

# BERTL

## EXCEPTIONAL



## Kyocera TASKalfa 420i



42-ppm Monochrome

Print • Copy • Scan • Fax

### Key Buyer Benefits

- Wide 8.5" Color Touch Screen Control Panel
- Advanced USB Host Interface
- Fast Warm-up Time (30 seconds or less)
- Efficient Duplex and Paper Handling
- Outstanding ease-of-use for clearing misfeeds, loading paper, and changing toner
- Scientifically enhanced long life consumables reduce the frequency of major component replacement and downtime
- Fast scan speeds in both full color and black & white
- Scan to SMB, Scan to e-Mail, Scan to FTP, Scan to USB, WSD Scan, TWAIN Scan
- 2 GB RAM / Standard 160 GB Hard Disk Drive (HDD)
- On-board Document Storage to secure and access commonly used documents
- Optional Data Security Kit provides secure overwrite and encryption for Printing, Copying and Scanning
- Security Watermarks prevents unauthorized copying
- KX Driver allows users to access the unique features integrated into each TASKalfa MFP from one common print driver
- Offers Kyocera's unique long-life technology and embedded HyPAS
- Long Life Components and Consumables (Maximum Monthly Duty Cycle: 150,000 pages; Toner Yields: 34,000 Black pages, PM Schedule: 500,000 pages)
- Section 508 Compliance
- Three different optional finishers to choose from that offer advanced finishing
- Maximum paper capacity of 4,200 pages
- Energy Star and Restriction of Hazardous Substances (RoHS) Compliant

## 100% INDEPENDENT ANALYSIS

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OFFICE

In December 2009, Kyocera Mita America Inc. introduced the new TASKalfa 420i black & white multifunctional system. The TASKalfa 420i completes Kyocera Mita's black & white MFP product series, the TASKalfa 520i and 300i models. These MFP's are built using the same engine technology that utilizes the company's patented long-life Amorphous Silicon drum, and an offers crisp 600 dpi image quality with fast and efficient print, copy and scan functionality and document portability. Overall, these MFP's have been designed to lower total cost of ownership while delivering fast productivity, excellent image quality and outstanding ease of use for midsized workgroups.

BERTL recently tested the Kyocera TASKalfa 420i, which has a rated print speed of 42 ppm. The recommended monthly print volume is 150,000 pages with high toner yields of 34,000 pages per cartridge. The drum life also has a high life span of 500,000 pages. The TASKalfa 420i has flexible media capabilities with a maximum paper capacity of 4,200 pages, the ability to print on stock as heavy as 110lb. index (216 gsm) and sheets up to 11" x 17".

The new Kyocera TASKalfa 420i black & white MFP is designed to be easy on the environment and offers the following features:

- Energy Star and Restriction of Hazardous Substances (RoHS) certified
- High resolution 8.5" wide screen color tilting touch-panel display with graphical navigation simplifies operation by providing an intuitive user interface to keep ahead of today's fast-paced office document distribution needs
- Standard memory capacity o 2 GB RAM and a 160 GB hard disk drive
- Image Preview and Thumbnail view modes, to locate and retrieve stored jobs quickly and easily.
- Kyocera offers a comprehensive suite of solutions designed to assist in the document creation process and workflow including their KX Driver, PDF Direct print, PRESCRIBE Solution, KYOcapture and KYOcapture Express
- The TASKalfa 420i series comes standard with Secure Print and Security Watermark capabilities
- An optional Data Security Kit provides security overwrite and encryption for printing, copying and scanning ensuring critical information is never compromised.

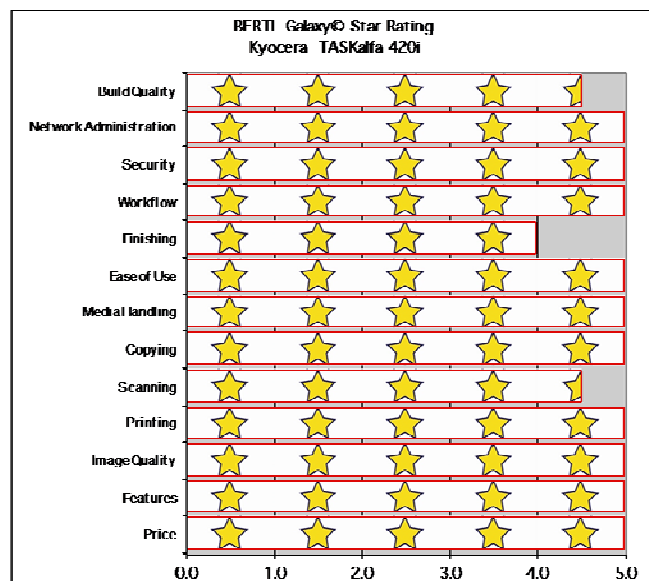
This device is available with three different speed configurations and sold globally through Kyocera authorized providers and direct marketing resellers. Pricing for each model in the series is as follows:

- TASKalfa 420i \$8,493
- TASKalfa 420i \$9,845
- TASKalfa 420i \$11,495

In the following test report, BERTL takes an in-depth look at the Kyocera TASKalfa 420i, testing and evaluating its productivity, image quality and ease-of-use.

Kyocera TASKalfa 420i Features Summary	
List Price	\$9,845.00
Imaging Technology	Laser, Electrostatic
Standard Functions	Network Print, Copy, Network Scanner, Document Box
Optional Functions	Super G3 Fax, Internet fax
Maximum Monthly Print Volume	150,000
Mono Print Speed	42 ppm
Mono First Page Out Time	3.9 seconds
Automatic Duplex	Yes
Network Scanning	Yes
Color Scanning	Yes
NT Authentication	Yes
LDAP Compatibility	Yes
Hard Disk Overwrite	Yes

**BERTL'S GALAXY© STAR RATING**



## PRINT PRODUCTIVITY

Evaluating print productivity is not as simple as timing copy jobs. The printing process involves several steps and can be affected by a variety of factors along the way.

The document must first be spooled by the print driver into a PCL or Postscript file. The PCL or Postscript file is then sent to the printer where it is raster image processed (Ripped) into image data by the device processor. The image data is then sent to the marking engine and output as printed pages.

There are three obvious factors highlighted above (spool time, RIP time, and print engine speed), which can all make or break a device's overall productivity. Other factors that could affect productivity and print speed of the device are the use of other device functions such as scanning and faxing.

It is possible to time and compare these factors through the use of careful preparation, conditioning and testing. Following are charts that show printing performance when tested under controlled conditions.

## NETWORK PRINTING SYSTEMS

+ The TASKalfa 420i delivers multiple Page Description Languages (PDLs) including the following: PRESCRIBE, PCL 6/PCL5e and KPDL3 (PS3) drivers.

+ The TASKalfa 420i also provides users a choice of multiple print drivers including: KX Driver, Mini Driver, KX Driver for XPS, XPS Mini Driver, Network Fax Driver and PPD for MAC.

+ All the drivers offer bidirectional communication with its user-selectable interface for all of the Windows base operating systems.

+ High print resolutions at 600 x 600 dpi for enhanced image quality.

+ Driver supports the following OS's: Windows 2000/XP/2003/Vista/2008/Windows 7, Novell NetWare 3.x/4.x/5.x/6.x, Mac OS 10.x, Sun OS 4.1.x; Solaris 2.x; AIX; HP-UX (LPR).

+ Supported Network Protocols include TCP/IP (IPv4, IPv6, SSL, HTTPs), IPX/SPX, AppleTalk and NetBEUI.

+ Users can connect to the TASKalfa 420i via 10/100BaseTX, Hi-Speed USB 2.0 or a USB Host Interface.

+ Printing utilities for the TASKalfa 420i include the following: PDF Direct Print, KMnet Admin, KMnet for Accounting, KMnet Viewer.

+ Fast productivity with the PowerPC 750FL/ 600 MHz controller and 2 GB of RAM.

+ Comes standard with a 160 GB Hard Disk Drive for added memory.

## TESTING RESULTS

\*All testing was done using the KX driver.

Print Productivity (seconds)			
# of Originals	Mode	PCL	PS
50	Simplex	42.8 ppm	42.6 ppm
50	Duplex	35.5 ppm	36.1 ppm

\*Print productivity is evaluated based on a text based letter sized 50 page PDF file.

Network-Bandwidth/Print File Sizes			
	Native File Size	PCL6	PS
1-page Digital Photo PDF	4.48 MB	4.26 MB	5.79 MB
4 page Passport Form PDF	0.08 MB	260 KB	503 MB
16-page Magazine in PDF	1.78 MB	4.23 MB	3.41 MB
22-page Excel Worksheet	0.12 MB	243 KB	1.33 MB
32-page Text-Based PowerPoint	0.23 MB	1.13 MB	1.75 MB
32-page Graphic Intensive PowerPoint	4.20 MB	7.47 MB	8.10 MB
38-page Form Word Document	0.91 MB	3.67 MB	3.67 MB
50-page Text-Based PDF	0.17 MB	4.36 MB	1.72 MB
50-page Text-Based PDF Duplex	0.17 MB	4.36 MB	1.72 MB

			First Page Out Time (seconds)		Total Job Time (seconds)	
Job List	Media Size	Mode	PCL6	PS	PCL6	PS
1-page Digital photo print original	Letter	1:1	10.53	19.35	10.53	19.35
4-page Passport Form PDF	Letter	1:1	8.61	10.30	17.47	13.72
16-page Magazine PDF	Letter	1:1	11.05	10.33	32.13	35.82
22-page Excel Worksheet	Letter	1:1	34.61	17.58	64.27	48.43
32-page Text-Based PowerPoint	Letter	1:1	7.42	8.65	51.91	52.41
32-page Graphic Intensive PowerPoint	Letter	1:1	8.83	10.18	52.75	55.10
38-page Form Word Document	Letter	1:1	11.33	10.02	63.31	63.45
50-page Text-Based PDF	Letter	1:1	11.36	10.14	79.78	78.95
50-page Text-Based PDF (duplex)	Letter	1:2	14.99	15.58	95.84	95.00

**WHAT WE LIKED**

- Tested simplex network-print speed was as fast as 42 ppm with both the Postscript and PCL6 drivers, matching Kyocera’s rated speed of 42 ppm.
- Tested duplex network-printer productivity was extremely productive up to 36 ppm with the Postscript driver.
- Tested First-Page-Out-Time was 7.42 seconds with the PCL6 driver and 8.65 seconds with the Postscript driver.
- In BERTL’s job stream test the PCL6 driver completed the stream job test in 6 minutes and 23 seconds, running at 38 ppm, which translates to an efficiency rate of 91%. Using the Postscript driver the efficiency rate was up to 88%.

## **COPY PRODUCTIVITY**

Advertised speeds are always quoted using the simplest route (in-and-out of a device). Of course, users often apply finishing options, incorporate different media sizes and types into the document, print in duplex, and add other elements that can affect speed. In the chart below, BERTL tests how different modes—mixed-size original mode and duplex mode—affect document-feeder productivity.

To assess copier productivity, BERTL ran copy jobs in order to determine document-feeder scanning speed, the affect of the first set out on overall engine speed, and whether specific job attributes affect engine throughput capability. Each job was set up by feeding media from the shortest media route to the shortest available output destination. A separate test examines how adding finishing/output destinations affects productivity.

## **COPY FEATURES**

+ The TASKalfa 420i offers two optional document processors both with capacity for up to 100-sheets and scan speeds up to 75 images per minute.

+ Users can submit jobs that require single or duplex copying. The TASKalfa 420i supports copy jobs that require 1:1, 1:2, 2:2 and 2:1 side printing.

+ Users can make copies that range from 1 to 999 in quantity and copy paper sizes from 5.5" x 8.5" up to 11" x 17".

+ Copy Resolution is set at 600 x 600 dpi.

+ Kyocera's Rated Output Speed is up to 42 cpm.

+ Kyocera's Rated First-Copy-Out Time (FCOT) is as fast as 3.9 seconds.

+ Kyocera's warm up time is as fast as 30 seconds or less.

+The TASKalfa 420i has many image modes to choose from including: Text, Photo, Text/Photo, Auto, Manual and Map.

+ The TASKalfa 420i can simultaneously copy, fax and scan.

+ Users can use the variable zoom to Full Size, 5 Reduction, 5 Enlargement Preset Ratios and scale from 25% to 400% in 1% increments.

+Copy Features included with the TASKalfa 420i incorporate the following: Positive/Negative Reverse, Mirror Image, Rotate Copy, Border Erase, Split Copy, Electronic Sort and Margin Shift.

+ The TASKalfa 420i comes standard with the following document boxes: Custom Box, Job Box, Removable Memory Box, Fax Box (with optional Fax System).

+ Memo Page delivers copies with a space for adding notes on the side of the document.

+ The TASKalfa's on-board help guide provides simple step by step instructions for any task.

+ The TASKalfa features a function called EcoPrint. This function can be used to save toner when high quality printing is unnecessary.

+ The Combine Mode allows user to copy 2 or 4 originals combined onto a single page (2-in-1 mode or 4-in-1 mode A). This feature is specifically designed to help users reduce printing costs.

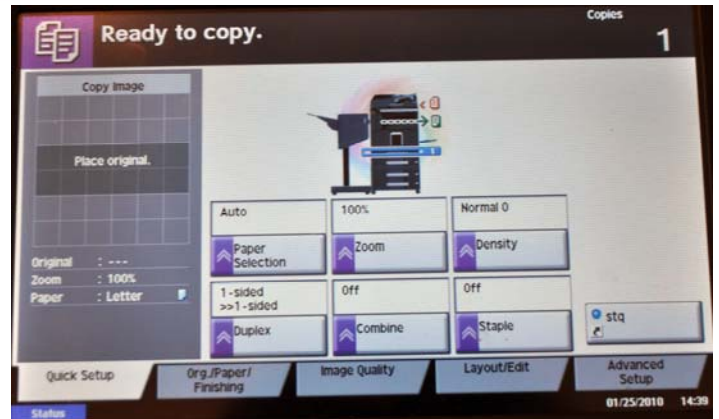
<b>First Copy Out Time Using the Automatic Document Feeder</b>	
	<b>Monochrome Mode</b>
<b>Number of Originals</b>	<b>Time In Seconds</b>
1 Simplex Original	5.97
1 Duplex Original	12.00

<b>First Copy Out Time Using the Platen Glass</b>	
	<b>Monochrome Mode</b>
<b>Number of Originals</b>	<b>Time In Seconds</b>
1 Simplex Original	3.99

<b>Copy Job Time</b>			
<b># of originals</b>	<b>Monochrome Mode</b>	<b>Time In Seconds</b>	<b>CPM</b>
10	1 sided to 1 sided	18.44	32.5
10	1 sided to 2 sided	24.28	24.7
10	2 sided to 1 sided	36.06	16.6
10	2 sided to 2 sided	43.87	13.7

Copy Productivity (seconds)		
# of Originals	Mode	Monochrome
1	Simplex	42.5 cpm
1	Duplex	39.0 cpm

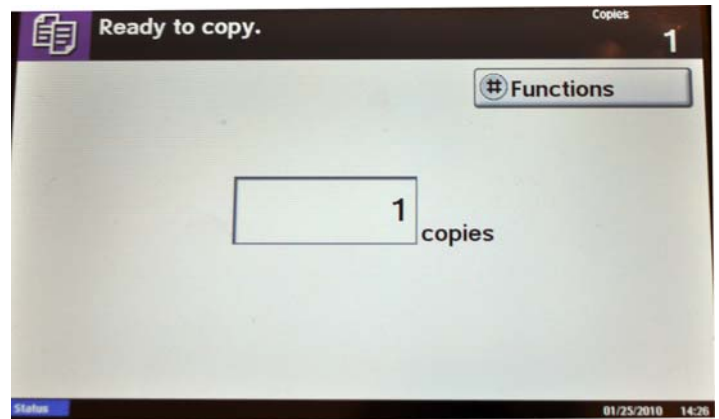
\*Copy productivity is evaluated based on a single text based letter file copied 50 times.



The “Copy” touch screen is clearly labeled and has all the most common copy settings



**Above and below:** The TASKalfa 420i’s platen (above) and document feeder (below).



The TASKalfa 420i offers an accessibility display option which enlarges the options shown on the control panel.



## Document Feeder Productivity

BERTL also takes the user into account and looks at how document-feeder productivity affects the amount of time a user has to wait at the device before they can walk away with their originals.

Document Feed Speed			
# of originals	Monochrome Mode	Time In Seconds	OPM*
11	Simplex Originals	15.66	38.3
6	Duplex Originals	18.41	16.3
11	Mixed Originals	37.31	16.1

\*Originals per minute.

Document Finishing Penalty				
# of originals	Finishing Selection	Time In (Sec)	1 Set Time (Sec)	Penalty (Sec)
10/5	Corner Staple	94.10	23.60	1.03
10/5	Side Staple	105.2	25.82	0.74
8/5	Saddle-Stitch Booklet	*	*	*
10/5	Covers and Inserts	65.60	17.90	-0.11

\*Tested without a saddle stitch finisher.

## WHAT WE LIKED

- Copy touch screen is clearly labeled and easy to use.
- Tested copy First-Page-Out-Time was 3.99 seconds off the platen glass and 5.97 seconds using the automatic document feeder.
- Tested total job time in simplex mode was 42.5 cpm; matching Kyocera's rated copy speed of up to 42 ppm.
- Very productive duplex copier productivity up to 39 cpm
- Fast document feeder productivity.



## NETWORK SCANNING SYSTEMS FEATURES

+ The TASKalfa supports many scan destinations including the following: Scan to SMB, Scan to e-Mail, Scan to FTP, Scan to USB, WSD Scan and TWAIN Scan.

+ Advanced USB host interface gives users the ability to conveniently print-from and scan-to a USB drive in PDF, JPEG, TIFF and XPS file formats directly from the control panel.

+ The TASKalfa 420i offers users the option to scan their jobs in using Grayscale, Monochrome and Color.

+ Kyocera provides users with a multitude of file format options which include:

- Black: PDF and TIFF
- Color: PDF, TIFF, JPEG and XPS
- PDF Extension: High Compression PDF and Encrypted PDF

+ Scanned PDF documents can be password protected and encrypted right from the control panel.

+ Users can scan paper sizes up to 11" x 17" using the TASKalfa 420i.

+ Users can scan while the system is copying, printing or while it is transferring scan to network or fax jobs.

+ Supports the following network protocols include: 10/100BaseTX and TCP/IP.

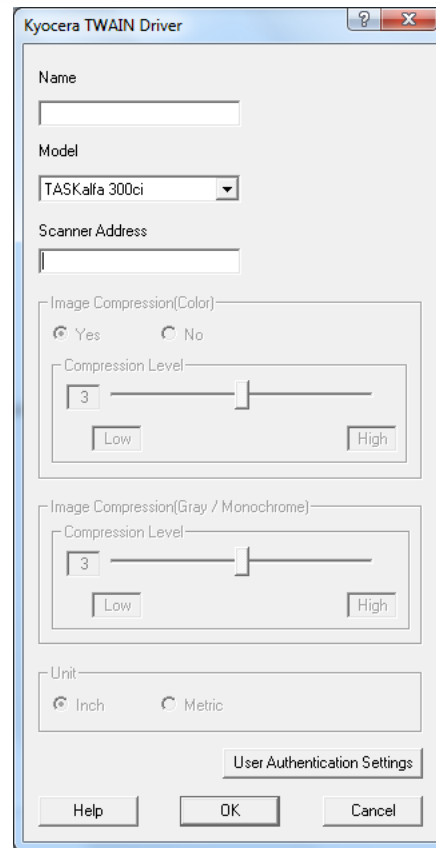
+ Users can select the best image quality setting suitable to the type of original being scanned. This includes options for Text + Photo, Photo, Text, and OCR.

+ This device offers several resolution options aimed at satisfying the most demanding customers. Options include the following:

- 200 dpi
- 300 dpi
- 400 dpi
- 600 dpi

+ Kyocera's Document Box creates a simple way for users to store, secure and access critical documents directly at the device. In addition users can manage their stored files as they are able to organize, search, print, annotate, enhance, store and send files, as well as combine multiple files regardless of their file format.

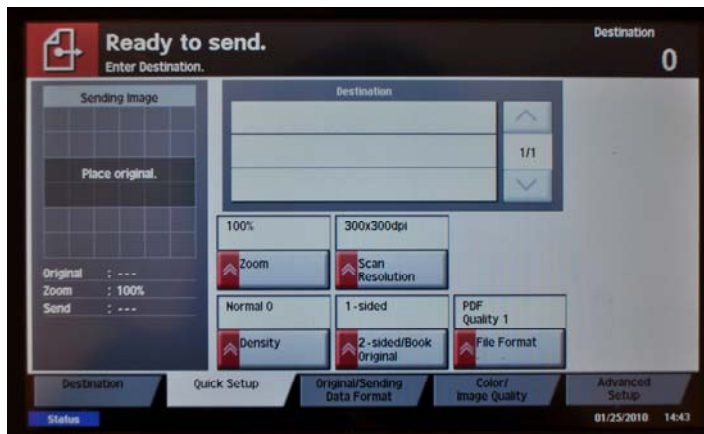
+ Kyocera Custom Box provides "thumbnail" views of files, which is especially helpful when a user is handling a large number of files and may not recall the identity of files.



The Kyocera TWAIN driver provides users with the ability to scan hard copy originals into most software applications such as Adobe Acrobat, Photoshop, MS Word, Excel and etc.



The Kyocera TASKalfa 420i features a standard USB flash interface for printing files stored on USB flash memory devices. Users can also scan files to USB memory devices. The USB interface is conveniently located on the right side of the device.



Users can scan hard-copy originals, converting them into electronic files. Users can select the scanning color mode, single or duplex scanning mode, document type and scan presets. Users can add up to 6 preset buttons on this screen.

## WHAT WE LIKED

- In BERTL's scan productivity test the TASKalfa 420i produced 56.34 ipm using black/text mode at 300 dpi.
- The smallest file size achieved was 349 KB using black text mode at 200dpi, while the largest file size obtained was 9.2 MB using color text/photo mode at 600 dpi.
- No print slowdown when scanning in jobs or when scan-date transfer is underway.
- Versatile features include Scan to E-mail, Scan to SMB, Scan to FTP, Scan to e-Mail, Scan to USB, WSD Scan and TWAIN Scan.
- Scanned documents can be saved to TIFF, JPEG, PDF and XPS for optimum compatibility.
- LDAP compatibility enables users to access the network address book, making destination-management chores easier for network administrators.
- Kyocera TWAIN driver offers users an array of scanning features to improve productivity.
- Eliminate errors by previewing and approving thumbnails of scanned documents before final output or distribution via Scan-to-Email or Scan-to-Folder.
- Promote multitasking and minimize time spent at the system with high-speed scanning up to 75 sides-per-minute.

Scanning Productivity Test (Pages Per Minute)					
Res (DPI)	Scan Color	Scan Mode	Scan Time (sec.)	File Size (MB/KB)	Scans per Minute
200	Black	Text	11.22	349.0 KB	53.48
300	Black	Text	10.65	602 KB	56.34
200	Grayscale	Photo	14.62	1.1 MB	41.04
300	Grayscale	Photo	15.53	2.0 MB	38.63
200	Color	Photo	13.94	1.3 MB	43.04
300	Color	Photo	14.25	2.4 MB	42.11
200	Black	Text/Photo	9.47	400 KB	63.36
600	Color	Text/Photo	27.38	9.2 MB	21.91
600	Grayscale	Text/Photo	27.88	7.3 MB	21.52

\*Scan productivity is evaluated based on a test of 1-10 letter sized pages and using PDF format.

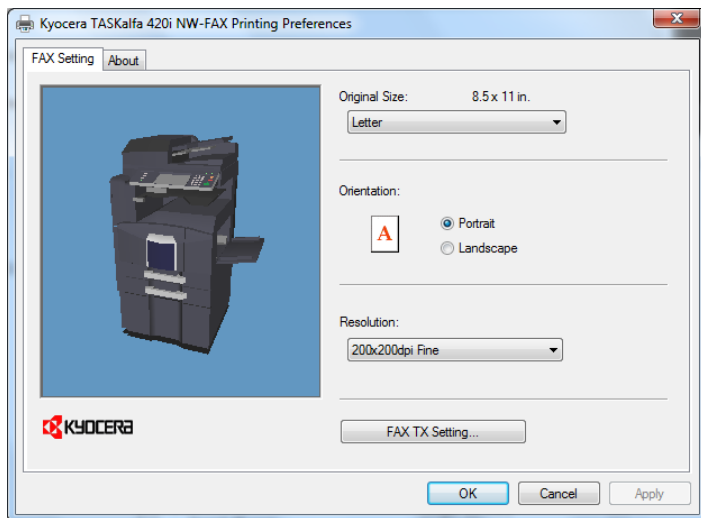
## OPTIONAL SUPER G3 FAX AND INTERNET FAX

Users can add facsimile capability to their Kyocera TASKalfa 420i device with the optional Super G3 fax system, which offers advanced features such as; multi-send, combine fax and scanning. For Internet Fax operation, users can add the optional Internet Fax kit.

FAX FEATURES	
Fax / Network Fax Option	Fax System(S) / Internet Fax Kit(A) (requires Fax System(S))
Fax Modem Speed	33.6 Kbps
Scanning density	Normal: 8 dot/mm x 3.85 line/mm, Fine: 8 dot/mm x 7.7 line/mm, Superfine: 8 dot/mm x 15.4 line/mm, Ultrafine: 16 dot/mm x 15.4 line/mm, Halftone
Max. original size	A3
Compression method	MH, MMR, MR, JBIG
Compatibility	Super G3 Fax
Fax Memory	Standard: 12 MB; Maximum: 120 MB
Fax Functions	Duplex TX/RX, Confidential RX/TX, F-Code RX/TX, Broadcasting, Fax Box, Fax Block, Dual Fax

## WHAT WE LIKED

- The optional Super G3 Fax Module expands the unit into a powerful workgroup fax.
- Internet fax function lets users transmit documents right from their desktop for added ease and productivity.
- Advanced features include: Optional Internet fax, Network faxing, Rotate transmission, Rotate reception, Remote diagnostics, Duplex fax reception, Memory reception, Mailbox, Dual fax with second fax system.



The Kyocera TASKalfa 420i network fax driver offers the most common used fax features for users to easily send faxes from their PC's.

## IMAGE QUALITY

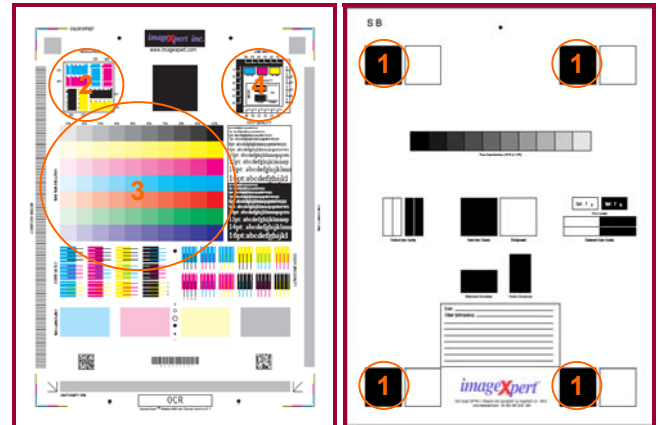
BERTL evaluates the output of several “test targets” in order to determine image quality. Following are descriptions of key elements of image quality. Note the numbered examples on each of the test targets shown in the right column.

### Office Color Image Quality

1. **Density of Solid Areas** - Better contrast; more vivid overall images
2. **Line Work** - Better production of lines and text
3. **Halftones** - Better production of photographic and screened images
4. **Negative/Positive** - Better production of fine detail

### Photographic Color Image Quality

5. **Flesh tones** - Better production of portraits
6. **Banding** - Better solid and dithered fill
7. **Low Contrast** - Better production of dark images
8. **Saturation** - Better production of bright colors
9. **Caste** - Better color fidelity
10. **Fine Detail** - Better reproduction of fine details



BERTL uses ImageExpert printer test targets for the evaluation of printed image quality. BERTL technicians measure image density and evaluate the device’s ability to produce a full range of halftones and various sizes of negative/positive text, dots and lines in each primary printing color (CYMK).

Density of Solid Areas*		
	Copy Density	Print Density
Black	1.28	1.33

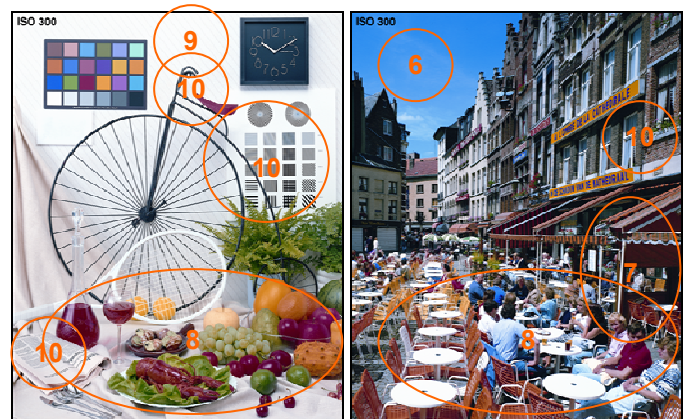
\*Density is on a scale of 0 to 2.5, with 2.5 being the best possible.

Copy & Print Resolution*				
	Copy Resolution		Print Resolution	
	Vertical	Horizontal	Vertical	Horizontal
Black	4.5	4.5	3.0	3.0

\*Line Pairs per Millimeter. For copy resolution, higher is better (range, 2.0-8.0); for printer resolution, lower is better (range, 1.0-5.0).

Copy Halftones		
	Min. Gradation*	Max. Gradation**
Black	10	100
Print Halftones		
	Min. Gradation*	Max. Gradation**
Black	10	100

\*Minimum gradation is on a scale of 10 – 100 percent in 10 percent increments. The best possible minimum gradation is 10 percent.  
 \*\*Maximum gradation is on a scale of 10 – 100 percent in 10 percent increments. The best possible maximum gradation is 100 percent.



BERTL uses synthetic (photographic) test images obtained from ISO International Standard 12640--Graphic Technology—Prepress digital data exchange—CYMK Standard Color Image Data (CYMK/SCID) in order to evaluate the ability to print photographic images.

## IMAGE QUALITY

Negative/Positive Lines*				
Line Width (points)	Negative		Positive	
	Vertical	Horizontal	Vertical	Horizontal
1	√	√	√	√
2	√	√	√	√
3	√	√	√	√
4	√	√	√	√
5	√	√	√	√
6	√	√	√	√

A "√" mark indicates the device was able to print the line width correctly.  
 \*Chart cells containing an "x" indicate that the printer was not able to print the line width correctly. Overall, the fewer "x's," the better the image quality. If no cells are marked with an "x," then the device was able to print all line widths correctly.

Negative/Positive Dots*	
Line Width (points)	% of Dots Printed
1 pixel Black	100
1 pixel Black Neg	100
2x2 pixel Black	100
2x2 pixel Black Neg	100
Checkerboard apparent?	No

\*On a scale of 0 – 100%. The higher the percentage, the better.

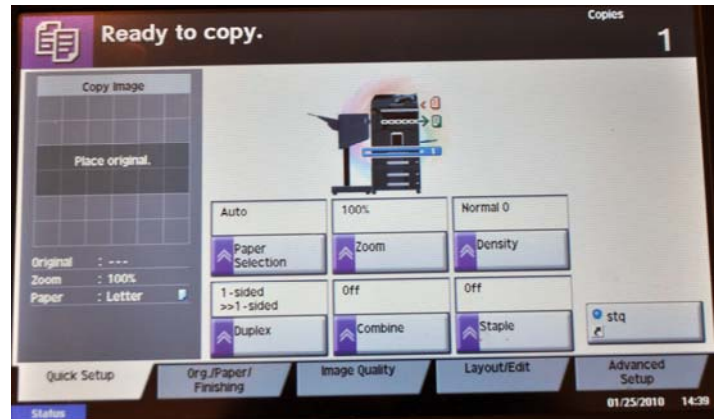
## WHAT WE LIKED

- High quality output with 600 x 600 dpi resolution.
- Overall excellent image quality was produced from the Kyocera TASKalfa 420i.
- Great print and copy densities.
- Excellent resolution in both copy and printer modes.
- Great halftone reproduction in printer and copier modes when printing all grayscale shades.
- Text was clean, crisp, and could be read without any difficulty. Even small sizes remained legible.
- Gradations were smooth in all grayscale shades.
- No saturation was noticed in any of BERTL's test files.
- Excellent production of photos, business charts and graphs.

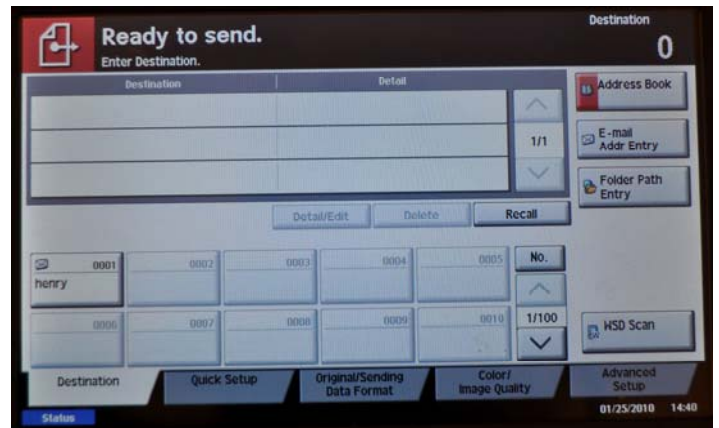
## PROGRAMMING THE CONTROL PANEL

A control panel's ease of use—or lack of—can often have a significant effect on user productivity. The harder it is to select frequently used options such as duplexing, document finishing, etc., the more time the user has to spend programming the device and the less productive they are. The Kyocera TASKalfa 420i's control panel incorporates a large 8.5" color touch screen and several hard keys. The hard buttons on the left allow the user to switch between different functions such as Copy, Send, Document Box, Program and Application. Also contributing to the productivity of this device is the ability to Scan-to and Print-from a USB flash drive instantly allowing users a more portable way of accessing their documents.

BERTL was exceptionally impressed with its animated step-by-step instructions for device management and its intuitive help guides.



When users select the Copy function on the left side of the control panel, the Copy screen appears. Here users can specify copy settings such as paper selection, zoom, simplex/duplex, orientation, staple and etc.

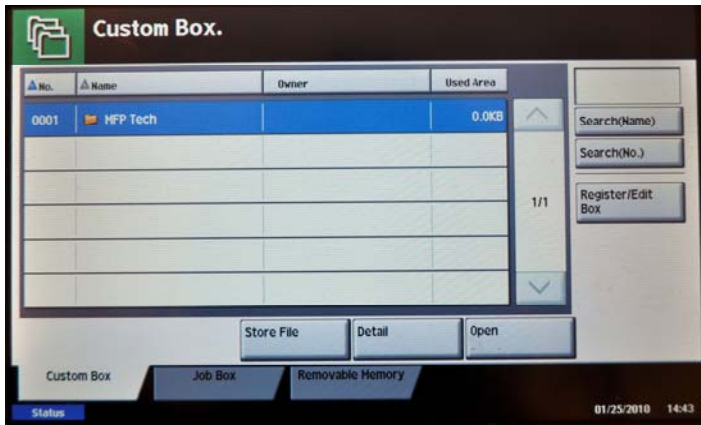


Users have the option of sending electronic documents to a multitude of places with options that include:

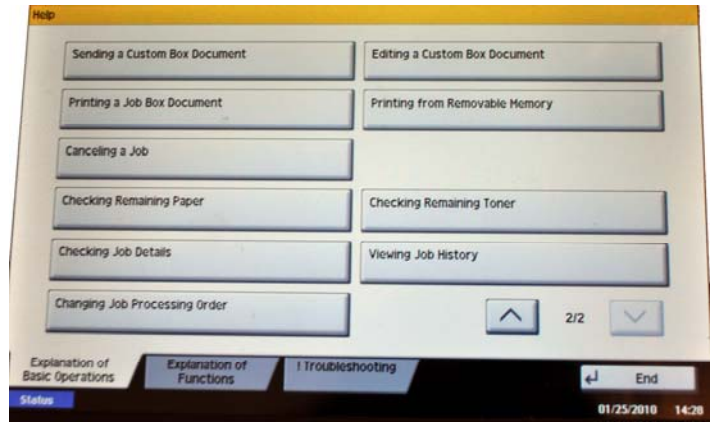
- Scan to network server
- Scan to remote email destinations via SMTP
- Scan to application (Electronic Document Management System/Repositories)
- Scan to Microsoft Exchange 2000 Web Folders
- Scan to Windows XP client SMB or FTP
- Scan to Folder
- Scan to USB

**Selections Required for Frequently Used Copy Functions**

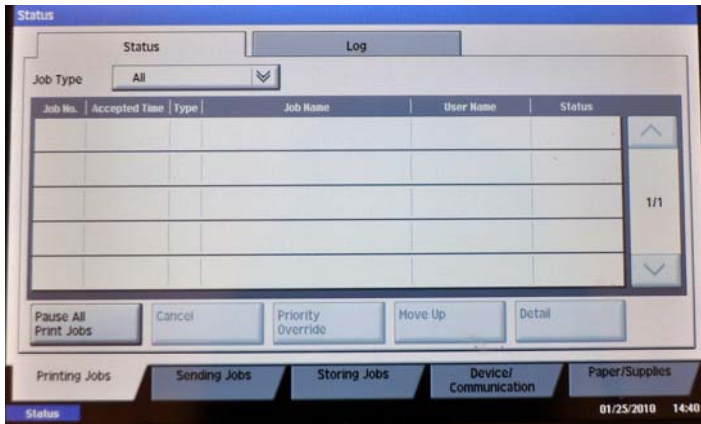
Photo Mode	2
Reduce to 78%	2
Corner Staple	2
1:2	2
2:2	2



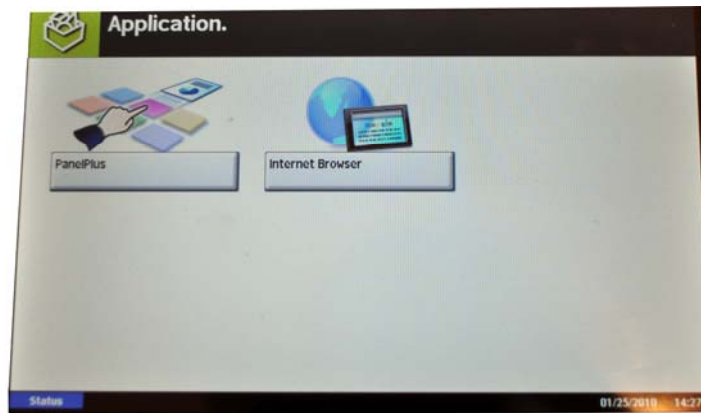
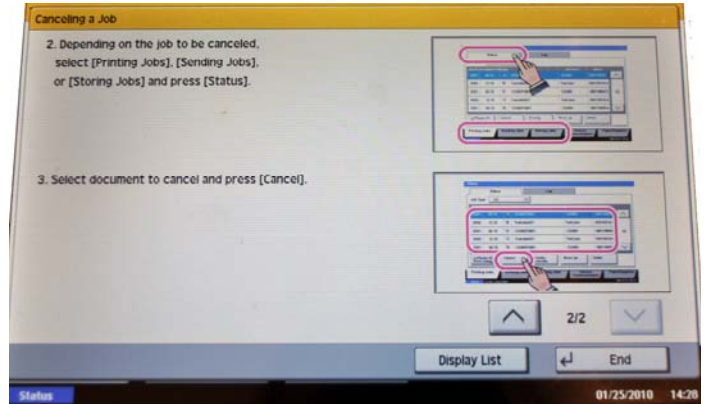
The Document Box function allows users to store, retrieve and send commonly used documents straight from the device simply by utilizing the Custom Box, Job Box and Removable Memory features.



**Above and below:** The TASKalfa 420i offers intuitive help guides on the control panel for all functions. BERTL Analyst found these help file to be extremely helpful.



Using the Status/Job Cancel function users can check the status and history of jobs and cancel the jobs being processed or waiting to be printed.



In the Application screen users can access loaded applications such as the internet and print out web pages directly from the control panel.



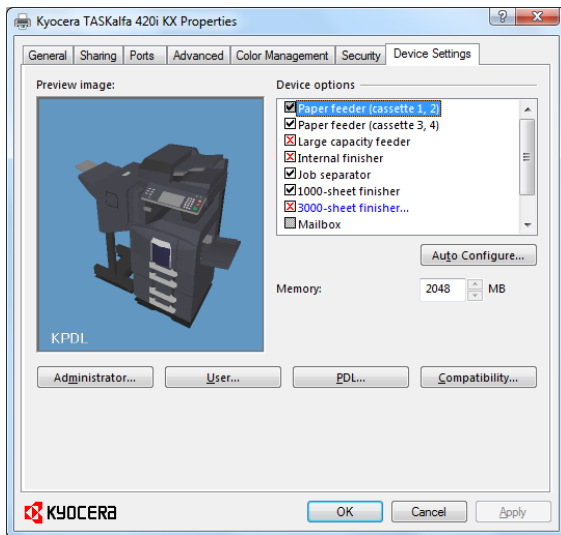
Device administrators can add a company logo as a background image which can be viewed when the power button is pushed on the control panel.

## PCL AND POSTSCRIPT PRINT DRIVERS

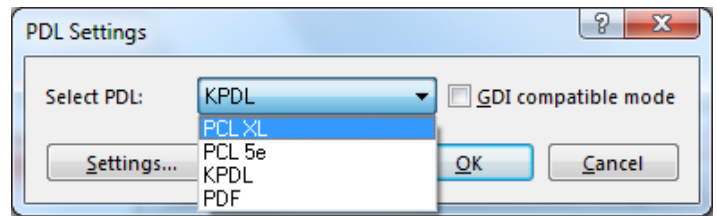
The TASKalfa 420i comes standard with Kyocera's KX Driver, PDF Direct Print and unique PRESCRIBE Solution for on-demand black and white document creation and output. The KX Driver allows users to access features integrated into each TASKalfa MFP from one common print driver.

Print-Driver Checklist	
Do print drivers have identical user interfaces?	Yes
Are print drivers interfaces identical to other models from this vendor?	Yes
Are finishing, duplex and paper tray selections located on the first tab?	Yes
Bi-directional communication within print drivers?	Yes
Auto device configuration from within print driver?	Yes
Does print-driver installation require rebooting of the workstation?	No
Are print-driver deployment processes included?	Yes
Are print-driver deployment guidelines and procedures included?	Yes

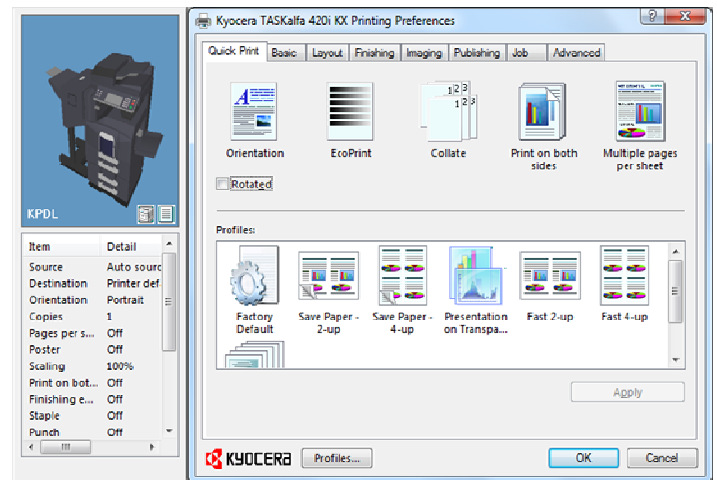
\*The driver settings and tabs can be configured or customized by the device administrator or the user. Based on the driver configuration the paper selection can be located on the second tab when the "Quick Print" tab is set to default. If the "Basic" tab is set as the default tab, then the paper selection is shown on the first tab.



In order to specify system defaults and installed options, administrators select the Printers and Faxes folder from the Microsoft Windows' Start menu, and then select the TASKalfa 420i's print driver. Administrators can manually indicate which options are installed, or, by selecting the Auto Configuration option in the upper right, installed options will be automatically indicated in the print driver.



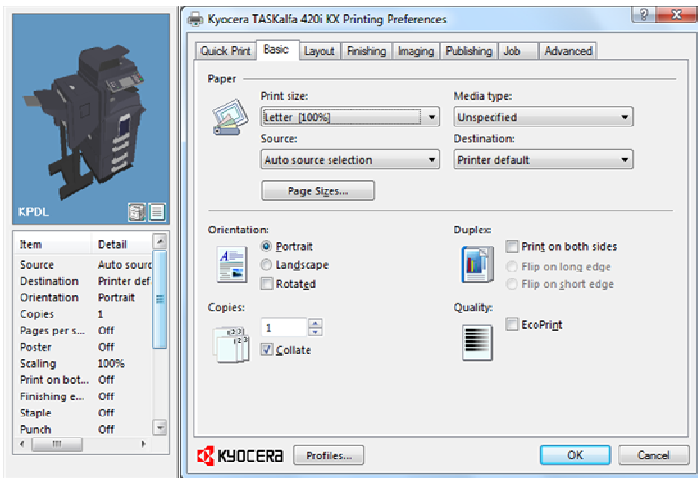
A unique feature offered with all Kyocera devices is the ability to modify the PDL within a single interface. Users have the option of selecting their driver from a dropdown list suitable to their printing needs. This functionality allows users to take full advantage of the unique features integrated into each TASKalfa MFP directly from one common print driver.



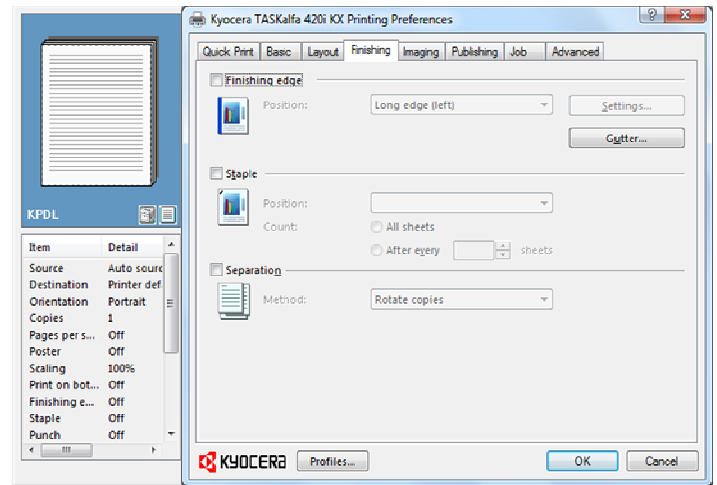
The TASKalfa 420i's PCL 6 driver's first tab, QuickPrint, provides profile settings for quick access to frequent and commonly used tasks. Additional options include the ability to change the orientation, collate, print on both sides and multiple pages per sheet (N-up) as well as EcoPrint mode.

Also note that the left side of each tab displays a graphic image indicating the current print-job settings enabled, as well as a graphic of the TASKalfa 420i showing how it is currently configured.

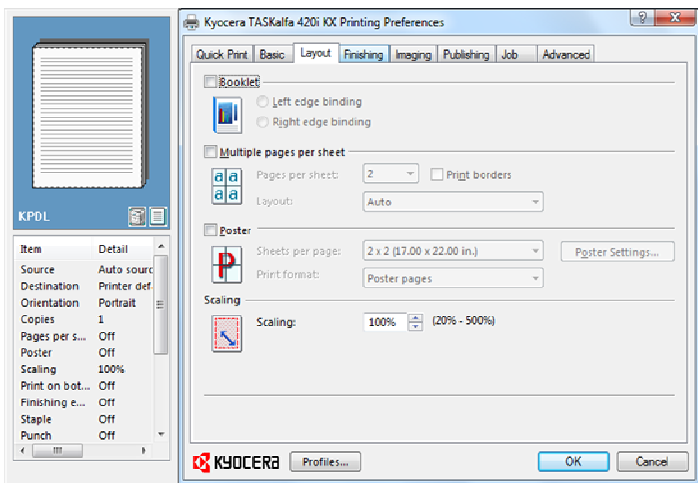




The PCL6 driver's Basis tab provides options for specifying the paper size, source media type, and destination. Additional options include the ability to change the document orientation, number of copies, print on both sides, and color (CMYK, Black & White, and EcoPrint) settings.

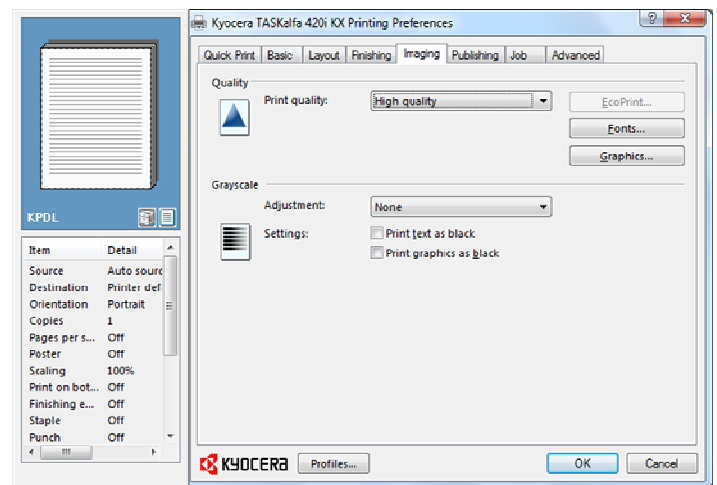


The Finishing tab lets users apply several finishing options to print jobs using the optional output devices. Options include Finishing Edge, Gutter, Staple, Punch, and Separation.

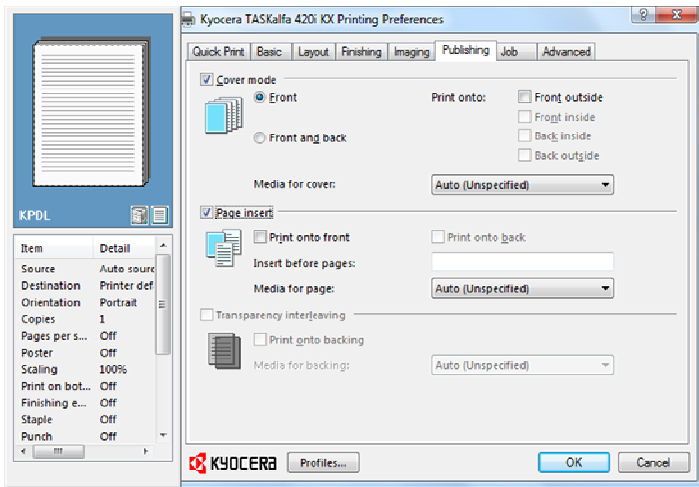


In the Layout tab users can arrange document data on printed pages without changing the original document. Depending on the device options users can choose from the following;

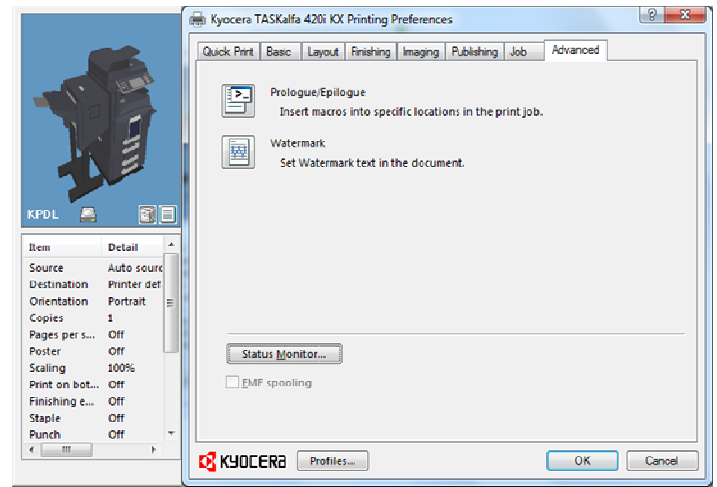
- **Booklet Mode** – prints a multi-page document in a book format that can be folded and stapled
- **Multiple Pages per Sheet** – prints more than one document page on a single sheet
- **Poster** – prints a large banner using several sheets of paper
- **Scaling** – increases or decreases the print size



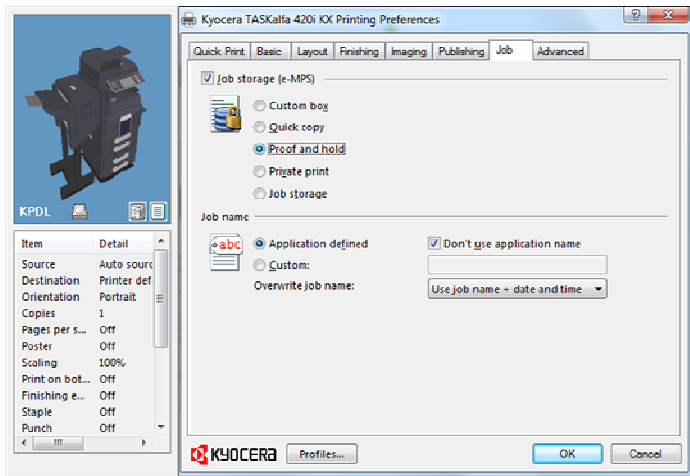
The Imaging tab contains options for print job quality, trapping, color mode, printer profiles, adjustments, and settings such as print text as black.



The Publishing tab lets users specify extra sheets to be added to print jobs. Users can select from Cover Mode (Front/Back), Page Insert, and transparency interleaving which inserts a blank or printed page between transparencies.



The Advance tab contains features that extend the capabilities of the printing system. Options include Prologue/Epilogue (used for special printing commands), Watermark (displays semi-transparent text), Color Optimizer, and the status monitor used to display the printing system status messages.



The Job tab lets users manage print jobs on the printing system's standard hard disk. Storage options include Custom Box, Quick Copy, Proof and hold, Private print, and Job storage. Users can also set the name of the job for easy identification.

## ROUTINE MAINTENANCE

The reliability factor that really sets Kyocera apart from the competition is their long life consumables and components, as well as their maintenance intervals and warranties. The long life consumables reduce the frequency of major component replacement and downtime. Kyocera's maintenance intervals and patented Amorphous Silicon drum technology with high yield of 500,000 pages deliver a durable imaging system day-in and day-out.

Also contributing to the TASKalfa 420i is animated, step-by-step instructions for routine tasks, such as clearing paper misfeeds or replacing toner. BERTL found these animated screens very helpful when performing these routine maintenance tasks.

Maintenance Checklist	
Load ink/toner while running?	No
Requires rear access for access to maintenance items?	No
Requires side access for access to maintenance items such as toner cartridge?	No
All-in-one imaging units?	No
User-disposable waste item(s)?	Yes

## ROUTINE MAINTENANCE—REPLACING TONER



In order to replace the TASKalfa 420i's toner, the user must first open the front panel by simply pulling the door open.



Before removing the toner cartridge first push the blue release latch upward.



**Above and below:** Once the latch is released the user simply slides the toner container out for replacement. Overall, BERTL found replacing the toner cartridge to be very easy.



## CHANGING THE WASTE TONER CONTAINER



**Above and below:** Users must periodically empty the TASKalfa 420i's waste toner collection container. After opening the front door, the user pulls the container out and twists counterclockwise to release the waste toner box.



## MISFEED ACCESS



The document feeder's misfeed access area is accessed by lifting up the ADF cover.



To access the front misfeed area, the user first opens the front door. Once open, the user can use the green levers to clear any jammed paper.



**Above and below** To access the left side misfeed area, the user must first slide out the finisher, then open the side panel by lifting this gray button and lowering the panel. Once open, the user can clear any misfeeds.



The TASKalfa 420i has two paper transport misfeed areas.

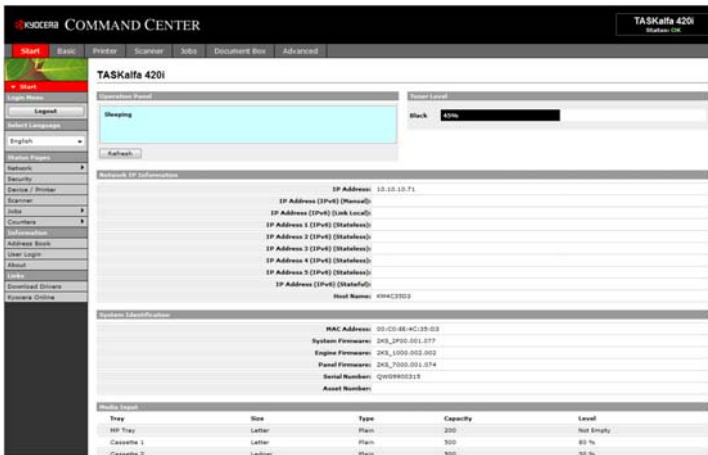


**Above and next page:** Misfeeds in the 1,000-sheet finisher can be accessed by pulling the finisher away from the device and/or lifting up the top panel to clearing any jammed paper.

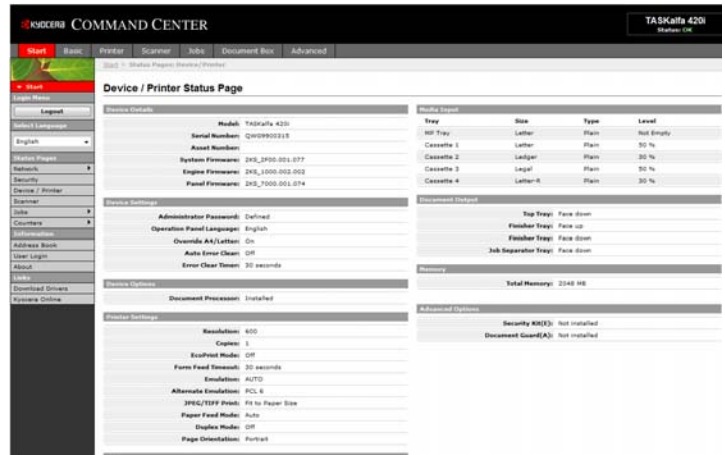


## CLIENT UTILITIES AND DEVICE MANAGEMENT

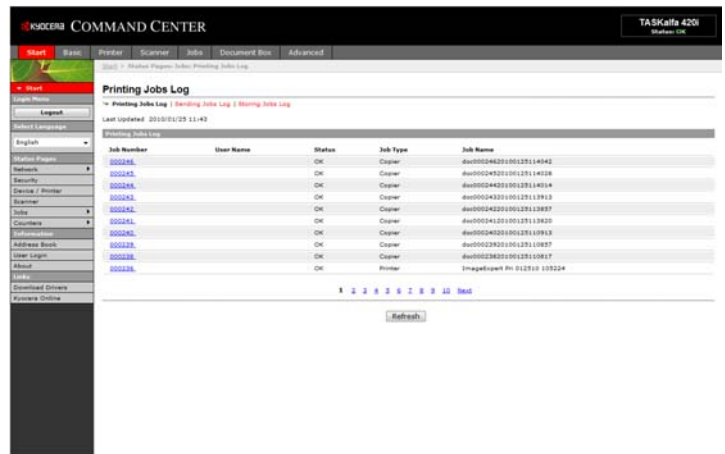
In order to take the best and most efficient advantage of a device and its capabilities, as well as ensure maximum uptime, clients need an efficient way to access and monitor the device. Kyocera Mita offers many features and options to help productivity for all users. Kyocera's HyPAS (Hybrid Platform for Advanced Solutions) is a software development platform for advanced solutions, which allows users to further optimize the TASKalfa 420i with powerful integrated solutions designed to boost their business activities. HyPAS delivers a broad range of options that enable the TASKalfa 420i to seamlessly integrate with widely accepted software applications and operate in virtually any environment.



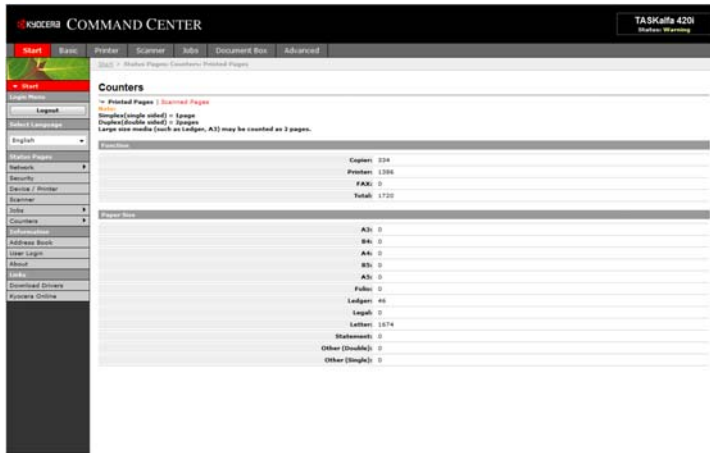
The TASKalfa 420i's Command Center web page enables users to check device status, Network IP information, System identification, as well as the status of paper sources and toner status.



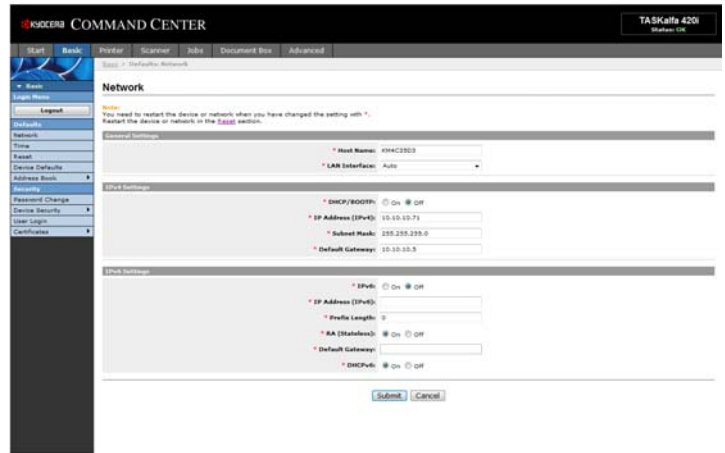
The Device / Printer Status page provides users with detail information associated with the devices current software levels, device settings, options, media input, document output settings.



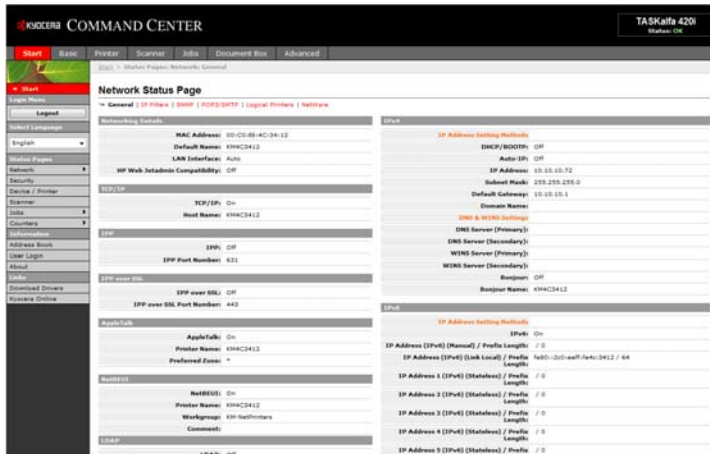
From the Printing Jobs Log users can view a list of jobs which have been submitted to the device for printing. Users can use this screen to check if their jobs have been completed. Similar logs are available for jobs that were sent out and stored on the device.



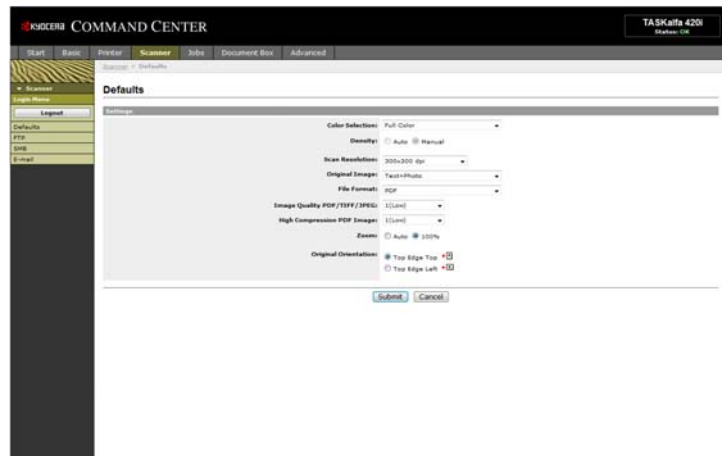
The Counters page provides users and administrators with an accounting of how the device is being used. Administrators can easily view the total number of pages printed, scanned, copies, and faxed. In addition, administrators can also get an accounting of the paper sizes being used.



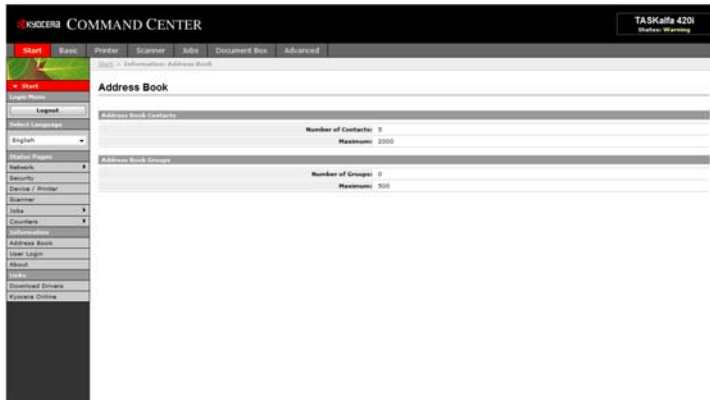
The Kyocera TASKalfa 420i's embedded Web page enables administrators to manage, monitor and maintain the TASKalfa 420i.



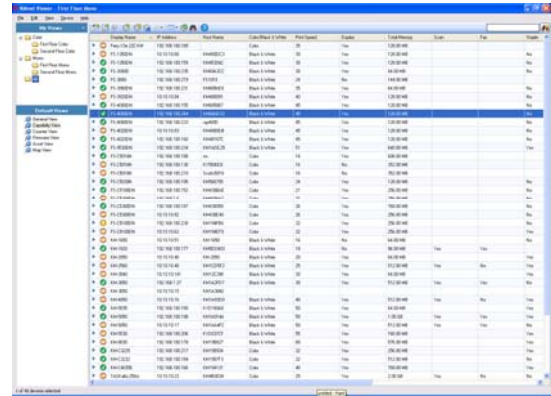
The Network Status Page provides users with very detail network protocol information such as the IP Filters, SNMP, POP3, SMTP, Netware, etc.



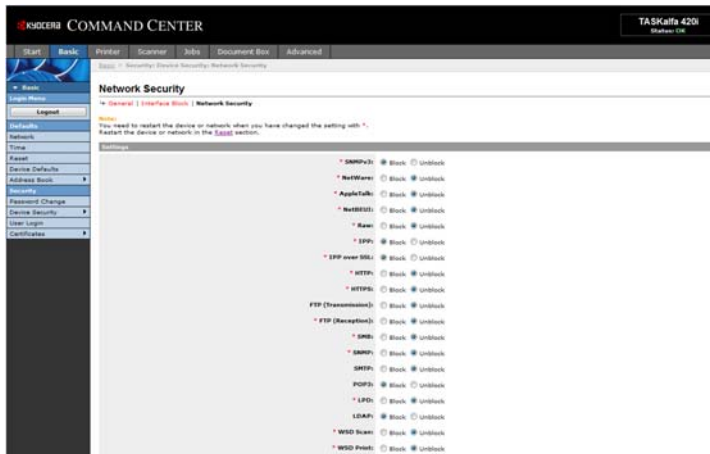
Administrators can modify all of the device's default settings directly from the embedded web interface. This includes settings for functions such as printing, copying, scanning, faxing and security settings.



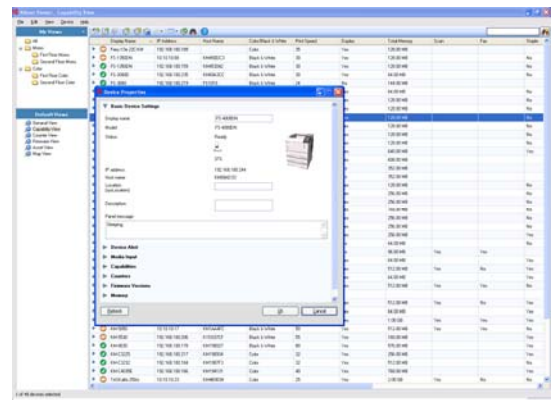
Administrators can manage address books by adding and deleting addresses as needed.



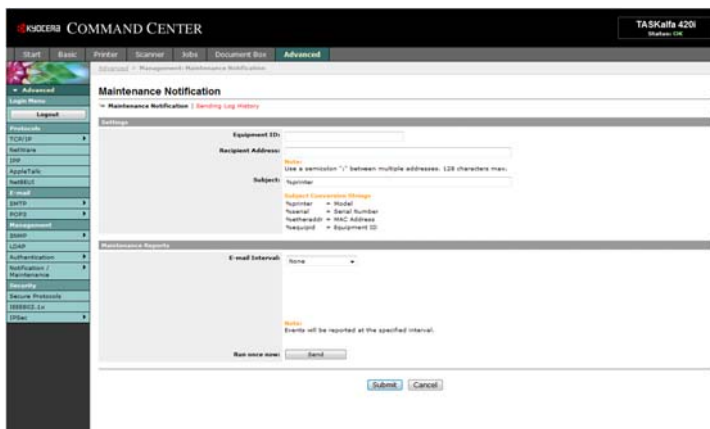
KMnet Viewer is very comprehensive and easy to use tool designed specifically to aid administrators with managing large number of devices on their network.



Depending on an organizations internal security requirement, administrators have a multitude of options from which they can choose to lock down a device.



KMnet Viewer provides bi-directional communication between connected devices and the administrator, locally or remotely.



Administrators can configure the system so that specified users are automatically sent an e-mail message indicating that a specified status condition has occurred, such as toner is low.



## WHAT WE LIKED

- Exceptionally easy-to-use with a well designed large color touch screen layout.
- All consumables are quick and easy to replace.
- BERTL found replacing the toner cartridges and waste container to be easy.
- BERTL found it easy to access and remove any misfeeds.
- Kyocera Mita's Command Center is a very well designed and capable web-based utility that enables network administrators to manage the TASKalfa remotely via the network. This utility makes it very easy to monitor the device and supplies directly from a client workstation. BERTL liked the ability to set up automatic e-mail alerts and maintenance notification.
- Kyocera's KX Driver allows users to access the unique features integrated into each TASKalfa MFP from one common print driver, minimizing user acclimation when switching between devices.
- Advanced document workflow solutions such as KYOCapture and KYOCapture Express, integrate with many of the industry's leading document management systems, including SentryFile, LaserFishe, Documentum, and Microsoft SharePoint.
- KMnet Viewer allows administrators to monitor all devices on the network, including those from other vendors. KMnet Viewer provides proactive information showing problems before affecting users.
- KMnet Viewer also provides visual, audible and E-mail notification of all device alerts to users, administrators and service locations. Administrators can easily customize alerts and create device groups for easy reporting and device management.
- With KMnet Viewer administrators can configure, view, and monitor fleets of devices remotely as well as gather print job statistics and print reports.
- HyPAS technology is a powerful and scalable software solution platform designed to optimize Kyocera's MFPs with integrated solutions that enable the TASKalfa 420i to seamlessly integrate with widely accepted software applications and operate in virtually any environment.
- Vast security options include IPv6 and IPsec, Security Watermark, PrintQ Manager Secure Job Release, Secure Printing, Custom Box and optional Data Security Kit for hard disk overwrite and encryption.

## MEDIA INPUT

The TASKalfa 420i comes standard with dual 500-sheet adjustable paper drawers and a 200-sheet multi-purpose tray. For high-volume printing, a 3,000-sheet Large Capacity Tray option increases the total capacity to 4,200 sheets. A wide range of paper sizes and weights are supported. Paper sizes up to 11 x 17 inches are supported through the bypass and the 500-sheet trays. Standard bond and post cards run easily with great dependability.

Advanced finishing options are available on this device to fulfill any task. Users can choose from a space saving 500-sheet internal finisher, 1,000-sheet finisher or a 3,000 sheet finisher with booklet folding and multi bin mailbox options.



Media Handling Checklist	
Minimum/Maximum Media Weight (Paper Trays)	16 lb bond ( 60 gsm)/ 90 lb index (312 gsm)
Minimum/Maximum Media Weight (3,000-sheet Large Capacity Tray)	16 lb bond ( 60 gsm)/ 28 lb bond (105 gsm)
Minimum/Maximum Media Weight (Multi-Purpose Tray)	12 lb bond (60 gsm)/ 110 lb index (216 gsm)
Feeds maximum media weight from all sources?	No
Offset Stacker	Yes (Optional)
Finisher	Yes (optional)
Hole Punch	Yes (optional)
Additional Options	
KYOcapture, KYOcapture Express, Fax Memory, Platen Cover, Job Separator JS-700(B), Attachment Kit AK-700, Stand, Data Security Kit (E) - Security Overwrite and Encryption for Print/Copy/Scan, Printed Document Guard Kit (A) and Optional Document Processor (DP-760(B) or DP-750(B)).	

The Kyocera TASKalfa 420i shown here is equipped with the following:

**Standard:** two 500-sheet paper cassettes and a 200-sheet multi-purpose tray.

**Optional:** two 500-sheet paper cassettes and a 1,000-sheet finisher.



The 200-sheet multi-purpose tray can be adjusted by lowering the tray down and sliding these levers into place.

## LOADING MEDIA

Media Loading Checklist	
Drop-in loading of a full ream of paper?	Yes
Corner separators in paper trays?	No
Spring-loaded ramps in paper trays?	Yes
Geared media size side guides?	No
Captured rear media guide?	No
Automatic paper size detection?	Yes



**Above and next column:** In order to adjust the paper drawers to accommodate different paper sizes, the user squeezes and slides the green guides into place. BERTL found it easy to adjust the paper drawers.



The optional 1,000-sheet finisher supports 3-position stapling, stacking and a variety of paper weights and sizes for complex finishing jobs.

## MEDIA OUTPUT AND FINISHING

The TASKalfa 420i offers three high-performance finishers that give documents a professional look and feel. Users can choose from a 3,000-sheet finisher, 1,000-sheet finisher or a 500-sheet internal finisher. All models offer stapling, stacking and more advanced options.

Optional 3,000 Sheet Finisher DF-760(B)	
Stack/Staple Capacity	Main Tray: 3,000 Sheets; Sub Tray(B): 200 Sheets; Sub Tray(C): 50 Sheets / 50 Sheets: 8.5" x 11"; 30 Sheets: 8.5" x 14", 11" x 17"
Paper Size	Main Tray: 8.5" x 11" – 11" x 17"; Sub Tray(B): 5.5" x 8.5" – 11" x 17"; Sub Tray(C): 8.5" x 11"
Paper Weight	Main Tray: 16 lb Bond - 90 lb Index Duplex; 16 lb Bond - 120 lb Index Simplex; Sub Tray (B/C): 16 - 24 lb Bond
Edge Staple Position	3 Positions: Top Left, Bottom Left, Center Bind
Optional Multi-Bin Mailbox	(MT-720) Includes 7 Trays; Supports 16 lb Bond – 90 lb Index Stack Capacity per Bin: 100 Sheets: 5.5" x 8.5", 8.5" x 11"; 50 Sheets: 8.5" x 14", 11" x 17"
Optional Punch	(PH-5A) 2 and 3 Hole Punch Unit, Supports 8.5" x 11" - 11" x 17", 16 lb Bond - 110 lb Index
Optional Saddle Stitch/Fold	(BF-720) Supports 8.5" x 11", 8.5" x 14", 11" x 17", 16 lb Bond – 120 lb Index; Over 20 lb Bond Single Sheet Folding Capacity: 1-3 Sheets - 30 Booklets; 4-6 Sheets - 20 Booklets; 7-16 Sheets - 10 Booklets

Optional 1,000 Sheet Finisher DF-780(B)	
Stack/Staple Capacity	1,000 Sheets; 50 Sheets: 8.5" x 11"; 30 Sheets: 8.5" x 14", 11" x 17"
Paper Size / Weight	8.5" x 11" – 11" x 17 / 16 – 32 lb Bond
Edge Staple Position	3 Positions: Top Left, Bottom Left, 2 Point Long Edge

Optional Internal Finisher DF-720(B)	
Stack/Staple Capacity	500 Sheets; 30 Sheets: 8.5" x 11"; 20 Sheets: 8.5" x 14", 11" x 17"
Paper Size / Weight	8.5" x 11" - 11" x 17" / 16 - 31 lb Bond
Edge Staple Position	1 Position

## WHAT WE LIKED

- 200-sheet Multi Purpose tray is easily adjusted to accommodate different paper sizes including envelopes.
- Paper capacity can be expanded up to 4,200 sheets for longer uninterrupted operation.
- Users can choose from a 3,000-sheet sheet, 1,000-sheet finisher or a 500-sheet internal finisher for advanced finishing options.
- The 3,000-sheet finisher supports multi-position stapling, with options including 2/3 hole punch, multi-tray, 7 bin mailbox, and booklet folding for advanced in-house finishing.
- Support the following paper materials: Bond Paper, Recycled Paper, Transparencies, Cardstock and Envelopes.
- Paper drawers can handle 16 lb - 28 lb Bond, while the Multi Purpose tray can 12 lb Bond - 110 lb Index.
- BERTL Analyst found it very easy to adjust and fill the paper drawers.

Kyocera really stepped up to the plate with the TASKalfa 420i with its exceptional performance speeds, outstanding image quality and intuitive ease of use. During BERTL's extensive testing of the TASKalfa 420i, this office-monochrome, laser-based MFP for mid-size to large workgroups performed exceptionally well. BERTL observed the following when testing the TASKalfa 420i:

- Tested simplex network-print speed was as fast as 42 ppm with both the Postscript and PCL6 drivers, matching Kyocera's rated speed of 42 ppm.
- Tested duplex network-printer productivity was extremely productive up to 36 ppm with the Postscript driver.
- In BERTL's job stream test the PCL6 driver completed the stream job test in 6 minutes and 23 seconds, running at 38 ppm, which translates to an efficiency rate of 91%. Using the Postscript driver the efficiency rate was up to 88%.
- Tested copy First-Page-Out-Time was 3.99 seconds off the platen glass and 5.97 seconds using the automatic document feeder.
- Tested total job time in simplex mode was 42.5 cpm; matching Kyocera's rated copy speed of up to 42 ppm.
- In the image quality department, the TASKalfa 420i was exceptional when compared to competitor devices in the same class.
- The high-resolution large color touch screen provides exceptional state-of-the-art help guides, along with excellent clarity, and well organized menus, users will find it very easy to navigate.
- Various Scan-to-functions let users share information at the touch of a button. These include Scan-to-Email for rapid delivery, Scan-to- Folder for automated archiving, and Scan-to-USB that lets a user scan a document to a USB clip drive as well as Scan-to-FTP, Scan-to-SMB, WSD Scan and TWAIN Scan.
- The optional Super G3 Fax Module and Internet Fax expands the unit into a powerful workgroup fax.
- Kyocera's Command Center Internet Services, which provides detailed device and consumables' status, and provides network configuration, access management and accounting controls for administrators, is a capable and easy to use tool.
- The TASKalfa 420i was exceptionally easy to use and maintain, from the large and easy-to-navigate touch screen to using the print drivers and device-management software. Ease of maintenance is very good, with front-loading toner cartridges that even novice users will find easy to replace, and uncomplicated misfeed access and paper-replacement.
- BERTL Analysts were very impressed with the TASKalfa's document management capabilities. Kyocera's KYOcapture offers users a convenient way to manage and capture content for electronic archiving and document distribution to major document management systems such as SentryFile, LaserFishe, Documentum, and Microsoft SharePoint and many others.
- HyPAS technology is a powerful and scalable software solution platform designed to optimize Kyocera's MFPs with integrated solutions that enable the TASKalfa 420i to seamlessly integrate with widely accepted software applications and operate in virtually any environment.
- Vast security options include: IPv6 and IPsec, Security Watermark, PrintQ Manager Secure Job Release, Secure Printing, Custom Box and optional Data Security Kit for hard disk overwrite and encryption making this product a cut above the rest at this price point.
- Versatile media handling and flexibility, with the ability to print on stock as heavy as 110 lb. index (216 gsm) and paper sizes up to 11"x 17".
- Multiple finishing choices designed to handle any workgroup's basic finishing requirements including the ability to collate, stack and staple.
- Ability to expand paper supply to up 4,200 sheets.
- The Kyocera TASKalfa 420i has superior energy and supply-saving features, which include fast warm-up and first copy out times, duplex and combine copy modes, long life components and consumables, low noise levels, minimal ozone emissions and is energy star and restriction of hazardous substances (ROHS) compliant.
- In compliance with Section 508 with features that include: a large, easy-to-view color display, an adjustable control panel, visual and audible alerts, and easy-to-access paper drawers.

Considering Kyocera's TASKalfa 420i exceptional overall performance in testing, outstanding ease of use, and brilliant office- TASKalfa 420i monochrome image quality, BERTL awards the TASKalfa 420i its Five-Star *Exceptional* rating and highly recommends the device for mid-size to large offices and workgroups that require a reliable and fully functional monochrome MFP.

OFFICE

## About BERTL

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The success of an organization depends on its ability to manage its information and assets. An effective workflow process requires the complex integration of information, devices, software and people.

IT managers, office managers, and other knowledge-management professionals need to know what digital imaging devices would best serve their specialized workflow processes.

BERTL's services are designed around this real-world framework, delivering business consumers the independent analysis and insight needed to make critical decisions about digital imaging's role in their organization.

## Independent Analysis and Insight

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BERTL's reports, comparative data, and strategic guides look at digital imaging through the eyes of the business user. The research examines not only the technical features, but also vertical market applications, and business benefits. The impact on worker productivity is a primary concern.

BERTL is 100 percent independent. It receives no funding from manufacturers and all product evaluations and reports are published at BERTL's own expense for its subscribers. Business users worldwide trust BERTL for objective, unbiased analysis of digital imaging systems.

## BERTL Services

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### Reports and Star Ratings

BERTL analysts provide detailed reports on the technical and practical benefits of thousands of color and monochrome workgroup, office, graphic arts, and production devices.

### Product Specifications

DataCheck Gen II provides the most current competitive data on printers, copiers, MFPs, fax devices, wide format printers, scanners, and more.

### News, Interviews, and Analysis

The ITchat online magazine provides insight into the dynamics and trends of the digital imaging marketplace through interviews, feature articles, and software reviews.

## BERTL Awards

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BERTL analysts recognize the leading devices and software solutions in the annual BERTL's Best awards. BERTL also honors the performance of manufacturers in the annual Readers' Choice selections.

## Contact BERTL

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