



Spectrum ^{XF}

The extra fast, built-to-last, performance-without-compromise scanner.

Extra Speed + New Camera + Onboard VRS 4.0 Plus = Performance without Compromise With scanning speeds up to 140 pages per minute, the new best-of-breed SharpShooter™ TriLinear CCD Camera, and Onboard VirtualReScan® (VRS) technology, Spectrum XF offers the best combination of features you'll find in a production scanner. Spectrum XF provides all of the extra benefits you want – extra throughput, extra efficiency, extra OCR, ICR and Barcode recognition – without the extra cost.

extra fast
10-30% faster
color, bitonal, grayscale
up to 140 ppm

built-to-last
exceptional durability
60,000 documents/day
600,000 scans/roller

peak-performance
best-of-breed camera
Onboard VRS 4.0 Plus
maximum OCR accuracy



**Ultrasonic Multifeed Detection & Ignore by Size:
Never Miss a Doublefeed**

Simply the best way to prevent multifeds and resolve them immediately should they occur. This innovation also allows documents with photographs, labels, taped receipts, and even envelopes, to be scanned automatically – without stopping, requiring user-intervention or having to manually turn sensors on and off.

**Prompt Resolution: Resolve Problems
without Rescanning or Restarting**

Prompt Resolution notifies the user of any jam, misfeed or paper handling issue, automatically deleting any bad images. Users then continue scanning where they left off – without having to rescan the entire batch.

Only Spectrum XF combines the benefits of color scanning with the efficiencies of bitonal scanning onboard the scanner so users can maximize speed, productivity, and image quality while minimizing file sizes, consumables and service costs. Like all B \ddot{o} we Bell + Howell scanners, Spectrum XF offers users robust scanning capabilities while delivering huge savings in time, money and maintenance over the life of the scanner.

Spectrum XF and B \ddot{o} we Bell + Howell. Always adding value.

SHARP SHOOTER Best-of-Breed CCD Camera Technology: Sharper Images at Top Speeds

Spectrum XF proves that going faster doesn't mean you have to sacrifice image quality. The state-of-the-art TriLinear camera design ensures images at a finer level of detail in bitonal and grayscale, and in more vivid color.

- Unmatched power and speed:**
- 600 dpi optical capture
 - 40 megapixel-per-second throughput
 - 22,500 total pixel capture
 - 7,500 pixel capture per line

Better image quality also means higher accuracy for OCR, ICR and barcode recognition, a terrific advancement for forms processing applications.

Extra Advantages: Faster In Every Setting

Whatever your business or application, Spectrum XF will get you there... faster. With Spectrum XF, you can now take advantage of speeds up to 140 ppm (pages per minute). How much faster is this over previous models?

- For capture users:**
- 13-30% faster in color at 200 dpi
 - 10-17% faster in bitonal at 200 dpi

- For forms processing users:**
- 12-15% faster in bitonal at 300 dpi

By any measure and at any setting, Spectrum XF is up to 20% faster than other scanners in its class.

Negative Inversion: Versatile Scanning

Spectrum XF allows users to convert black to white and vice versa when scanning images printed on paper that has a black or near-black background – a great feature for scanning micro-film printouts.

VRS VirtualReScan INCLUDED Onboard VirtualReScan 4.0 Plus: Optimal Image Enhancement without the Speed Trade-Offs

Spectrum XF features Onboard VRS, which means that each model has a VRS board built-in. Simply put, an onboard implementation of VRS is the best way to take advantage of the image enhancement and prompt resolution functionality that VRS has to offer – without sacrificing scanning speed. It's like having a PC inside your scanner, helping to drive performance and processing time with optimal speed and efficiency.

Scanners utilizing software-based VRS often have to sacrifice a measure of speed to accommodate image enhancement capabilities, such as cropping, deskew and brightness. In addition, scanners that were built without VRS in mind may not achieve desired performance levels because connectivity between the scanner and VRS has not been optimized. Because B \ddot{o} we Bell + Howell was the first manufacturer to implement Onboard VRS as a standard feature over five years ago with the Copiscan 8000 Plus, no one has done it longer and no one does it better.

With Spectrum XF and Onboard VRS 4.0 Plus, you can have advanced speed and improved productivity at the same time, on one system – now that's performance without compromise.

Advanced Electronic Color Dropout: Exceptional Forms Processing

Spectrum XF allows users to drop out any color – not just to red, green, or blue, and up to 3 colors per side of a document – a great feature for users who want to drop out unnecessary color backgrounds altogether while capturing color information in the foreground of the image.

AUTO COLOR DETECT Onboard Auto Color Detect: Color When You Want It, Bitonal When You Don't

Even if only a few of your documents need to be scanned in color, the advantages of onboard ACD are unmistakable.

By correctly identifying color and bitonal documents automatically, the time needed for scanning can be reduced by up to 60% over other methods. ACD eliminates the manual processing steps needed to capture color content on competitive scanning systems because the pre-sorting of color documents and inserting of separator sheets with patch codes is not necessary. And with ACD performed onboard in Spectrum XF, you won't have to sacrifice scanner speed to utilize it, which would negate the very productivity gains yielded by ACD.

Onboard Background Saturation and Dropout: Reduce File Size

Color Background Saturation and Dropout saves up to 40% in file space when scanning in color by allowing users to saturate or "smooth" document image backgrounds into one uniform color. This functionality not only makes images easier to read but also presents another way to stretch storage capacity, preserve only "mission critical" information and control storage costs.

Section 508 Compliance: Scan without Limits

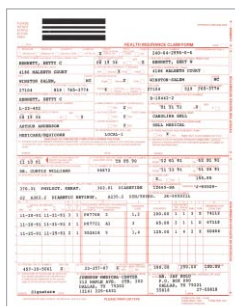
Spectrum XF meets the standards of Section 508 of the Rehabilitation Act, with features such as Audible Tone Assistance and a Braille quick reference guide for the visually impaired, and a TTY technical support line for the audibly impaired at 847.423.3032.

Advanced Forms Processing: Maximum OCR, ICR and Barcode Recognition

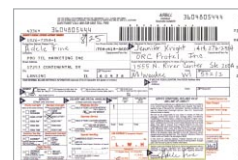
Spectrum XF delivers faster 300 dpi scanning speeds – up to 95 ppm landscape and 78 ppm portrait in bitonal mode – and combines them with dramatic advances in image quality to deliver superior optical character recognition (OCR), intelligent character recognition (ICR) and barcode recognition rates.

Spectrum XF also allows users to drop out any color – not just red, green or blue, and up to 3 colors per side of a document. Organizations can now design forms using any color, preserve the information they need, and save file size.

HCFA Form
Scan forms with patch codes



Airbill
Capture handwriting and barcodes with greater accuracy



Invoice
Record financial documents quickly and easily





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Model		8140D		8120D		8090D	
Scanning Speed Letter Size Landscape / Portrait	Binary at 200 dpi	Simplex 140 / 115 ppm Duplex 280 / 230 ipm		Simplex 120 / 100 ppm Duplex 240 / 200 ipm		Simplex 90 / 75 ppm Duplex 180 / 150 ipm	
	Color at 200 dpi	Simplex 140 / 115 ppm Duplex 230 / 230 ipm		Simplex 120 / 100 ppm Duplex 180 / 160 ipm		Simplex 90 / 75 ppm Duplex 140 / 120 ipm	
Resolution		Output: 100-400 dpi Optical: 600 dpi					
Output Options		Bitonal, Grayscale (8 bit) and Color (24 bit)					
Image Enhancement and Advanced Color Functionality		 Onboard VRS 4.0 Plus: Cropping, Deskew, Brightness and Contrast Control		 AUTO COLOR DETECT		Auto Color Detect, Color Background Saturation and Dropout, Small Color Object Detection, Advanced Electronic Color Dropout (on color models)	
Supported Drivers (Included)		ImageControls, ISIS, TWAIN					
Multifeed Detection		Ultrasonic Multifeed with Ignore by Size up to 10 in. (254 mm)					
Imprinting		Pre-Scan Standard		Pre-Scan Optional			
Document Size		2.6 x 2.6 in. (66 x 66 mm) to 11.7 x 40.0 in. (297 x 1,016 mm)					
Paper Thickness		0.0018 to 0.008 in. (0.046 to 0.20 mm)					
Paper Weight		9 to 110 lb bond (34 - 414 gsm)					
Interface		68 pin SCSI III					
Feeder Capacity		500-Sheet Mode, 100-Sheet Mode, Manual Mode					
Scanner Size (HxWxD)		18 x 22.75 x 27.5 in. (45.72 x 57.79 x 69.85 cm)					
Scanner Weight		103 lbs (46.7 kg)					
Power Consumption	Voltage	120 V	240 V	120 V	240 V	120 V	240 V
	Maximum (Scanning)	220 W	224 W	220 W	224 W	210 W	214 W
	Minimum (Idle)	150 W	153 W	150 W	153 W	150 W	153 W
Environment	Temperature	60°F to 100°F (16°C to 37°C)					
	Relative Humidity	10% to 80% non-condensing					
Sound Output (SPL ref 20 µPa)	200 dpi	55.0 dBA					
	400 dpi	56.9 dBA					
Additional Features		User Replaceable Skimmer and Separator Rollers (last up to 600,000 scans of bond paper, 250,000 NCR paper) User Replaceable Lamps (last up to 5,000 hours)					
Additional Contents		Power Cord, Camera Calibration Kit, SCSI III Card and Cable CD-ROM (Operator Manual in 7 Languages, User Utility Software), VRS CD Printed Documents (Operator Manual, Quick Installation Guide and Warranty Card)					
Additional Options		Custom Table 0123070 (not available in Europe); All-In-One Consumables Kit S006600 (US), S006800 (WW); Extended Exit Tray 0123024; Continuous Feeder Tray 0123025; Front Page Imprinter 0123018; Back Page Imprinter S003014					

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