Phaser®
4510
Letter-size
Black-and-white
Laser Printer

Xerox® Phaser® 4510
Laser Printer
Evaluator Guide

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About this Guide

This guide will introduce you to the Xerox Phaser 4510 laser printer and assist you in your evaluation process.

Section 1: Introducing the Xerox Phaser 4510 Laser Printer
Overview

The Phaser 4510 is a true office all-star, exceeding your highest expectations with unbeatable reliability, advanced intelligence features and exceptional value. With flexible configurations offering paper capacities from 700 to 1,800 pages, the Phaser 4510 is a great fit for busy workgroups small and large.

Total reliability, complete peace of mind

The Phaser 4510 is a workhorse office printer with rock-solid reliability.

- **200,000-page-per-month duty cycle** supports the heaviest office print volumes.

- **Engineered to keep performing,** with fewer moving parts to wear out and less consumables to replace.

- **Reliable Xerox paper pick-and-feed operation** virtually eliminates paper jams and keeps print jobs flowing smoothly.

- **Proven performance** backed by an industry-leading one-year on-site warranty and the unmatched Xerox Total Satisfaction Guarantee.

- **PhaserSMART®** automated troubleshooting saves you time by providing 24/7 access to the Xerox Knowledge Base system.

Uncommon intelligence, built right in

With advanced intelligence features, the Phaser 4510 printer works hard to enhance your productivity.

- **Print driver installs in 4 mouse-clicks;** networked models can be installed and configured over the web.

- **Get accurate toner-level readings** from the front panel, driver or via CentreWare® Internet Services.

- **PrintingScout™** tracks print jobs and provides onscreen print-issue alerts and immediate correction suggestions.

- **Smart trays** "know" the size and type of paper you've loaded, so your jobs automatically print on the intended media.

- **Smart duplexing** "knows" when a single-sided page is mixed in with two-sided print jobs and automatically passes through only the printed side, speeding up print times and eliminating unnecessary wear and tear.

A printer that earns its keep

The value-packed Phaser 4510 printer has it all: blazing print speed, outstanding print quality, and the power to keep up with your business-critical print load.

- **Get more for less.** Even the base model has a high-speed processor, up to 512 MB memory, and support for Adobe® PostScript® 3™.

- **Printing speed of up to 45 ppm** makes short work of long and multiple-set print jobs.

- **With a first-page-out-time as fast as 8 seconds**, the Phaser 4510 printer was built on the axiom that time is money.

- **True 1200 dpi** output makes fine details stand out, even on photo grayscale images.

- **Choose high-capacity print cartridges** for a lower cost per page and reduced printer interventions.

Section 1: Introducing the Xerox Phaser 4510 Laser Printer
Phaser 4510 Specifications

Phaser 4510B

The Phaser 4510B comes packed with features to support busy workgroups in small and large businesses.

Print Capabilities:

• Print Speed: Up to 45 ppm

• First-Page-Out Time: As fast as 8 seconds

• Resolution (max): 1200 x 1200 dpi

• Two-Sided Output: Optional

• Page Description Languages: Adobe PostScript 3, PCL® 5e emulation, PCL 6 emulation

Controller:

• Processor: 533 MHz

• Memory: 128 MB standard (512 MB maximum)

• Hard Drive: Optional 40 GB (minimum)

Connectivity:

• Direct Connect: Parallel, USB 2.0

Paper Capacity:

• 700 total sheets standard (1,800 total sheets optional)

• Tray 1 (MPT): 150 sheets

• Tray 2: 550 sheets

•Trays 3 and 4 (optional): 550 sheets each

• Output Tray: 500 sheets

• Stacker (optional): 500 sheets

Media Handling:

• Supported Sizes
  Tray 1 (MPT): Custom sizes from 3 x 5 in. to 8.5 x 14 in. (76 x 127 mm to 216 x 356 mm)
  Trays 2–4: Custom sizes from 3.9 x 5.8 to 8.5 x 14 in. (98 x 148 mm to 216 x 356 mm)

• Supported Weights
  Trays 1–4: 16 to 40 lb. bond to 50 to 80 lb. cover (64 to 216 gsm)

• Media Types: Plain paper, envelopes, labels, transparencies, card stock

Print Features:

• **Standard**: Smart Trays, Booklet printing, Poster printing, Edge-to-edge printing, Negative image, Mirror image, Scaling, Watermarks, Auto fit, Custom-size pages, Covers, Separators, RAM collation, N-up, Load-while-run

• **Advanced** (require optional Hard Drive Kit): Secure/Proof/Personal/Saved Print, Hard disk collation, Print With, PDF-direct printing, Extended font/form storage

Reliability:

• Duty Cycle: 200,000 pages per month

• Warranty: One-year on-site, Xerox Total Satisfaction Guarantee

Phaser 4510N

Includes all capabilities of the Phaser 4510B, with the following upgrades:

Connectivity:

Network — 10/100Base-TX Ethernet

Print Features:

Standard — Remote printing, Job accounting

Phaser 4510DT

Includes all capabilities of the Phaser 4510N, with the following upgrades:

Print Performance:

Two-Sided Output — Standard

Paper Capacity:

1,250 total sheets standard
(1,800 total sheets optional)

• Tray 1 (MPT) — 150 sheets

• Tray 2 — 550 sheets

• Tray 3 — 550 sheet

Phaser 4510DX

Includes all capabilities of the Phaser 4510DT, with the following upgrades:

Controller:

• Hard Disk — Standard 40 GB

Paper Capacity:

1,800 total sheets standard

• Tray 1 (MPT): 150 sheets

• Tray 2: 550 sheets

• Tray 3: 550 sheets

• Stacker: 500 sheets

Section 2: Evaluating Workgroup Laser Printers
Evaluating Print Speed

By definition, a workgroup printer is a shared resource. Typically, a networked laser printer is shared by up to 25 people on a regular basis. It is also common for the the network to contain multiple computer platforms, such as the various versions of Microsoft Windows, Mac OS, Unix, or Linux.

By far the most popular network used is Ethernet with TCP/IP protocols. But even with multiple users on a variety of platforms, each with their own unique applications and needs, all networked printer users require three things from their printers:

• Print speed high enough to maintain office productivity.

• Hassle-free printing — the more the printer can take care of itself the better.

• Value — small and large businesses all want a good return on their investments.

This section of the Evaluator Guide will look at each of these areas and suggest ways to evaluate a printer's performance against those requirements. Do this for all workgroup laser printers you consider and you'll see how the Phaser 4510 laser printer exceeds expectations on all counts.

Evaluating print speed

Consider print engine speed.

What is the printer's rated engine speed? Note that this does not tell the whole story about the performance of the printer.

Consider file download and image-processing speed.

Is the printer able to connect to high-speed networks? Can the printer quickly handle all file formats that might be sent to it? How fast can the image be processed and sent to the print engine? Different manufacturers use different data-compression and memory-management techniques to process the file and print the results. Considering all these factors together will give you a feel for the printer's total throughput capability.

How the Phaser 4510 exceeds the print speed requirement

Engine Speed

With a print speed of 45 pages per minute, the Phaser 4510 races through long or multiset jobs, avoiding print job logjams from multiple users. And the true 1200 x 1200 dpi resolution at full-rated speed means you won't sacrifice print quality for print speed.

Processing Speed

The 533 MHz image processor provides a first-page-out time of as fast as 8 seconds and handles even complex jobs quickly to help maintain office productivity. Memory of up to 512 MB, it handles large or multiple jobs with ease. Add the Hard Drive Kit (standard on the DX) for job pipelining, which prints one job while processing the next.

Section 2: Evaluating Workgroup Laser Printers
Evaluating Ease of Use

The Phaser 4510 printer incorporates most of the powerful Phaser features developed for our advanced color printer products. From its simple installation features, to its PrintingScout™ utility, from our unique real time print monitor to our proactive help software, the Phaser 4510 is packed with big printer features. The Phaser 4510 can even troubleshoot on its own with PhaserSMART®, our unique internet-based automated support system.

Consider network installation.

Will technical help be required?

Consider the types of documents your users typically produce.

Do they need a variety of media capabilities (i.e. preprinted letterhead on fine bond paper, standard peer-to-peer quality laser paper, transparency media, card stock, envelopes, etc.)? Is automatic two-sided printing (duplexing) important?

Consider access.

Is it easy to check the consumable status before committing to a large or important print job?

Consider what tools are provided to help manage the printer over the network.

How easy is it to learn to use and manage? Can it be easily controlled from not only the network but also its front panel?

Easy Installation

The Phaser 4510 printer's driver installation process is designed to provide an easy and consistent installation process from all software sources, regardless of platform. Features include:

- Automatic discovery of the printer on your network
- Automatic port creation
- Automatic printer model and feature detection
- Automatic driver installation
- Automatic IP address assignment

Install from the web technology distributes software from any of the following sources:

- Product CD
- CentreWare IS Embedded Web Server
- Xerox website

Media Flexibility

The Phaser 4510 handles media weights from 16–40 lb. bond to 50–80 lb. cover (64–216 gsm). Sizes can range from 3 x 5 in. up to 8.5 x 14 in. (76 x 127 mm up to 216 x 356 mm), as well as user-definable custom sizes in between. The Phaser 4510 prints on plain paper, transparencies, laser-quality labels, cover stock, and recycled paper. You can feed envelopes from any tray, with no special envelope feeder required. With the Phaser 4510, you can even preprint forms on carbonless paper. For details about Xerox and Phaser branded supplies, visit www.office.xerox.com/supplies.

Users will like the 1,800-sheet input capacity (maximum) divided into 4 sources for more uninterrupted printing and fewer user interventions. They'll always print on the media they expect thanks to the Phaser 4510's Smart Trays technology. The printer driver knows what media is in each tray and what the MS Office application is set for, and then matches them perfectly. No more wasted time or materials.

Access

All media and consumable replacement access takes place at the front of the printer. Consumable levels can be easily checked in either the print driver or on the front panel.

Printer Management

When you send a document to the Phaser 4510, our exclusive PrintingScout utility monitors and reports any printer condition that can prevent a print job from completing successfully. A pop-up Help window provides appropriate how-to instructions, illustrations, and links to help end users quickly identify and resolve their own printing problems. This way, you'll go to the printer completely prepared - no surprises.

What would be better than knowing if your printer needs help before you print? How about avoiding the problem altogether? MaiLinX email alerts can automatically send an email to a specified person when a printer needs supplies or maintenance - ensuring the printer is always ready.

The printer's built-in CentreWare IS Embedded Web Server is a website inside the printer. It allows users to check the printer's status and engage its job accounting and troubleshooting features, using a web browser such as Microsoft Internet Explorer or Netscape Navigator. Users only need the printer's IP address to connect to the printer.

And CentreWare Web is designed to provide enterprise management solutions for all devices connected to your network - not just Xerox. Install, troubleshoot, configure and produce asset reports for all devices. Simply install CenterWare Web on any computer running Windows 2003, XP or 2000 connected to your network and gain access from anywhere on your network through any standard web browser.

Section 2: Evaluating Color Printers
Evaluating Value

Speed and intelligence features must be balanced against the total cost of owning and operating a networked printer over time. Consider the true purchase price. Include everything needed for a workgroup printer to begin printing right away. If extra-cost add-ons are needed, such as a network card or special cables, then these costs must be added to the original purchase price.

Factor in the cost of operation.

The total cost-per-print can be every bit as important as the purchase price. It is especially important to consider all the consumables the printer may require over its lifetime, and to calculate the contribution each of these items makes to the average cost per page.

Estimate the cost of keeping the printer printing.

Start with durability: Does the duty cycle indicate that the printer can handle a large volume of printing? And don't forget the "hidden" costs, especially how often the printer needs attention from users and whether any special skills are required to change consumables or trouble-shoot problems.

How the Phaser 4510 exceeds the value requirement

Inclusive Price

With a base price of $899*, the Phaser 4510 packs in more standard features and capabilities you need than any other printer in this class. By combining a fast print engine, fast processor, high resolution, high duty cycle, and a large and expandable paper input capacity, you get a powerful office productivity tool.

Operating Costs

Operating the printer won't break the bank either. At under 1.2¢** per page, the Phaser 4510 provides an economical printing solution for any office.

Eliminate Hidden Costs

Finally, the ability to handle peak loads of up to 200,000 pages per month, means the Phaser 4510 has the strength and reliability to handle even the heaviest network loads. Choose high-capacity print cartridges to minimize user interventions. If service is required, the Phaser 4510 includes as a standard, an on-site warranty to minimize down time.

Xerox belongs to the Green World Alliance program so your Phaser 4510 will have a minimal impact on our environment as well. Xerox offers free recycling for all your Phaser 4510 Genuine Xerox print cartridges.

Specifications

		4510B	4510N	4510DT	4510DX
Speed		Up to 45 ppm			
Duty Cycle		250,000 pages / month			
Paper Handling					
Paper input	Standard	**Tray 1 (MPT):** 150 sheets; Custom sizes: 3 x 5 in. to 8.5 x 14 in. / 76 x 127 mm to 216 x 356 mm			
		Tray 2: 550 sheets; Custom sizes: 3.9 x 5.8 in. to 8.5 x 14 in. / 98 x 148 mm to 216 x 356 mm			
	Optional	**Tray 3:** 550 sheets		Standard	
		Tray 4: 550 sheets			
Paper output	Standard	500 sheets			
	Optional	**Stacker:** 500 sheets			Standard
Automatic two-sided printing		Optional		Standard	
Print					
First-page-out-time		As fast as 8 seconds			
Resolution (max)		1200 x 1200 dpi			
Processor		533 MHz			
Memory (std / max)		128 MB / 512 MB			
Connectivity		Parallel, USB 2.0	10/100Base-TX Ethernet, Parallel, USB 2.0		
Page description languages		Adobe® PostScript® 3™, PCL® 5e emulation, PCL 6 emulation			
Print features	Standard	Smart Trays, Booklet printing, Poster printing, Edge-to-edge printing, Negative image, Mirror image, Scaling, Watermarks, Auto fit,Custom-size pages, Covers, Separators, RAM collation, N-up, Load-while-run			
		NA	Remote printing, Job accounting		
	Optional	**Hard Drive Kit (minimum 40 GB):** Secure/Proof/Personal/Saved Print, Hard disk collation, Print With, PDF-direct printing (with 512 MB memory), Extended font/form storage			Standard
Warranty		One-year on-site warranty, Xerox Total Satisfaction Guarantee			

Section 3: Configurations, Specifications, Supplies, Options, Support and Additional Information Sources
Specifications

Specifications	
Device Management	CentreWare® IS Embedded Web Server, CentreWare® Web, Xerox NDPS Gateway, Xerox Usage Analysis Tool, PrintingScout™ Alert Notification (not available on nonnetworked model)
Print Drivers	Windows® 2000/XP/2003 Server, Vista, Mac OS® X version 10.2 or higher, Novell Netware® 5.x/6.5 (NDPS only), Linux Red Hat®, Fedora™ Core 5, SUSE 10.0, Unix: Sun Microsystems Solaris™ 9/10, IBM AIX® 5.1, HP-UX 11.0/11i, Xerox Walk-Up® Printer Drivers with Windows 2000 or higher
Font Capability	139 PostScript® fonts; 81 PCL® fonts
Media Handling	Trays 1–4: 16–40 lb. bond to 50–80 lb. cover / 64–216 gsm; Two-sided output: 16–40 lb. bond to 50–80 lb. cover / 64–216 gsm; Media types: Plain paper, envelopes, labels, transparencies, card stock
Operating Environment	Temperature: 41° to 95°F / 5° to 35°C; Humidity: 15 % to 85 %; Sound pressure: Printing: 56.1 dB(A), Standby: 28.0 dB(A); Sound power: Printing: 7.19 B, Standby: 5.0 B; Warm-up time (from power save): 8 seconds or less, FPOT from power save: 25 seconds
Electrical	Power: 110–127 VAC, 50/60 Hz or 220–240 VAC, 50/60 Hz; Power consumption: Printing: 675 W, Standby: 80 W, Power save: 18 W; 4510DT/DX: ENERGY STAR® qualified
Dimensions (WxDxH)	16.6 x 18.3 x 15.9 in. / 422 x 465 x 404 mm; Weight: 45.2 lb. / 20.5 kg
Certifications	Listed to UL 60950-1/CSA 60950-1-03, 1st Edition, FDA/CDRH – Class 1 Laser Product, FCC Part 15, Class B, Canada ICES-003, Class B, CE marked, Low Voltage Directive 73/23/EEC, EN 60950-1, 1st Edition, EN 60825-1 – Class 1 Laser Product, EMC Directive 89/336/EEC, EN 55022, Class B, EN 55024, RoHS Directive 2002/95/EC, WEEE Directive 2002/96/EC
What Comes In The Box	• Phaser 4510 Printer • Toner cartridge (10,000 print capacity) • Drum cartridge (60,000 print capacity) • World kit (includes Software and documentation CD, Registration card, Warranty booklet) • Power cord

Supplies	Part Number	Descritpion	Capacity
Print Cartridges	113R00711	Standard-Capacity Print Cartridge*	10,000 pages[1]
	113R00712	High-Capacity Print Cartridge*	19,000 pages[1]
Routine Maintenance Items	108R00717	Maintenance Kit, 110V	200,000 pages[2]
	108R00718	Maintenance Kit, 220V	200,000 pages[2]

[1] Average standard pages. Declared Yield in accordance with ISO/IEC 19752.
 Yield will vary based on image, area coverage and print mode.

[2] Approximate pages. Declared Yield based on letter-/A4-size 20 lb. (75 gsm) pages.
 Yield will vary based on media type, size, weight, orientation, and usage patterns.

Options	Part Number	Description
	097S03779	Hard Drive Kit
	097S03623	4510B to N Upgrade Kit
	097S03625	Duplex Module
	097S03624	550-Sheet Feeder
	097S03764	500-Sheet Stacker with Job Offset
	097S03776	128 MB Phaser Memory
	097S03777	256 MB Phaser Memory
	097S03778	20 MB Flash Memory
	097S03740	Wireless Network Adapter

Extended Service Agreements	Part Number	Description
	E4510SA	Annual on-site service agreement
	E4510S3	2 years additional (total of 3 years)*
	E4510S4	3 years additional (total of 4 years)*

* Available during 1st 90 days of product ownership

Section 3: Configurations, Specifications, Supplies, Options, Support and Additional Information Sources
Support and Additional Information Sources

Unrivaled service and support

Behind every Xerox product is a large network of customer support that's unrivaled in the industry and available when you need it. Xerox service professionals use leading-edge technologies to keep you up and running. They're even linked to the engineers who designed your product, so you can be confident when you choose Xerox. And Genuine XEROX® supplies are always readily available.

Total satisfaction guaranteed

The exclusive Xerox Total Satisfaction Guarantee, recognized as unique in the industry, covers every Phaser device that has been continuously maintained by Xerox or its authorized representatives under a Xerox express warranty or Xerox maintenance agreement. You decide when you're satisfied.

Xerox Office Services Support

Asset Management Services

- Asset Optimization and Tracking — Process and tools to optimize an enterprise's office output infrastructure and reduce overall costs

- Break-Fix Management — Single point of ownership and management for break-fix service for all brands of office output devices

- Supplies Management — Process and tools to procure, monitor and replenish all document-related supplies proactively

Imaging and Output Management Services

- Output Management — Single point of management of office output from all output devices, regardless of manufacturer

- Image Capture and Workflow — Cost-efficient solutions for capturing, managing, retrieving and distributing information into digital repositories

Support Services

- Technology Procurement and Deployment — A creative and flexible end-to-end print/computer product acquisition solution that uses a single-point-of-contact model while lowering the total cost of acquisition

- Help Desk Services — A broad range of enterprise services managed through a centralized single point of contact and delivered through an on-site or off-site model

- End User Services — Microsoft software implementation, IT project consulting, and customer education

Access Managed Services

- Student and Library Patron Access — Custom designed and implemented customer-managed solutions for student and library patron print access management

Additional Information Sources

What's in the box:

- Phaser 4510 Printer

- Toner cartridge (10,000 print capacity)

- Drum cartridge (60,000 print capacity)

- World Kit (includes software and documentation CD, Registration card and Warranty booklet)

- Power cord

Phaser 4510 Front Panel:

- The front panel offers tools and information pages to help with machine setup, feature selections, operational problems, media feed and supply issues.

On the web:

Visit **www.xerox.com/office** for:

- Product, supplies and support information

- Downloading drivers

- Finding your local Xerox sales representative

- Online documentation

Visit **www.xerox.com/office/support** for:

Support and service information, including the same troubleshooting Knowledge Base used by Xerox Customer Support staff to provide the latest technical information on:

- Application issues

- Errors

- Print-quality issues

- Troubleshooting

Questions? Comments? Problems?

If you have any questions, please contact your Xerox sales representative, call **1-877-362-6567**,
or visit us on the web at **www.xerox.com/office.**