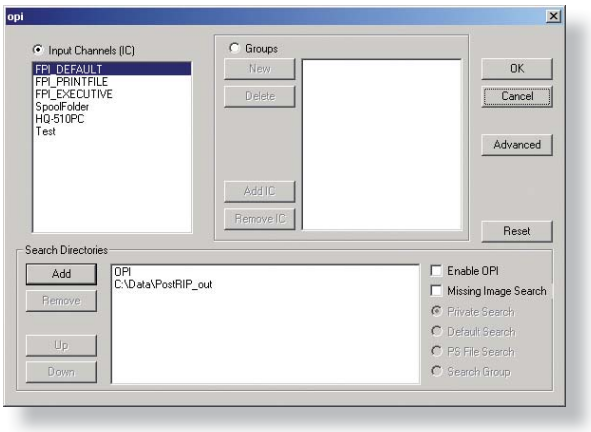
TrapPro is a trapping engine that includes the features top printers and publishers demanded, providing an improved feature set over previous trapping modules.



TrapPro is designed to trap jobs automatically. It provides in-RIP trapping that can be easily set up to accommodate different types of jobs or customers. Trap settings can be saved to reduce system time, improving both quality and trapped output.

in-RIP OPI (option)

With in-RIP OPI, desktop page layout applications can use low-resolution images, later replaced by the high-resolution images before RIP'ing.

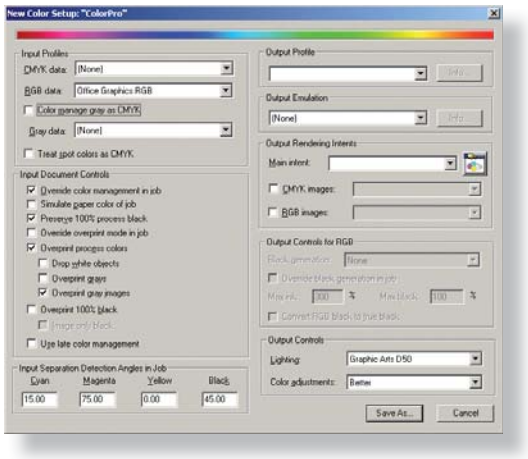


RIPnspector (option)

The RIPnspector software analyzes PostScript and PDF files, then reports all spot colors used in a job and checks for missing fonts and images, images below 150 dpi after OPI (if OPI has occurred), and RGB text or images in a CMYK color space.

ColorPro (option)

ColorPro is a full-feature color solution for the HQ RIP that ensures color quality and accuracy for proofing and emulation. ColorPro provides the largest realizable color gamuts for the final print market, and allows greater accuracy than would be possible using standard profiles.



ProofReady (option)

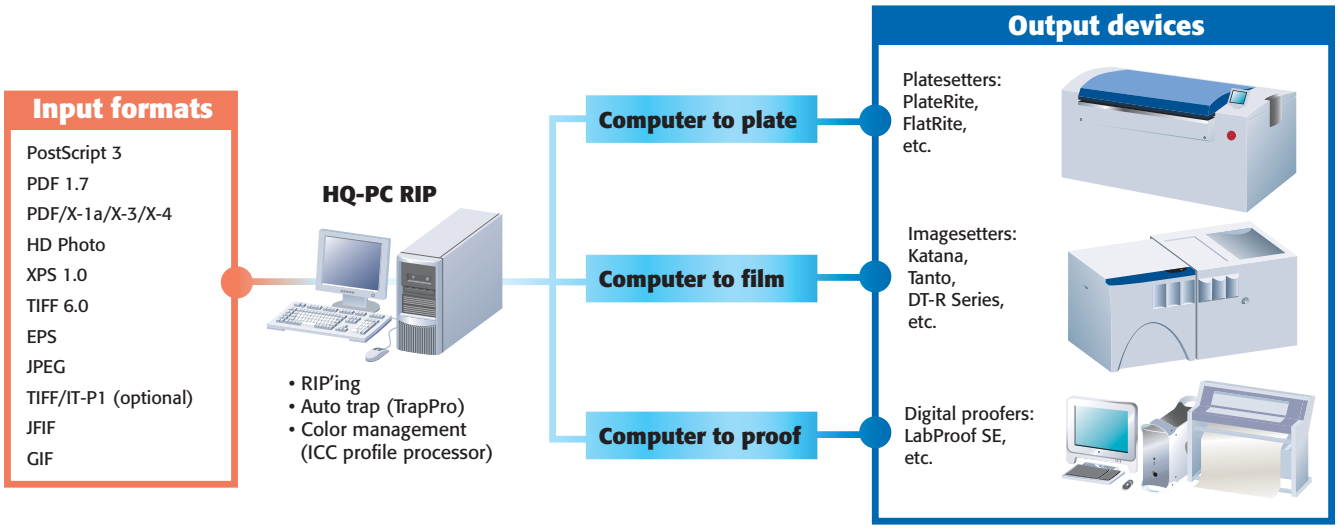
ProofReady plug-ins are provided with pre-configured color setups and calibration sets that enable instant color management. ProofReady is available for HP and Epson Variable Size Droplet (VSD) printers. SetGold, a separate utility for use with ProofReady, is also included with the ProofReady software. The SetGold software is used to create Golden State profiles.

TIFF/IT-P1 Input/Output (option)

The TIFF/IT-P1 input option makes it possible to input TIFF/IT-P1 jobs from high-end color electronic prepress systems (CEPS), with concurrent processing of the image (CT) and text/line art (LW) portions of these files. The output option can output PostScript or PDF files as TIFF/IT-P1.

CIP3 PPF (option)

The CIP3 PPF option increases efficiency by improving communications between prepress, press, and post-press using CIP3 Print Production Format (PPF) files. PPF files contain data acquired during the prepress stage of a print job that is used at the press stage to adjust ink keys more accurately.



SPEKTA, SPEKTA 1200, and SPEKTA2 Screening (option)

SPEKTA, SPEKTA 1200, and SPEKTA2 are halftone screening that incorporate AM/FM hybrid screening technology. This technology enables the strengths of both AM and FM screening methods to be implemented and combined for output on Screen's PlateRite series platesetters. Not only does SPEKTA/SPEKTA2 overcome moiré and broken lines, it also delivers print quality and detail comparable to that afforded by screen rulings of 300 lpi or greater.

Niagara Extra screening (option)

Niagara screening are specially designed for use with the PlateRite Niagara CTP and are divided into two groups: Standard and Extra. The standard screening are provided at no cost. The end-user may purchase Niagara Extra for additional screening that cover a variety of printing needs.

AlphaLogic Screening (option)

AlphaLogic Screening uses a halftoning algorithm to generate high-quality halftone screen output.

CRS Screening (option)

CRS produces screening without any banding.

Harlequin Chain Screening (HCS) (option)

Harlequin Chain Screening uses an elliptical dot shape to produce chain-like structures that are ideal for generating smooth flat tints and vignettes, even with comparatively low screen rulings.

Harlequin Dispersed Screening (HDS) (option)

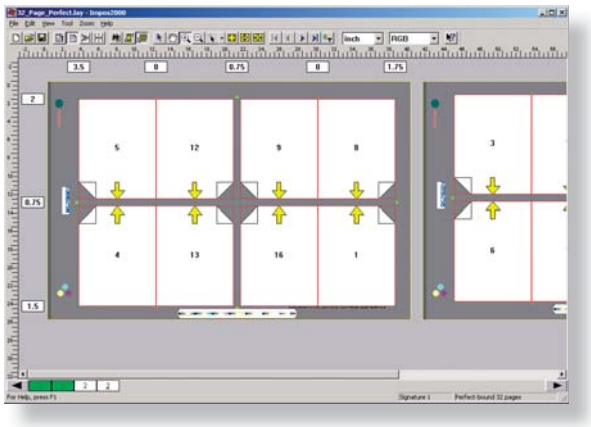
Harlequin Dispersed Screening is an FM or stochastic screening method known for its advantages in producing fine detail and eliminating the sources of moiré.

Harlequin Micro Screening (HMS) (option)

Harlequin Micro Screening is a screening method that uses a Respi screen structure to allow greater highlight gradation, even at high screen rulings.

impos2000 1-bit TIFF imposition (option)

impos2000 is a comprehensive, easy-to-use imposition software program that can be used for high-volume book work (sheet-wise imposition), step and repeat work, film optimization, and specialized color work. Throughout the various imposition steps, the user can view a color image of each page. This allows fast placement and easy visual verification of each signature.



impos2000 allows all film, plate, cutting, folding, and stacking marks to be displayed. Custom marks can be centered along the edges of the signature or plate (Top-Center, Right-Center, Bottom-Center, and Left-Center), as well as at the corners and center of the signature or plate. impos2000 also enables single- and multi-page corrections to be made without reRIP'ing the whole job.

A rotation feature in the Client makes it easy to save film by rotating RIP'ed pages 90, 180, or 270 degrees to fit the maximum number of pages possible on the flat. A 90-degree rotation feature in the Server enables users to rotate flats 90 degrees counterclockwise (270 degrees) to match the output direction of the output device.

HQ-PC RIP Specifications

Compatible Fonts	Type 0 (composite), Type 1, Compact Font Format (CFF/Type 2), Type 3, Type 4, Multiple Master, Type 32, Type 42, CID, TrueType
Input Languages	PostScript Language Levels 1, 2, and 3; PDF (up to v1.7, PDF/X); XPS; TIFF 6.0; TIFF/IT-P1 (optional); HD Photo; EPS; JPEG; JFIF; and GIF
Screening Methods	Harlequin Precision Screening™; Harlequin Dispersed Screening™ (optional); Harlequin Chain Screening™ (optional); Harlequin Micro Screening™ (optional); AlphaLogic Screening (optional); CRS (optional); SPEKTA, SPEKTA2, and SPEKTA 1200 (optional); and Niagara and Niagara Extra screening (optional)
Other Software Options	TrapPro, ColorPro, impos2000, CIP3 plug-in for PPF output, ProofReady, TIFF/IT-P1 input plug-in, TIFF/IT-P1 output plug-in, RIPnspector, in-RIP OPI, InkProof, DCS 2.0, Contone TIFF, Media Saving

Hardware Specifications

HQ-PC RIP	Pentium III, IV, or higher Windows Server 2003 with Service Pack 2 and Windows XP with Service Pack 2 Memory: 1 GB Disk drive: 74 GB or more Output interfaces: Fast PIF, SCSI

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• This brochure was made using SPEKTA 2 screening.

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