THE DOCUMENT COMPANY
XEROX®

Phaser™ 4400
Laser Printer

Phaser 4400 Evaluator Guide

About This Guide

This guide will introduce you to the Xerox Phaser 4400 Network Laser Printer, and help you in your printer evaluation process.

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This guide was printed entirely on a Xerox Phaser Color Printer.

Phaser 4400

Introducing the Xerox Phaser 4400 Network Laser Printer

Speeds Ahead of its Class! The Phaser 4400 Network Laser Printer packs more standard features into this "office standard" than any other printer in this class. Compare the powerful features included in the budget minded price and you'll see the inherent value available only from Xerox.

Setting the Highest Standard for Speed

Delivering 26 pages-per-minute at true 1200 dpi resolution, makes the Phaser 4400 a great choice to replace aging office network printers or as an entry into network printing for the first time. A powerful 266 MHz image processor and robust 150,000 page-per-month duty cycle give the Phaser 4400 the strength to handle most networked office printing demands.

Smart Printer for Great Work

The Phaser 4400 incorporates many of the legendary Ease of Use features developed for our Phaser color printers including; simple one-click installation, PrintingScout to comprehensively monitor the printing process and direct corrective action if necessary, and CentreWare® Internet Services an embedded web server for easy printer management over a standard web browser.

Outstanding Printing Inside your Budget

Right out of the box, the Phaser 4400 gives you **more** than you'll get with any other printers in its class. In fact, when you compare our printer's ideal combination of true 1200 x 1200 dpi resolution at 26 ppm speed, 64 MB of printer memory, true Adobe PostScript 3, PCL 5e/6 emulation, 10/100Base-TX Ethernet, USB, and its many standard convenience features, you'll wonder how we've kept it so affordable.

Product Overview

Phaser 4400B Feature Set

Even at the base level, the Phaser 4400B comes packed with the following performance and productivity features **standard:**

- 26 page-per-minute print speed
- 600 dpi resolution
- 32 MB memory (expandable to 224 MB)
- 266 MHz RISC Processor
- USB and Bi-directional Parallel
- Adobe® PostScript® 3™, PCL 5e, PCL 6
- 650 sheet total input capacity (expandable to 1750)
- 100 sheet Multi-Purpose Tray
- 500 sheet output capacity (expandable to 1000)
- 150,000 impressions per month (maximum duty cycle)
- Standard capacity print cartridge (10k) or high capacity print cartridge (15k)
- One year on site warranty, extensive on-line support and Xerox Total Satisfaction Guarantee.

Phaser 4400N Feature Set

The Phaser 4400N comes with all the common performance and productivity features included in the Phaser 4400B *plus* the following additional features:

- True 1200 x 1200 dpi resolution at full printing speed
- 64 MB memory (expandable to 256 MB)
- 10/100Base-TX Ethernet connectivity

Phaser 4400DT Feature Set

The Phaser 4400DT comes with all the common performance and productivity features included in the Phaser 4400N *plus* the following additional features:

- Automatic duplexing (two-sided printing)
- An additional 550 sheet feeder brings total input capacity to 1200 sheets (expandable to 1750)

Phaser 4400DX Feature Set

The Phaser 4400DX comes with all the common performance and productivity features included in the Phaser 4400DT *plus* the following additional features:

- 500 sheet stacker with offset, increases output capacity to 1000 sheet total
- 20 GB Hard Disk includes drivers and help videos and enables Secure Print, Proof Print, Saved Print, Job Collation, PDF direct 1.3, Font storage, and more.

Evaluating Workgroup Laser Printers

By definition, a workgroup printer is a shared resource. Typically, a network laser printer is shared by up to 25 people on a regular basis. It is also common for there to be multiple computer platforms, such as the various versions of Microsoft Windows, MacOS, 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 with their own unique applications and needs, all networked printer users require three things from their printers:

- Performance Features
- Ease of Use
- Value

This section of the Evaluator Guide will look at each of these areas, and suggest ways you can evaluate a printer's performance against that requirement. Do this for all workgroup laser printers you are considering and you'll see how the Phaser 4400 exceeds expectations on all counts.

Evaluate Performance Features

Today's busy workgroups have no time to waste, whatever their size. Consider raw engine speed, but also look at RIP speed (largely determined by processor speed), first-page-out time, and the ability to process multiple jobs concurrently to give you a feel for the printer's total throughput capability.

Speed at the cost of quality is not acceptable. Consider the resolution of the printer as represented in a variety of text styles and sizes. Also consider fills, gradients, graphic elements, and photo images.

What types of documents do your users typically produce? Do they need a variety of media capabilities? (i.e. pre-printed 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?

How The Phaser 4400 EXCEEDS The Performance Requirement:

At 26 pages-per-minute, the Phaser 4400 races through long or multi-set jobs, avoiding non-productive log jams from multiple users. The 266 MHz image processor provides a first-page-out time of just 11 seconds and handles even complex jobs quickly to help maintain office productivity. And the true 1200 x 1200 dpi resolution at full rated speed means there is no need to sacrifice print quality for print speed. Finally, the ability to handle peak loads of up to 150,000 impressions-per-month, means the Phaser 4400 will be able to handle even the heaviest network loads.

As for media flexibility, the Phaser 4400 provides up to 1750 sheet input capacity divided into 4 sources for more uninterrupted printing and fewer user interventions. You'll always print on the media you expect thanks to the Phaser 4400's Smart Trays technology. The printer driver knows what media is in each tray and what your MS Office application is set for, and then matches them perfectly.

Evaluate Ease of Use

The best way to evaluate a printer's ease of use is to use it in a real world environment over an extended period of time. But even without that opportunity, the following questions can help uncover a printer's true start-up and day-to-day Ease of Use potential:

- Can you easily reach all areas of a printer?
- Is it easy to check the consumable status before committing to a large or important print job?
- Also, consider what tools are provided to help manage multiple printers in a network.
- How easy is it to learn to use and manage? Does it offer easy control both over the network and from its front panel?

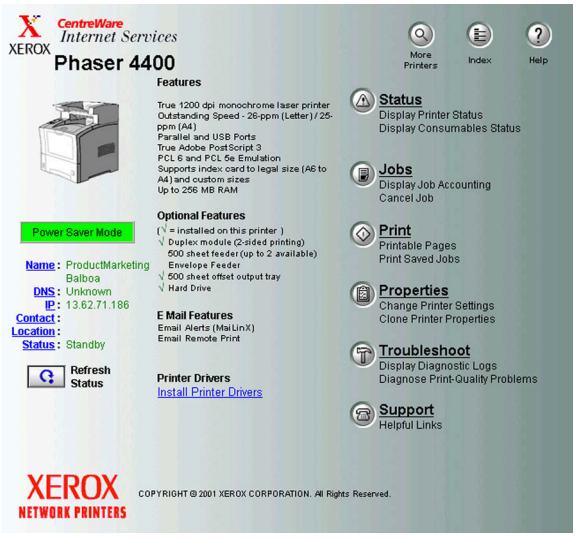
How The Phaser 4400 EXCEEDS The Ease of Use Requirement:

The Phaser 4400 represents the first monochrome laser printer from the Xerox Office Printing Business to incorporate most of the powerful Phaser features developed for our color printer products. From the simple one-click installation, to PrintingScout our unique real time print monitor and proactive help software, the Phaser 4400 is packed with big printer features. The Phaser 4400 can even trouble-shoot on its own with PhaserSmart™ our unique internet-based automated support system.

Our CentreWare IS works with an embedded web server in the printer. Just pull up the printer's URL and go to the CentreWare Internet Services site using your favorite Web browser and easily find all you need to know about it — current status, user manuals, trouble-shooting guides, software drivers, and hot links to Xerox product information, software updates, and support resources.

Network administrators can easily monitor, configure, and troubleshoot the printer right from their desktop — keeping the printer and its users running at full speed. It can also discover all of your networked printers and multifunction devices, regardless of manufacturer. On the Phaser 4400, CentreWare IS allows users to access the saved job repository directly from their desktops.

The security of system access has been modeled after Microsoft system security levels. And MaiLinX provides automatic email alerts to specified individuals for printer conditions requiring attention. For example, a "Low Toner" message sent to a purchasing manager could act as a reminder to order supplies before the printer runs out completely.



Evaluate Value

Performance Features and Ease of Use must be balanced against the total cost of owning and operating a networked printer over time.

Find 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 cabling, then these costs must be added to the original purchase price.

Count 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 troubleshoot problems.

How The Phaser 4400 EXCEEDS The Value Requirement:

The Phaser 4400 presents big printer features at a small printer price. With a base price of just $899*, the Phaser 4400 packs in more standard features than any other printer in this class. By combining a fast print engine, a fast processor, high resolution and high duty cycle and you get a powerful office productivity tool.

The Phaser 4400 handles media weights from 16 lb. Bond (60 gsm) to 133 lb. card stock (216 gsm). Sizes can range from 3 x 5 in. up to 8.5 x 14 in. as well as user definable custom sizes in between. For top quality results, Xerox-branded supplies are engineered to provide optimum performance in your Phaser printer.

The Phaser 4400 prints on plain paper, transparencies, laser-quality labels, envelopes, cover stock, and recycled paper. Xerox is the only printer manufacturer to offer die cut business card media and CD/DVD labels and inserts. For details about Phaser branded supplies, visit http://www.officeprinting.xerox.com/supplies

An input capacity of up to 1750 sheets and an output capacity up to 1000 sheets assures office users of more uninterrupted printing and less user intervention. You'll always print on the media you expect thanks to the Phaser 4400's Smart Trays technology. The printer driver knows what media is in each tray and what your MS Office application is set for, and then matches them perfectly.

*Base ERP

Phaser 4400
By the Numbers

Competitive Comparison

Feature	Phaser 4400	HP 4100	Lexmark T522	Lexmark T620
Base Price	$899	$1099	$899	$1159
Speed	26 ppm	25 ppm	25 ppm	30 ppm
First Page Out Time	11 seconds	12 seconds	9 seconds	10 seconds
Maximum Resolution (at engine speed)	1200 x 1200 dpi in N, DT, DX 600 x 600 dpi in B model	1200 dpi Image Quality	1200 dpi Image Quality	1200 dpi Image Quality
Memory	N 64 MB (Base 32 MB) Max. 256 MB	N 32 MB (Base 16 MB) Max. 256 MB	N 32 MB (Base 16 MB) Max. 273 MB	N 32 MB (Base 16 MB) Max. 384 MB
Processor Speed	266 MHz	250 MHz	250 MHz	300 MHz
Print Description Languages	True Adobe® Postscript® 3™, PCL6, 5e emulation,	HP-PCL 6, 5e, PostScript 3 emulation	PCL 6, 5e, PostScript 3 emulation	PCL 6, 5e, PostScript 3 emulation
Media Weights	16 to 133 lb. (60 to 216 gsm)	16 to 53 lb. (60 to 100 gsm)	16 to 125 lb. (60 to 210 gsm)	16 to 125 lb. (60 to 210 gsm)
Input Capacity (std./max.)	650/1750	600/1600	600/4100	600/4100
Output Capacity (std./max.)	500/1000	250/250	250/250	500/3000
Maximum Media Size	8.5 x 14 in.	8.5 x 14 in.	8.5 x 14 in.	8.5 x 14 in.
Edge to Edge Printing	Yes	No	No	No
Hard Disk	20 GB	5 GB	5 GB	5 GB
Maximum Duty Cycle	150,000/month	150,000/month	120,000/month	150,000/month
Network Connectivity	Base: USB and Parallel. All others add 10/100BaseTX Ethernet	Base: parallel. All others add 10/100Base TX Ethernet	Base: USB and Parallel. All others add 10/100BaseTX Ethernet	Base: USB, Parallel, and Serial. All others add 10/100BaseTX Ethernet
Toner Capacity (std./high)	10K/15K	6K/10K	7.5K/20K	10K/30K
Warranty	1 year on site	1 year depot	1 year depot	1 year depot

* Base estimate retail price

The Phaser 4400 beats the HP 4100 by:

- True 1200 dpi at full engine speed
- 30% faster image processor performance
- More memory
- Faster duplex speeds (HP won't even disclose their duplex speed!)
- Better Input/Output — 550 sheet trays for loading convenience, 1000 sheet max. output vs. 250
- Four times the Hard Disk Capacity
- Higher Print Cartridge Yields (std. 10K vs. 6K)
- On site warranty vs. depot return

The Phaser 4400 beats the Lexmark T522 and T620 by:

- True 1200 dpi resolution at full rated speed (both the T522 an T620 slow to half speed for 1200 dpi)
- Double the output capability of T522 — 500 vs. 250 (and the 4400 can expand to 1000, Lexmark T522 has no upgrade)
- Double the Hard Disk Capacity
- More robust — higher duty cycle than the T522 and a simple visual inspection reveal a more sturdy construction of the Phaser 4400
- Edge to Edge Printing — very important for electronic forms and spreadsheets, Lexmark can't offer it
- Larger standard toner yield. (10K vs. 7.5K)
- Full capacity cartridge vs. 5K starter
- On site warranty vs. depot return

Configuration Summary

Feature	Phaser 4400B	Phaser 4400N	Phaser 4400DT	Phaser 4400DX
Price*	$899	$1,099	$1,699	$2,399
Print Speeds* (letter/A4)	26/25 ppm			
Duplex speed (letter/legal)	Optional 19/18 ipm		19/18 ipm	
Maximum Resolution	600 x 600 dpi	1200 x 1200 dpi		
Memory (std./max.)	32/224 MB	64/256 MB		
Processor Speed	266 MHz			
Adobe PostScript 3, PCL6/5e Emulation	Standard			
100 sheet Multi-Purpose Tray (MPT)	Standard			
Input Capacity (std./max.)	650/1750 sheets		1200/1750 sheets	
Output Capacity (std./max.)	500/1000 sheets			1000/1000 sheets
Printer Drivers	Windows 95, 98, Me, 2000, XP, NT. MacOS 8.x, 9.x, X ver. 10.1. Novelle NetWare 3.x, 4.x, 5.x, 6.x. UNIX platforms: Solaris, IBM AIX, HP-UX, DEC UNIX, True UNIX 64, Linux (i386) and (PPC), SGI.			
Hard Disk (20 GB)	Optional			Standard
Maximum Monthly Duty Cycle	150,000 impressions			
USB, Bi-directional parallel	Standard			
10/100Base-TX Ethernet	Optional	Standard		
Print Cartridge Capacity (standard/high capacity)	10,000/15,000 impressions (at 5% coverage)			
Warranty	1 year on site			

* Estimated retail price

Upgrades / Options / Supplies

Description	Part Number
Phaser 4400B to 4400N Upgrade	098S04703
32 MB Phaser Memory	097S02923
64 MB Phaser Memory	097S02912
128 MB Phaser Memory	097S02913
16 MB Flash Memory	097S02914
Internal Hard Disk (20 GB)	097S02917
Duplex Unit (for two-sided printing)	097S02880
550 Sheet Feeder, adjustable up to Legal	097S02878
500 Sheet Stacker with Job Offset	097S02881
75 Envelope Feeder	097S02879
Standard Capacity Print Cartridge	113R00627
High Capacity Print Cartridge	113R00628
110 Volt Maintenance Kit	108R00497
220 Volt Maintenance Kit (not available in North America)	108R00498
Replacement Paper Tray, 550 sheet capacity, adjustable up to legal	109R00448

Print Quality Modes

Resolution	Application
600 x 600 dpi	Default mode. High quality for all around general-purpose office printing.
1200 x 1200 dpi	For highest quality, very fine lines, sharp edges and small text. (Not available in 4400B model)
Draft Mode	Reduces the amount of toner on the page. Page is printed lighter. Economical internal uses.
Fax Friendly Black	Changes solid fills to patterns. Available on request; for more information contact Xerox Customer Support at 1-877-362-6567.

Media Supported

Sizes

Description	Size
Paper Types:	
Letter	8.5 x 11 in.
Legal	8.5 x 14 in.
Executive	7.25 x 10.5 in.
Statement*	5.5 x 8.5 in.
US Folio	8.5 x 13 in.
Index Card	3 x 5 in.
A4	210 x 297 mm
A5	148 x 210 mm
A6*	105 x 148 mm
ISO B5*	176 x 250 mm
B5 JIS	182 x 257 mm
Envelopes:	
#10 Commercial*	4.13 x 9.5 in.
Monarch*	3.88 x 7.5 in.
DL*	110 x 220 mm
C5*	162 x 229 mm
B5*	176 x 250 mm
Transparencies:	
Letter	8.5 x 11 in.
A4	210 x 297 mm
Labels:	
Letter	8.5 x 11 in.
A4	210 x 297 mm

*Custom sizes

Weights

Description	U.S. Size	Metric Size
Plain Paper	16 to 32 lb.	60 to 120 gsm
Card Stock	32 to 130 lb.	120 to 216 gsm
Simplex (one-sided)	16 to 130 lb.	60 to 216 gsm
Duplex (two-sided)	16 to 28 lb.	60 to 105 gsm

Total Satisfaction Services℠

TOTAL SATISFACTION SERVICES

Description	U.S. Part Number	Canadian Part Number
Extended On Site Service (available during the first 90 days of product ownership)		
2 additional years	4400S3	4400S3C
3 additional years	4400S4	4400S4C
Annual On-Site Service (available after first 90 days of product ownership)	4400SA	4400SAC
Help Desk Service		
Core Training	HDMCORE	HDMCORE
Product Training for Phaser 4400	HD4400	HD4400
Annual Support Subscription	HDYEAR	HDYEAR

Specifications

Physical dimensions

	Width	Depth	Height	Weight
4400B **4400N**	16.6 in. (422 mm)	17.3 in. (439 mm)	16.3 in. (413 mm)	55.1 lbs. (25 kg)
4400DT	16.6 in. (422 mm)	17.3 in. (439 mm)	23.2 in. (588 mm)	76.7 lbs. (34.8 kg)
4400DX	16.6 in. (422 mm)	17.3 in. (439 mm)	28.8 in. (730 mm)	82.2 lbs. (37.3 kg)

Environment

Temperature	Operating: 41° to 95° F (5° to 35° C)
Relative Humidity	Operating: 15% to 85% (non-condensing)
Noise Level	Idle/Standby: 4.9 B (A), Printing: 6.7 B (A) in Duplex

Power consumption (two models)

100-120 VAC (± 10%), 50-60 Hz (± 3 Hz)
220-240 VAC (± 10%), 50-60 Hz (± 3 Hz)

ENERGY STAR® qualified

Information Sources

The Printer's Front Panel
The Front Panel offers a suite of tools and information pages to help solve printing problems, media feed and supply issues, and administrative problems.

The Printer's CD-ROM contains:

- Phaser 4400 Laser Printer Features Guide, Networking Guide, Setup Guide, Support Guide, Trays and Paper Guide, and Trouble shooting Guide
- Setup poster
- Printer drivers
- Driver installers (for Mac and Windows)
- Read Me release notes
- Internet Services Help (HTML documentation)
- Adobe® Acrobat® Reader® (for reading the PDF files)
- Adobe® Type Manager® (ATM)

On the Web
Visit www.xerox.com/officeprinting for:

- Product, supplies, and support information
- Downloading printer drivers
- Finding your local reseller
- On-line documentation
- CentreWare Font Management Utility

Visit www.xerox.com/officeprinting/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
- Networking issues
- Printer errors
- Print-quality issues
- Troubleshooting

Visit www.colorconnection.xerox.com for:

- Resource for tools and information to help you get the most from your printer
- Interactive tutorials and helpful tips for using your printer and favorite software applications
- Easy access to on-line technical support
- Customized features to meet your individual needs

PhaserSMART™
An automated, internet-based, support delivery tool. Uses real time information from the printer to diagnose and deliver customer self-support solutions.

Questions?
Comments?
Problems?

If you have any questions or issues with your evaluation printer, please contact your Xerox sales representative or the Xerox Office Printing Help Desk at:

U.S. and Canada 1-877-362-6567
or visit us on the web at: www.xerox.com/officeprinting

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JS/SP 6/1/03

44XEG-01UB

Printed on a Xerox Phaser Color Printer