# HQ RIP components
Continued

impos2000–PC 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.
- Create thumbnails for images with less than four separations automatically, when polling.
- Automate image nesting in Step & Repeat and Multiple Step & Repeat modes for some types of packaging.
- Add a barcode custom mark to signatures.
- Rotate collation and custom image marks.
- Add single-line crop marks to signatures.
- Arrange images in Jumble mode using six new automatic alignment toolbar buttons.
- Regenerate RGB thumbnails using a new toolbar button.
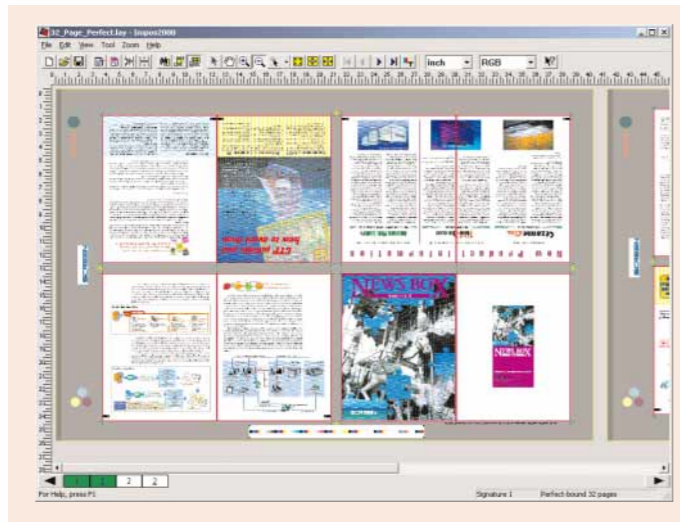
The impos2000 Server software has the following new features:

- A new proofing plug-in enables you to use Canon printers.
- The EP2 (Epson), RTL (HP), and new GARO (Canon) plug-ins now support Error Diffusion Screening (EDS), for higher quality output.
- The EP2 plug-in can convert all image channels (CMYK and spot colors) to a single black channel.

PixelStream–PC 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.
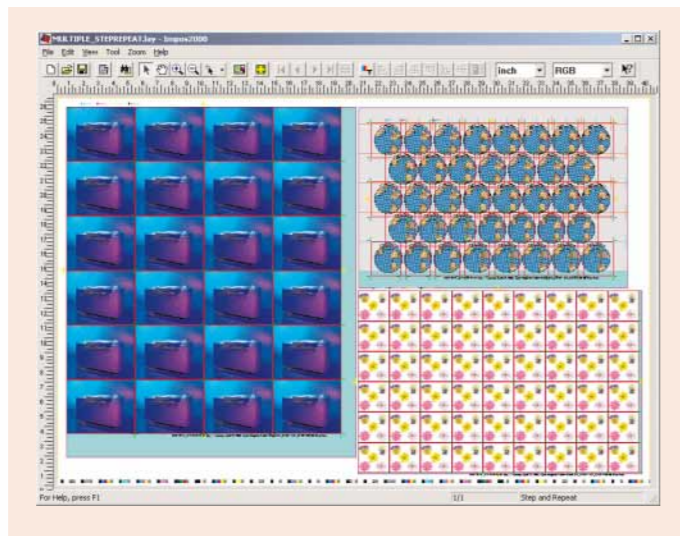
The optional modules are:

- impos2000 imposition software.
- TrapPro or TrapProLite 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.

PixelStream also includes several imposition proofing plug-ins for 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.

Specifications

Software Specifications

HQ-510 RIP	
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 Level 3/Levels 1 and 2, PDF (up to v1.4, PDF/X), TIFF 6.0, TIFF/IT-P1 (optional), EPS, JPEG, JFIF, GIF
Screening Methods	Harlequin Precision Screening™, Harlequin Dispersed Screening™ (optional), Harlequin Chain Screening™ (optional), Harlequin Micro Screening™ (optional), Error Diffusion Screening (EDS), 2-bit screening, AlphaLogic Screening (optional), CRS (optional), and SPEKTA (optional)
Other Software Options	TrapPro, TrapProLite, 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-510PM	Power Macintosh G3/G4 OS 9.x, OS X Memory: 512 MB (recommended) Hard disk: 8 GB or more Output interfaces: PIF, Fast PIF, SCSI
HQ-510PC	Pentium III, IV Windows 2000 Server with Service Pack 2, Windows XP Memory: 512 MB (recommended) Hard disk: 8 GB or more Output interfaces: PIF, Fast PIF, SCSI

SCREEN
MEDIA TECHNOLOGY

HQ-510 RIP Version 6.0
Software RIP

WORKFLOW

Innovation & Reliability

• *Trademarks and registered trademarks used herein are the property of their respective owners.*

• This brochure was made using SPEKTA screening.
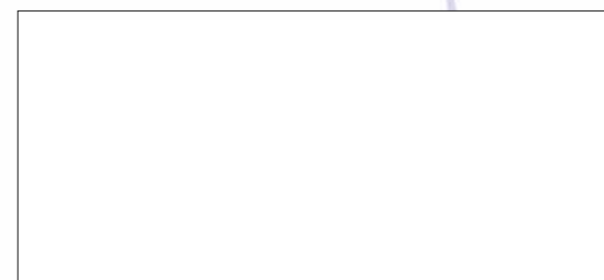
We reserve the right to alter product design and specifications without prior notice.

HQ-510 RIP

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

SCREEN'S LATEST HQ-510 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-510 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 6.0 of the HQ-510 RIP can operate on Windows or Power Macintosh systems. It is compatible with Windows 2000, Windows XP, Mac OS 9.x, and Mac OS X.

This version boasts several new features, including:
• The new TrapPro and TrapProLite trapping solutions, which replace TrapWorks.
• The new ColorPro comprehensive color management system, which replaces the HIPP, HCMS, HFCS, and HCPS HQ RIP color solutions.
• PDF 1.4 support.
• PDF/X-1a and PDF/X-3:2002 support.
• New HEDS1 and HEDS2 plug-ins.
• USB dongle support.

Features include:
• Input formats: PostScript Levels 1 to 3, PDF up to 1.4, PDF/X-1a, PDF/X-3:2002, EPS, TIFF 6.0, JPEG, JFIF, GIF, and TIFF/IT-P1. Option available to output PostScript and PDF files as TIFF/IT-P1.
• Screening: Equipped with Harlequin Precision Screening (HPS), which delivers smooth gradations and a remarkable level of fine detail. Optional SPEKTA, CRS, AlphaLogic Screening, Harlequin Chain Screening, Harlequin Dispersed Screening, and Harlequin Micro Screening available.
• ICC profile support: Automatic use of ICC profiles embedded in EPS or PostScript files makes reliable, consistent color reproduction easier.

• /DeviceN(HiFi) color: Allows up to 255 separations and almost any number of colors to be processed and printed correctly from virtually any color system.
• PostScript 3 Idiom Recognition: Allows automatic detection and correction, within PostScript 3 specifications, of any PostScript file with code from a previous PostScript level.
• PDF support: Accepts up to PDF 1.4, PDF/X-1a, and PDF/X-3:2002 as native input. The RIP supports PDF 1.4 features, such as transparency, 128-bit encryption, and referenced PDF.
• Image interpolation: Reduces the resolution of an image to match a lower resolution output device, or increases the resolution to match a higher resolution device.
• Enhanced CID stub font support: Stub fonts are created for all valid CIDFont and CMap combinations at startup, during installation using the RIP "Fonts" menu, or when rebooting after installing a font with an AppleTalk installer. Stub fonts provide backward compatibility for applications that are not aware of CID fonts.
• Enhanced Calibration module: Applies calibration to a calibration set that contains dot gain data in some, but not all, channels.

HQ RIP components
The RIP'ing solution

HQ-510PC 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-510PC 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, TIFF, JFIF, and JPEG. The HQ-510 v6.0 RIP also supports Portable Document Format (PDF)1.4 or earlier files, without first converting them to PostScript. It supports PDF 1.4 features, such as transparency, JBIG2, 128-bit encryption, and referenced PDF. It supports PDF/X-1a and PDF/X-3:2002, which permit a single file to be distributed to one or more locations as color-managed or CMYK data ready for final print.
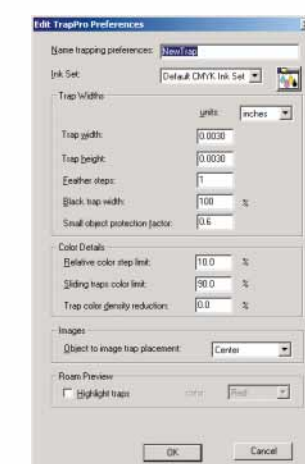
TrapPro and TrapProLite (options)

TrapWorks, the previous in-RIP trapping solution, has been replaced by two new trapping options: TrapPro and TrapProLite. TrapProLite is a direct replacement for TrapWorks. If you previously purchased TrapWorks, your TrapWorks key can enable TrapProLite. Although your TrapWorks key can enable this software, TrapProLite has some new and improved features over TrapWorks.

TrapPro is a new trapping engine that adds the features top printers and publishers demanded, providing an improved feature set over TrapWorks.

Both TrapPro and TrapProLite are designed to trap jobs automatically. Both provide 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.
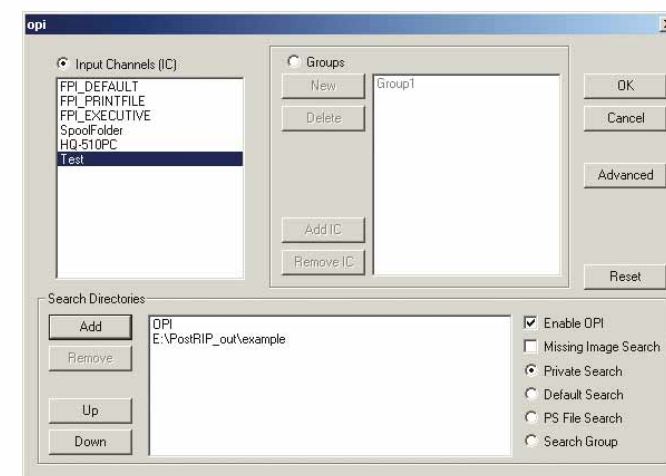
RIPnspector (option)

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. ColorPro is a direct replacement for previous HQ RIP color management systems, such as HIPP, HCMS, and HFCS.
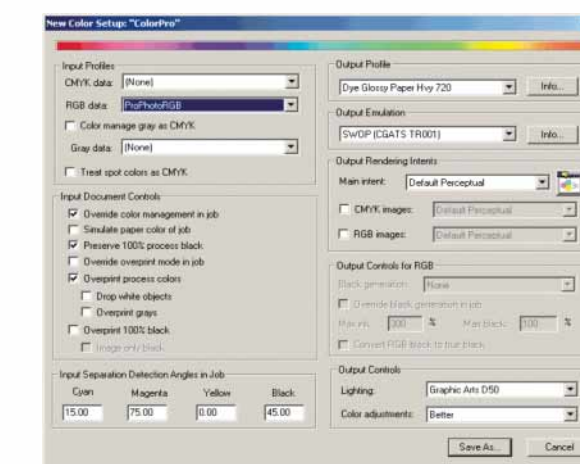
ProofReady (option)

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 printers, including Epson Variable Size Droplet (VSD) printers. SetGold, a separate utility for use with ProofReady on the PC only, is also included with the ProofReady software. The SetGold software is used to create Golden State profiles.
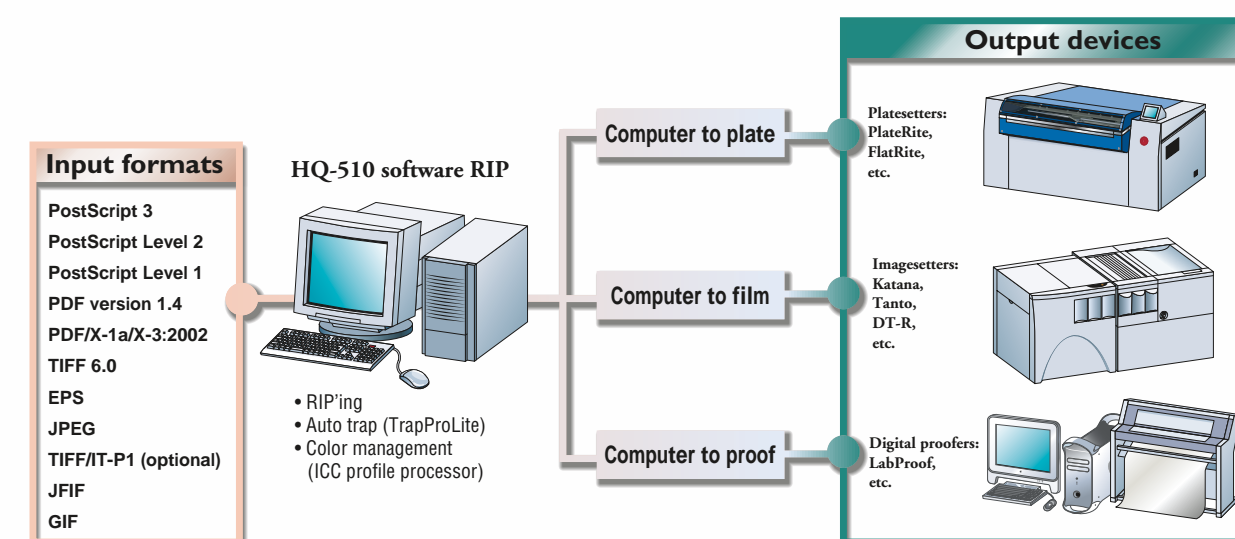
TIFF/IT-P1 Input/Output (options)

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.

HQ RIP components
Continued

Input formats

PostScript 3
PostScript Level 2
PostScript Level 1
PDF version 1.4
PDF/X-1a/X-3:2002
TIFF 6.0
EPS
JPEG
TIFF/IT-P1 (optional)
JFIF
GIF

HQ-510 software RIP

• RIP'ing
• Auto trap (TrapProLite)
• Color management
  (ICC profile processor)

Computer to plate

Computer to film

Computer to proof

Output devices

Platesetters:
PlateRite,
FlatRite,
etc.

Imagesetters:
Katana,
Tanto,
DT-R,
etc.

Digital proofers:
LabProof,
etc.

SPEKTA Screening (option)

SPEKTA is an AM/FM hybrid screening technology. It 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 overcome moiré and broken lines, it also delivers print quality and detail comparable to that afforded by screen rulings of 300 lpi or greater.

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—PC 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.
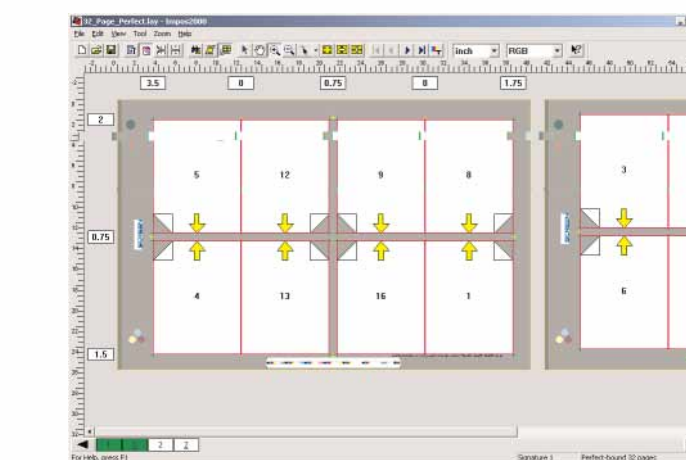
impos2000 allows all film, plate, cutting, folding, and stacking marks to be displayed. Custom marks can be centered along the edges of the signature or plate (Top-Center, Right-Center, Bottom-Center, and Left-Center), as well as at the corners and center of the signature or plate. impos2000 also enables 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.