

bizhub 4750/4050

User's Guide: Introduction



Table of contents

1	Introduction		
	1.1	Welcome	1-2
	1.2	User's Guides	1-3
		Booklet manuals	
		User's guides included in User's Guide CD-ROM	
	1.3	Notations and symbols used in this manual	
		Procedural instruction	
		Symbols used in this manual	
		Notations of application names	
	1.4	Safety information	1_5
		Warning and precaution symbols	
		Meaning of symbols	
	1.5	Legal restrictions on reproduction	. 1-10
	1.6	Regulation notices	
		For EU member states only	
2	Before !	Using This Function	
_			
	2.1	CD-ROM supplied with this machine Driver & Utilities CD-ROM	
		User's Guide CD-ROM	
	2.2	Installation location and environment	
	2.2.1	Installation location	
	2.2.2	Installation environment	
	2.2.2	installation styliotiment	2-0
3	About T	his Machine	
	3.1	Checking the name of each part	3-2
	5.1	Front side	
		Rear side	
	3.2	Checking the option configuration	3-4
		List of optional components	
		Front view (with optional devices installed)	
		Rear side view (with optional devices installed)	3-6
4	Turning	the Power On or Off	
	4.1	About power supply	4-2
	4.2	Turning the Power Switch ON or OFF	4-3
	4.3	Using the Power key	4-4
		When using the Power key as a Power Save key	4-4
		When using the Power key as a Sub Power OFF key	4-5
5	Loading	g the Original	
	5.1	Loading the original into the ADF	
		Original available for ADF	
		Loading the original into the ADF	
	5.2	Loading the original onto the Original Glass	
		Original available on the Original Glass	
		Loading the driginal onto the Original Glass	3-4

6	Loadi	ng Paper	
	6.1	Paper	6-2
	6.1.1	Checking the available paper types	6-2
	6.1.2	Checking the available paper sizes	6-3
	6.1.3	Precautions for correct operations	6-4
		Unavailable paper	
		Storing paper	
	6.2	Loading paper into the Manual Feed Tray	
		How to load paper into the Manual Feed Tray	
	6.3	Loading paper into Tray 1/2/3/4	
_			
7	Contr	ol Panel	
	7.1	Names and functions of Control Panel keys	7-2
	7.2	Changing the angle of the Control Panel	7-4
	7.3	Touch Panel	7-5
	7.3.1	Operating the Touch Panel	7-5
		Tap	
		Flick	
	7.3.2	Displaying the Keypad	7-5
	7.3.3	Switching the entry or selection screen	7-6
	7.3.4	Precautions on using the Touch Panel	7-6
	7.4	Entering characters	7-7
	7.5	Screen layout	7-8
	7.5.1	Main Menu	7-8
	7.5.2	Main screen	7-9
	7.5.3	Icon types	
		Icons indicating the status of this machine	
		Icons to change to selection screen	
	7.6	Changing the function assigned to a Register key (for administrators)	7-11
8	Viewi	ng Active Job and Job Logs	
		Displaying the Job List screen	8-2
		Viewing the active job	
		Viewing job logs	8-3
0	Lagin	Cavaan	
9	Login	Screen	
		Logging in to this machine	
		Performing user authentication (MFP authentication)	
		Performing user authentication (external server authentication)	
10	0		
10	Speci	fications	
	10.1	Checking the specifications of this machine	10-2
	10.2	Checking the specifications of optional devices	
		Paper Feed Unit PF-P11	
		Paper Feed Unit PF-P12Fax Kit FK-512	
		Fax Kit FK-512 Finisher FS-P02	
		Authentication Unit AU-201	
		Authentication Unit AU-201S	
	10.3	Standard operating life of consumables and periodic replacement parts	10-7
	-		

11 Trademarks and Copyrights

Trademark acknowledgements	11-2
OpenSSL Statement	11-2
OpenSLP License	11-4
Bonjour	11-4
NetSNMP License	11-6
Kerberos	11-8
WPA Supplicant	11-11
Copyright	11-11
Note	11-11
SOFTWARE LICENSE AGREEMENT	
FIRMWARE UPDATES	11-13
PRINTER LICENSE	11-13
CARTRIDGE LICENSE AGREEMENT	11-13
Fuser/Imaging Unit License - Single Use: Please read before opening	11-13
Our Concern for Environmental Protection	11-14

12 Index

1 Introduction

Introduction

Welcome 1.1

Thank you for purchasing this machine.

To obtain maximum performance from this product and to learn how to use it effectively, please read this User's Guide as necessary.

1

1.2 User's Guides

Booklet manuals

Manual title	Overview	
[Quick Start Guide]	This guide describes how to perform basic operations of this machine and configure initial settings.	
[Safety Information Guide]	This guide describes notes and precautions that should be followed to use this machine. Please be sure to read this manual before using this machine.	

User's guides included in User's Guide CD-ROM

Manual title	Overview
[User's Guide: Introduction]	This guide contains information that is useful to know before beginning to operate this machine, such as the name of each part and how to turn the power on and off, use the Control Panel , and load an original or paper.
[User's Guide: Print Functions]	This guide describes how to install the printer driver as well as basic usage and applications.
[User's Guide: Copy Functions]	This guide describes various methods to make copies.
[User's Guide: Scan Functions]	This guide describes scan transmission operations and necessary preparations. You can scan a paper document, convert it to digital data, and send the result to the computer or server.
[User's Guide: Fax Functions]	This guide describes fax operations and necessary preparations.
[User's Guide: Network Fax Functions]	This guide describes fax (Internet fax) operations using the network and necessary preparations.
[User's Guide: PC-FAX Functions]	This guide describes PC- Fax operations and necessary preparations. You can send the original data created on the computer by fax directly without printing it out to paper.
[User's Guide: Advanced Functions]	This guide describes how to install optional license kits and functions that can be used by installing the license kits.
[User's Guide: Maintenance/Trouble-shooting]	This guide describes how to replace consumables, clean this machine, and perform troubleshooting.
[User's Guide: Description of Utility Keys]	This guide describes Utility settings such as [User Settings] and [Administrator Settings] for this machine.
[User's Guide: Applied Functions]	This guide describes the special usages of this machine such as how to use Web Connection , manually install the printer driver, configure print settings using Linux, and use the authentication unit.

1.3 Notations and symbols used in this manual

Procedural instruction

- This check mark symbol shows a precondition of a procedure.
- 1 This format number "1" represents the first step.
- 2 This format number represents the order of consecutive steps.
 - → This symbol indicates a supplementary explanation of a procedural instruction.

Symbols used in this manual

↑WARNING

Improper handling can cause serious injury or death.

↑CAUTION

• Improper handling can cause minor injury or damage to houses and property.

NOTICE

This symbol indicates a risk that may result in damage to this machine or documents. Follow the instructions to avoid property damage.



This symbol indicates supplemental information of a topic as well as options required to use a function.

Reference

This symbol indicates reference functions related to a topic.

Related setting

This shows the settings related to a particular topic for any user.

Related setting (for the administrator)

This shows the settings related to a topic only for administrators.

Product and key names

Notations used in this manual	Description
[]	An item enclosed in brackets [] indicates a key name on the Touch Panel or computer screen, or the name of a user's guide.
Bold text	This presents a key name, part name, product name, or option name on the Control Panel .

Notations of application names

This manual describes application names as shown below.

Application name	Notations used in this manual
PageScope Direct Print	Direct Print
PageScope Web Connection	Web Connection
PageScope Data Administrator	Data Administrator
PageScope Mobile (for iPhone/iPad/Android)	Mobile (for iPhone/iPad/Android)



1.4 Safety information

This section contains detailed instructions on the operation and maintenance of this machine. To achieve optimum utility of this device, all operators should carefully read and follow the instructions in this manual.

Please read the following section before connecting the machine to the supply. It contains important information related to user safety and preventing equipment problems.

Please keep this manual in a handy place near the machine.

Make sure you observe all of the precautions appear in each section of this manual.

Reference

Some parts of the contents of this section may not correspond with the purchased product.

Warning and precaution symbols

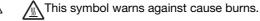
The following indicators are used on the warning labels or in the manuals to categorize the level of safety warnings.

∴WARNING	Ignoring this warning could cause serious injury or even death.
ACAUTION	Ignoring this caution could cause injury or damage to property.

Meaning of symbols



A triangle indicates a danger against which you should take precaution.





A diagonal line indicates a prohibited course of action.

This symbol warns against dismantling the device.



A solid circle indicates an imperative course of action.

This symbol indicates you must unplug the device.

Disassemble and modification

<u>∧</u>WARNING

 Do not modify this product, as a fire, electrical shock, or breakdown could result. If the product employs a laser, the laser beam source could cause blindness.



• Do not attempt to remove the covers and panels which have been fixed to the product. Some products have a high-voltage part or a laser beam source inside that could cause an electrical shock or blindness.



Power cord

MARNING

 Use only the power cord supplied in the package. If a power cord is not supplied, only use the power cord and plug that is specified in POWER CORD INSTRUCTION. Failure to use this cord could result in a fire or electrical shock.



Do not use the power cord other than being supplied in the package. If a
power cord is not supplied, only use the power cord and plug that is
specified in POWER CORD INSTRUCTION. Failure to use this cord could
result in a fire or electrical shock.



Power cord

• Do not scratch, abrade, place a heavy object on, heat, twist, bend, pull on, or damage the power cord. Use of a damaged power cord (exposed core wire, broken wire, etc.) could result in a fire or breakdown. Should any of these conditions be found, immediately turn OFF the power switch, unplug the power cord from the power outlet, and then call your authorized service representative.





Power source

↑ WARNING

 Do not use the power source voltage other than being specified on the machine. Failure to do that could result in a fire or electrical shock.



 Do not use a multiple outlet adapter to connect any other appliances or machines.
 Use of a power outlet for more than the marked current value could result



Do not use an extension cord in principle. Use of an extension cord could cause a fire or electrical shock. Contact your authorized service repre-



CAUTION

in a fire or electrical shock.

sentative if an extension cord is required.

 The outlet must be near the equipment and easily accessible. Otherwise you can not pull out the power plug when an emergency occurs.



Power plug

⚠WARNING

 Do not unplug and plug in the power cord with a wet hand, as an electrical shock could result.



• Plug the power cord all the way into the power outlet. Failure to do this could result in a fire or electrical shock.



ACAUTION

 Do not place any objects around the power plug, as the power plug may be difficult to pull out when an emergency occurs.



• Do not tug the power cord when unplugging. Pulling on the power cord could damage the cord, resulting in a fire or electrical shock.



 Remove the power plug from the outlet more than one time a year and clean the area between the plug terminals. Dust that accumulates between the plug terminals may cause a fire.



Grounding

⚠ WARNING

Make sure to ground this product. (Connect the power cord to an electrical outlet that is equipped with a grounding terminal.) Failure to do so and an unlikely event of leakage could result in a fire or electrical shock.



Installation

⚠ WARNING

 Do not place a flower vase or other container that contains water, or metal clips or other small metallic objects on this product. Spilled water or metallic objects dropped inside the product could result in a fire, electrical shock, or breakdown.



Should a piece of metal, water, or any other similar foreign matter get inside the product, immediately turn OFF the power switch, unplug the power cord from the power outlet, and then call your authorized service representative.



Do not use flammable sprays, liquids, or gases inside or near this machine. Do not clean the inside of this machine using a flammable gas duster. A fire or explosion could result.





CAUTION

After installing this product, mount it on a secure base. If the unit moves
or falls, it may cause personal injury.



 Do not place the product in a dusty place, or a site exposed to soot or steam, near a kitchen table, bath, or a humidifier. A fire, electrical shock, or breakdown could result.



• Do not place this product on an unstable or tilted bench, or in a location subject to a lot of vibration and shock. It could drop or fall, causing personal injury or mechanical breakdown.



 Do not let any object plug the ventilation holes of this product. Heat could accumulate inside the product, resulting in a fire or malfunction.



Ventilation

A CAUTION

 Using this product in a poorly ventilated room for a long time or producing a large volume of copies or prints may cause the odor of exhaust air from the machine. Ventilate the room well.



Actions in response to troubles

⚠ WARNING

Do not keep using this product, if this product becomes inordinately hot
or emits smoke, or unusual odor or noise. Immediately turn OFF the power switch, unplug the power cord from the power outlet, and then call your
authorized service representative. If you keep on using it as is, a fire or
electrical shock could result.



 Do not keep using this product, if this product has been dropped or its cover damaged. Immediately turn OFF the power switch, unplug the power cord from the power outlet, and then call your authorized service representative. If you keep on using it as is, a fire or electrical shock could result.



! CAUTION

 The inside of this product has areas subject to high temperature, which may cause burns.



When checking the inside of the unit for malfunctions such as a paper misfeed, do not touch the locations (around the fusing unit, etc.) which are indicated by a "Caution HOT" caution label.

Consumables

↑ WARNING

Do not throw the toner cartridge or toner into an open flame. The hot toner may scatter and cause burns or other damage.



⚠ CAUTION

• Do not leave toner-related parts (toner units, PC drum units, imaging units or developing units) within easy reach of children. Licking any of these parts or ingesting toner could damage your health.



 Do not store toner-related parts (toner units, PC drum units, imaging units or developing units) near devices susceptible to magnetism, such as precision equipment and data storage devices, otherwise they may malfunction. They could cause these products to malfunction.



Do not force open the toner-related parts (toner units, PC drum units, imaging units or developing units). If toner tumbles from the toner bottle, take utmost care to avoid inhaling it or even getting skin contact.



If toner lands on your skin or clothing, wash thoroughly with soap and water.



 If you inhale toner, move to a place with fresh air and gargle with a lot of water repeatedly. Should you get symptoms such as coughing, seek medical advice.



 If you get toner into your eyes, immediately rinse them with running water for over 15 minutes. Seek medical advice if irritation persists.



If you swallow toner, rinse out your mouth and drink a few glasses of water. Seek medical advice if necessary.



When moving the machine

A CAUTION

 Whenever moving this product, be sure to disconnect the power cord and other cables. Failure to do this could damage the cord or cable, resulting in a fire, electrical shock, or breakdown.



 When moving this product, always hold it at the locations specified in the User's Guide or other documents. If the unit is moved while held at locations other than those specified, it may fall, causing severe personal injury.



When using the machine

⚠ WARNING

 If you use an implantable medical equipment (cardiac pacemaker, etc.), do not bring the IC card reader close from the implant within 12 cm at all times. The radio waves may affect implantable medical equipment (cardiac pacemaker, etc.) operations.



ACAUTION

 When using the machine, do not look at the light of the lamp for a prolonged time. Eyestrain could result.



Papers

A CAUTION

 Do not use stapled paper, conductive paper (such as silver paper or carbon paper) or treated heat-sensitive/inkjet paper, otherwise a fire may result.



When the Fax is not installed:

Before successive holidays

A CAUTION

 Unplug the product when you will not use the product for long periods of time.



1.5 Legal restrictions on reproduction

Certain types of originals must never be reproduced with the purpose or intent to pass reproductions of such originals off as the originals.

The following is not a complete list, but is meant to be used as a guide to responsible reproduction.

<Financial Instruments>

- Personal checks
- Traveler's checks
- Money orders
- Certificates of deposit
- Bonds or other certificates of indebtedness
- Stock certificates

<Legal Originals>

- Food stamps
- Postage stamps (canceled or uncanceled)
- Checks or drafts drawn by government agencies
- Internal revenue stamps (canceled or uncanceled)
- Passports
- Immigration papers
- Motor vehicle licenses and titles
- House and property titles and deeds

<General>

- Identification cards, badges, or insignias
- Copyrighted works without permission of the copyright owner

In addition, it is prohibited under any circumstances to reproduce domestic or foreign currencies, or works of art without permission of the copyright owner.

When in doubt about the nature of an original, consult with legal counsel.

NOTICE

This machine provides the forgery prevention function in order to prevent financial instruments from being reproduced illegally.

We appreciate your understanding that printed images may infrequently have some noise or image data may not be stored under certain circumstances due to this forgery prevention function.

1.6 Regulation notices

For EU member states only

This symbol means: Do not dispose of this product together with your household waste!

Please contact the Local Authority for appropriate disposal instructions. In the case of a new device being purchased, the used one can also be given to our dealer for appropriate disposal. Recycling of this product will help to conserve natural resources and prevent potential negative consequences for the environment and human health caused by inappropriate waste handling.



This product complies with RoHS (2011/65/EU) directive.

Before Using This Function

2.1

2 Before Using This Function

2.1 CD-ROM supplied with this machine

Driver & Utilities CD-ROM

Item	Overview
[Printer/FAX]	Allows you to install the printer driver and fax driver. For details, refer to [User's Guide: Print Functions] and [User's Guide: PC-FAX Functions].
[Scanner]	Allows you to install the scanner driver. For details, refer to [User's Guide: Scan Functions].
[PageScope Utilities]	Various utilities are provided to optimize functions of this machine. Clicking this displays the download page.

User's Guide CD-ROM

Contains various user's guides.

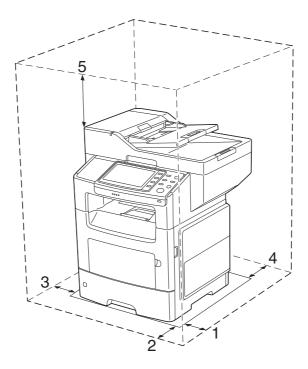
For details on the user's guide types, refer to page 1-3.

2

2.2 Installation location and environment

2.2.1 Installation location

To simplify tasks such as operations, consumable replacement, or inspection, create an installation environment as shown below.



No.	Orientation:	Space Requirement
1	Right	4-5/16 inches (110 mm)
2	Front	12 inches (304.8 mm)
3	Left	2-3/4 inches (70 mm)
4	Rear	3-15/16 inches (100 mm) When the optional Finisher is installed: 6-11/16 inches (170 mm)
5	Тор	31-1/2 inches (800 mm)

2.2.2 Installation environment

Install this machine in a place enough to endure its weight.

Model Name	Weight
bizhub 4750	Approx. 52-15/16 lb (24 kg)
bizhub 4050	Approx. 52-15/16 lb (24 kg)

Install this machine in the place shown below.

- Stable and horizontal (inclination around this machine: 1 degree or less) location with a hard, even surface
- To check whether the installation location is level, use a normal round pencil. If the pencil rolls, the location is not horizontal. Ensure this machine is horizontal, and make sure that there are no objects such as cables caught under this machine.
- Location close to a dedicated power outlet that is grounded
- Location close to your computer
- Sufficiently spacious location that ensures ease of use and appropriate air ventilation
- Location in which ambient temperature is 60°F to 90°F (15.6 °C to 32.20 °C) and humidity is 8% to 80%

Do not install this machine in the locations described below.

- Location exposed to direct sunlight
- Location in which excessive differences in temperature and humidity are detected due to close proximity to a heater or cooling equipment
- Location exposed to direct flame or combustible materials
- Location close to equipment such as a copy machine or air-conditioner that generates noise, or equipment such as a refrigerator that generates a strong magnetic or electromagnetic force
- Location close to water, water pipes, or fluid (drink) containers, corrosive chemicals, or corrosive gases such as ammonia
- Location in which fine metallic pieces such as clips or staples are scattered
- Location subject to thumping vibrations



- Do not connect to the same power outlet as that used for a high-current equipment.
- If this machine is installed in or moved to an environment subject to excessive changes in temperature, condensation will form in this machine, which may reduce printing quality. If condensation is detected, leave this machine for approximately 1 hour before using it to adjust to the environment.
- When using a humidifier or vaporizer in the room where this machine is installed, use purified or distilled water. If impurities in water are emitted into the air, they will collect in this machine and reduce printing quality.

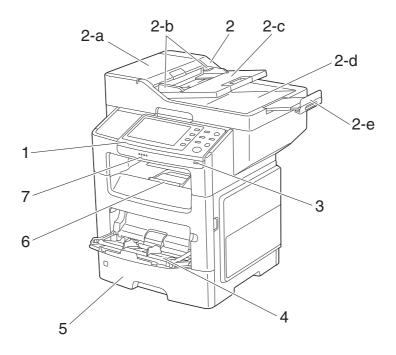
3 About This Machine

3.1

3 About This Machine

3.1 Checking the name of each part

Front side



No.	Name
1	Control Panel
2	Automatic Document Feeder (ADF)
2-a	ADF Feed Cover
2-b	Document Guide
2-c	Document Feed Tray
2-d	Document Output Tray
2-е	Document Stopper
3	USB Host Port
4	Manual Feed Tray
5	Tray 1
6	Output Tray
7	Data Indicator

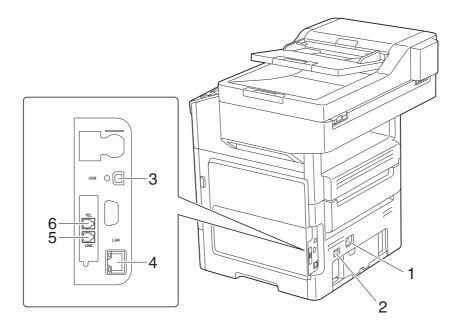
^{*} A USB hub can be connected to the **USB Host Port**. A USB memory device and **Authentication Unit** (IC card type) can be simultaneously connected to a USB hub one by one.

NOTICE

When using a USB hub, use a self-powered hub. If you use a bus-powered hub, the hub could malfunction.

Rear side

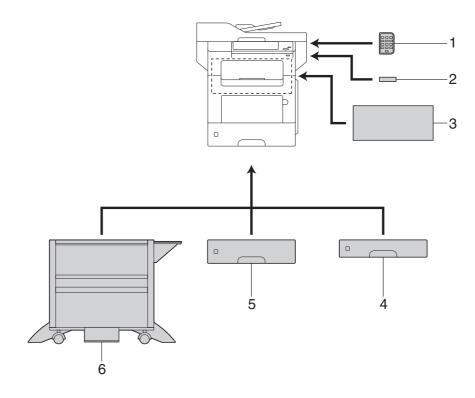
This view shows the machine with the optional ${\it Fax}$ Kit ${\it FK-512}$ and ${\it Mount}$ Kit ${\it MK-P03}$ installed.



No.	Name
1	Power Connection
2	Power Switch
3	USB Printer Port (Type B)
4	Ethernet (LAN) Port (1000Base-T/100Base-TX/10Base-T)
5	LINE (telephone line) Jack
6	TEL (telephone) Jack

3.2 Checking the option configuration

List of optional components



No.	Name	Description		
1	Keypad KP-P01	Located on the side of the Control Panel . Allows you to enter numbers by using the Hardware Keypad .		
2	Authentication Unit AU-201/AU-201S	Performs user authentication by scanning information recorded on the IC card or the NFC-compatible mobile terminal (Android terminal).		
3	Finisher FS-P02	Staples the printed sheets. For staples, use Staple Kit SK-501 .		
4	Paper Feed Unit PF- P11	Allows you to load up to 250 sheets of paper. There are three slots in which the Paper Feed Unit can be installed.		
5	Paper Feed Unit PF- P12	Allows you to load up to 550 sheets of paper. There are three slots in which the Paper Feed Unit can be installed.		
6	DESK DK-P02	Used to install this machine on the floor. This component may not be able to be used depending on the region the machine is used in.		
The fol	lowing optional component	s are built into this machine and are not shown in the figure above.		
7	Fax Kit FK-512	Used to operate this machine as a fax machine.		
8	Mount Kit MK-P03	This unit is required to install the Fax Kit.		
9	Local Interface Kit EK-P04	Used to add an RS-232C port.		
10	i-Option LK-101 v3	Supports the web browser function that is one of the advanced functions.		
11	i-Option LK-106	Used to add a bar code font, which is one of special fonts.		
12	i-Option LK-107	Used to add a unicode font, which is one of special fonts.		
13	i-Option LK-108	Used to add an OCR font, which is one of special fonts.		
14	i-Option LK-111	Supports the ThinPrint function, which is one of a number of advanced functions.		

No.	Name	Description	
15	Network Interface Card NC-P03	Used to make this machine available in a wireless network environment.	

Reference

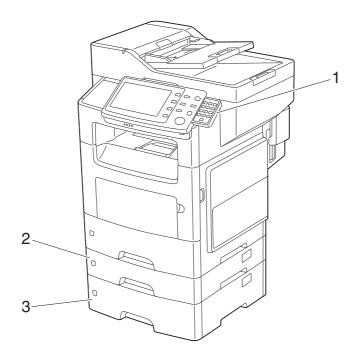
For details on how to register **i-Option** license kits, refer to Chapter 2 "Registering License Kits" in [User's Guide: Advanced Functions].

NOTICE

When removing and installing an optional device, turn this machine off, then disconnect the power plug from the outlet.

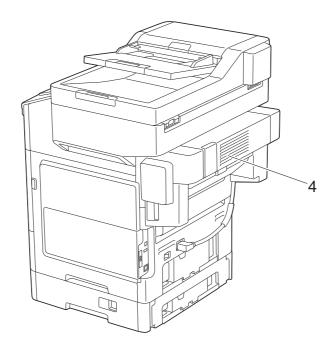
3.2

Front view (with optional devices installed)



No.	Name
1	Keypad KP-P01
2	Paper Feed Unit PF-P11
3	Paper Feed Unit PF-P12

Rear side view (with optional devices installed)



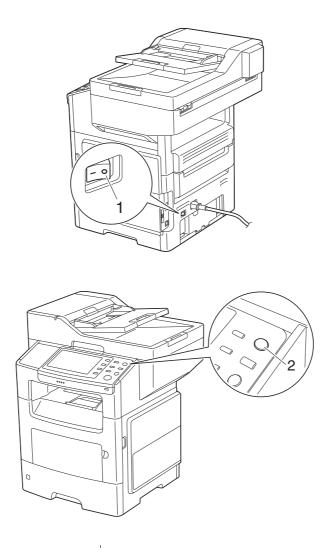
No.	Name
4	Finisher FS-P02



4 Turning the Power On or Off

4.1 About power supply

This machine has two power switches: **Power Switch** outside the machine and **Power** key on the **Control Panel**.



No.	Name	Description	
1	Power Switch	Press this switch when turning the main power of this machine on or off, or when restarting this machine.	
2	Power key	Press this key to switch this machine to Power Save mode. This function reduces power consumption and has more significant power saving effect. For details, refer to page 4-4.	

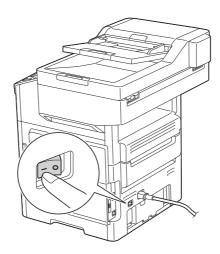
NOTICE

While printing, do not turn the **Power Switch** off or press the **Power** key. Otherwise, it may lead to a paper iam.

If the **Power Switch** is turned off or the **Power** key is pressed while this machine is running, the system deletes the currently loaded data or communicating data as well as queued jobs.

4.2 Turning the Power Switch ON or OFF

- Connect the **Power Cord** to this machine.
- Connect the Power Cord to the power outlet.
- When turning the main power on, press | of the **Power Switch**.



A screen appears to show that this machine is in the process of start-up. When the main menu icon is displayed, this machine is ready to use.

4 When turning the main power off, press \bigcirc of the **Power Switch**.

NOTICE

When restarting this machine, turn the **Power Switch** off and on again after 10 or more seconds have elapsed. Not doing so may result in an operation failure.

4

4.3 Using the Power key

Press the Power key to switch this machine to Power Save mode.

You can select [Power Save] or [Sub Power OFF] as Power Save mode that is activated when the **Power** key is pressed.

To configure settings: [Utility] - [Administrator Settings] - [System Settings] - [Power Supply/Power Save Settings] - [Power Save Key] (The default varies depending on the region the machine is used in.)

When using the Power key as a Power Save key

When the **Power** key is pressed, the status of this machine changes as shown below. Depending on how long the **Power** key is pressed, the state of the power saving mode to be activated will differ.

Power key	Status of this ma-chine	Status of LED	Description
Short press	Low Power mode (Default)	Flash: Blue	Turns off the display of the Touch Panel to reduce power use. This machine returns to Normal mode when it receives data or faxes or when the user operates the Touch Panel .
	Sleep mode	Flash: Blue	Provides a greater power saving effect than Low Power mode. The time required to return to Normal mode is longer than that from Low Power mode. This machine returns to Normal mode when it receives data or faxes or when the user operates the Touch Panel .
Hold down	Sub Power OFF	Light up: Orange	Provides a greater power saving effect than Sleep mode. While the sub power is turned off, this machine can receive data or faxes, however, it cannot scan or print an original. If data or faxes are received while the sub power is turned off, they are printed when the machine returns to Normal mode. To enable the machine to return to Normal mode from the Sub Power OFF status, press the Power key again.

Related setting (for the administrator)

- Press the **Power** key to select whether to switch to Low Power or Sleep mode.
 To configure settings: [Utility] [Administrator Settings] [System Settings] [Power Supply/Power Save Settings] [Power Save Settings] (Default: [Low Power])
- You can select whether Deep Sleep mode is activated to further reduce power use when this machine is in Sleep mode. When the machine is in Deep Sleep mode, it will not return to Normal mode when the user operates the **Touch Panel**. To return to Normal mode, press the **Power** key.
 To configure settings: [Utility] [Administrator Settings] [System Settings] [Power Supply/Power Save Settings] [Power Consumption in Sleep Mode] (Default: [Enabled])

4

When using the Power key as a Sub Power OFF key

When the **Power** key is pressed, the status of this machine changes as shown below. Depending on how long the **Power** key is pressed, the state of the power saving mode to be activated will differ.

Power key	Status of this ma-chine	Status of LED	Description
Short press	Sub Power OFF	Light up: Orange	Provides a greater power saving effect than Sleep mode. While the sub power is turned off, this machine can receive data or faxes, however, it cannot scan or print an original. If data or faxes are received while the sub power is turned off, they are printed when the machine returns to Normal mode. To enable the machine to return to Normal mode from the Sub Power OFF status, press the Power key again.
Hold down	ErP Auto Power OFF	Flash: Orange	This function provides a more significant power saving effect than the Sub Power OFF mode, which is close to the state where the main power is turned off. In ErP Auto Power OFF mode, this machine cannot receive data or faxes, and also it cannot scan or print an original. To enable the machine to return to Normal mode from the ErP Auto Power OFF status, press the Power key again.

Loading the Original

5.1

5 Loading the Original

5.1 Loading the original into the ADF

Original available for ADF

Item	Specifications	
Original types	Plain paper (14lb to 32 lb (52 g/m ² to 120 g/m ²))	
Max. original size	A4 or Legal (Fax only: 8-1/2 inches × 39-3/8 inches (215.9 mm × 1000 mm))	
Original loading capacity	Max. 50 sheets (20 lb (75 g/m ²))	

Do not load the following originals into the **ADF**. Doing so may cause an original paper jam, or damage the originals.

- Wrinkled, folded, curled, or torn originals
- Highly translucent or transparent originals, such as transparencies or diazo photosensitive paper
- Coated originals such as carbon-backed paper
- Original that is less than basic weight 14 lb (52 g/m²) or greater than 32 lb (120 g/m²)
- Originals that are bound, for example, with staples or paper clips
- Originals that are bound in booklet form
- Originals with pages bound together with glue
- Originals with pages that have had cutouts removed or that are cutouts
- Label sheets
- Offset printing masters
- Photographic Paper
- Glossy original such as gloss coated paper

Loading the original into the ADF

The **ADF** feeds original sheets one by one in order from the top, and automatically loads them. It also loads a 2-sided original automatically.

The ADF is helpful when loading a large number of original.

Put the first page of an original at the top, and load the original into the **Document Feed Tray** with the side to be photocopied facing upward.



→ Load the original by positioning its top side to the left. When loading in a different orientation, be sure to specify the loading direction of originals.

NOTICE

5.1

Do not load more than 50 sheets of paper at one time into **Document Feed Tray**, and do not load sheets of paper above the upper-limit indicator guide. Doing so may cause the originals to jam, damage the originals and/or **ADF** failure. However, if the original contains more than 50 pages, it can be scanned separately.

If the original is loaded at an angle into the **ADF**, it may slow down the scanning speed of the original. Before loading the original into the **ADF**, be sure to align its pages.

2 Slide the **Document Guide** to fit the loaded original.

5.2

5.2 Loading the original onto the Original Glass

Original available on the Original Glass

Item	Specifications
Original types Sheets, books (two-page spread), cards, three-dimensional objects	
Max. original size	A4 or Legal
Original loading capacity	Max. 22-1/16 lb (10 kg)

Loading the original onto the Original Glass

Using the **Original Glass** allows you to scan an original such as a book or card, which is not available in the **ADF**.

- 1 Open the ADF.
- 2 Load the original into the Original Glass with the side to be photocopied facing downward.



- → Place the original by positioning its top side to the left and by aligning it with the **\(\)** mark on the far left of the **Original Scale**. When loading in a different orientation, be sure to specify the loading direction of originals.
- → When copying a highly transparent original such as transparencies or tracing paper, place a blank sheet that is the same size as the original on the original to enable clear scanning.

NOTICE

Do not place an original heavier than 22-1/16 lb (10 kg) on the original glass. Furthermore, do not use excessive force to press down on a book or any other form of original that must be spread on the original glass. Otherwise, the machine may be damaged or a failure may occur.

3 Close the ADF.

NOTICE

When placing a thick book or a three-dimensional object on the original glass, you do not need to close the **ADF** to scan it. A bright light may be emitted through the **Original Glass**. Be careful not to look directly at it. Note, however, that the light coming through the original glass is not a laser beam, and will not expose the user to related hazards.

6 Loading Paper



6 Loading Paper

6.1 Paper

6.1.1 Checking the available paper types

Paper type	Paper weight	Paper capacity	
Plain paper Recycled paper Single Side Only ^{*1} Special Paper ^{*2} Colored Paper ^{*4} User Paper 1 ^{*5} User Paper 2 ^{*5}	15-15/16 lb to 23-15/16 lb (60 g/m² to 90 g/m²)	Manual Feed Tray: 100 sheets Tray 1: 550 sheets 6 Paper Feed Unit PF-P11: 250 sheets 6 Paper Feed Unit PF-P12: 550 sheets 6	
Letterhead ^{*3}	15-15/16 lb to 23-15/16 lb (60 g/m² to 90 g/m²)	Manual Feed Tray: 100 sheets Tray 1: 550 sheets	
Thick 1 User Paper 3 ^{*5}	24-3/16 lb to 31-15/16 lb (91 g/m² to 120 g/m²)	Manual Feed Tray: 20 sheets Tray 1: 550 sheets 6 Paper Feed Unit PF-P11: 250 sheets 6 Paper Feed Unit PF-P12: 550 sheets 6	
Thick 1+ User Paper 4 ^{*5}	32-3/16 lb to 41-3/4 lb (121 g/m² to 157 g/m²)	Manual Feed Tray: 20 sheets	
Thick 2 User Paper 5 ^{*5}	42 lb to 43-3/8 lb (158 g/m ² to 163 g/m ²)	Manual Feed Tray: 20 sheets	
Postcards*7	-	Manual Feed Tray: 20 sheets	
Envelopes	-	Manual Feed Tray: 10 sheets	
Label sheets	-	Manual Feed Tray: 30 sheets Tray 1: 550 sheets ⁶ Paper Feed Unit PF-P11: 250 sheets ⁶ Paper Feed Unit PF-P12: 550 sheets ⁶	

^{*1} Paper on which you will not print on both sides (for example, when something is already printed on the front side).

NOTICE

Paper other than plain paper is referred to as special paper. When loading special paper into the paper tray, specify the correct paper type. Otherwise, it may result in a paper jam or image error.



You can select whether or not to allow printing on both sides of letterhead paper in [Letterhead duplex print permission settings] of this machine (default: [Restrict]). To allow printing on both sides of letterhead paper, use plain paper as the letterhead paper type.

^{*2} Fine and other special paper.

^{*3} Paper where company names, preset text, and other text are already printed.

^{*4} Colored paper.

^{*5} Paper that is registered as a frequently used paper type.

^{*6} Standard capacity when the paper weight is 20 lb (75 g/m²).

^{*7} General postcards.

6.1.2 Checking the available paper sizes

Paper feed port	Allowable sizes
Manual Feed Tray	A4, A5, A6, B5 (JIS), B6 Legal (8-1/2 × 14), Letter (8-1/2 × 11), SP Folio (8-1/2 × 12-11/16), Executive (7-1/4 × 10-1/2), Statement/Invoice (5-1/2 × 8-1/2) Foolscap (8 × 13), 8-1/8 × 13-1/4, F4:Folio (8-1/4 × 13), Government Legal (8-1/2 × 13), 8-1/2 × 13-1/2, 16K, Kai 16, Kai 32 Photo size 4 × 6/Photo size 10 × 15 (100 × 150 mm) Envelope C10, Western-style envelope #6, Envelope DL, Western-style envelope #2, End-opening envelope #3, End-opening envelope #4 B5 (ISO), UK Quarto (8 × 10), Government letter (8 × 10-1/2) Width: 3 inches to 8-1/2 inches (76.2 mm to 215.9 mm), Length: 5 inches to 14 inches (127 mm to 355.6 mm)
Tray 1	A4, A5, A6, B5 (JIS), B6 Legal (8-1/2 \times 14), Letter (8-1/2 \times 11), SP Folio (8-1/2 \times 12-11/16), Executive (7-1/4 \times 10-1/2), Statement/Invoice (5-1/2 \times 8-1/2) Foolscap (8 \times 13), 8-1/8 \times 13-1/4, F4:Folio (8-1/4 \times 13), Government Legal (8-1/2 \times 13), 8-1/2 \times 13-1/2 Government letter (8 \times 10-1/2)
Paper Feed Unit	A4, A5, B5 (JIS) Legal (8-1/2 × 14), Letter (8-1/2 × 11), Executive (7-1/4 × 10-1/2), Government legal (8-1/2 × 13)
Auto Duplex Unit	A4 Legal (8-1/2 \times 14), Letter (8-1/2 \times 11), SP Folio (8-1/2 \times 12-11/16) F4:Folio (8-1/4 \times 13), Government Legal (8-1/2 \times 13), 8-1/2 \times 13-1/2, Foolscap (8 \times 13) Width: 8-1/4 inches to 8-1/2 inches (209.6 mm to 215.9 mm), Length: 11 inches to 14 inches (279.4 mm to 355.6 mm)



- For all paper sizes, the printable area for printing is the area excluding 3/16 inch +/- 1/16 inch (4.2 mm +/- 2 mm) from the paper edge and the printable area for copying is the area excluding 3/16 inch +/- 1/16 inch (4 mm +/- 2 mm) from the paper edge. When configuring a user setting of the page size using the application, specify the paper size within the printable area so that the optimal result is obtained.
- On an envelope, it is only possible to print on the front (address) side. Also, the result of printing on the seal overlapping part on the front side cannot be assured. The area that cannot be assured varies depending on envelope types.
- The page margin setting is determined depending on your application. If the default paper size or margin is selected, there may be some part of the paper that is not able to be printed on. To obtain the optimal result, configure the custom setting so that an image is included in the printable area of this machine.

6.1.3 Precautions for correct operations

Unavailable paper

Do not load the following types of paper into the tray. Not observing these precautions may lead to reduced print quality, a paper jam, or machine damage.

- Paper that has been printed on using a heat-transfer printer or an inkjet printer
- Folded, curled, wrinkled, or torn paper
- Paper that has been left unwrapped for a long period of time
- Paper that is damp, perforated, or that has been hole punched
- Extremely smooth or extremely rough paper, or paper with an uneven surface
- Treated paper such as carbon-backed paper, thermal paper, pressure-sensitive paper, or iron-on transfer paper
- Paper that has been decorated with foil or embossing
- Paper of a non-standard shape (paper that is not rectangular)
- Paper that is bound with glue, staples or paper clips
- Paper with labels attached
- Paper with ribbons, hooks, buttons, etc., attached
- Paper with different paper quality (roughness) on the front and back sides
- Paper that is too thin or too thick
- Paper containing static electricity
- Acidic paper
- Other types of unavailable paper

Storing paper

To store paper, be sure to note the following points.

- Store paper on an even, horizontal surface, and do not take the paper out of its packaging until it is loaded into a tray. If paper is left for a long period of time outside its package, it may cause a paper jam.
- When not using paper that has been taken out of its package once, return it to the original package and store it in a horizontal, cool, dark place.
- Do not store paper in locations or in environments that are:
- Too humid
- Exposed to direct sunlight
- Subject to high temperatures (95°F (35°C) or more)
- Too dusty
- Do not set paper against the other or store it vertically.



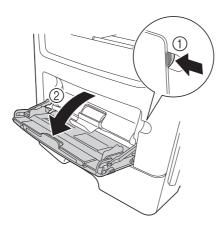
When purchasing a large quantity of paper or special paper, carry out a trial print to check the printing quality in advance.

6.2 Loading paper into the Manual Feed Tray

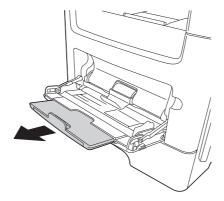
How to load paper into the Manual Feed Tray

When selecting a paper size other than for paper trays, use the **Manual Feed Tray**. To use the **Manual Feed Tray**, load paper and specify the paper size and paper type.

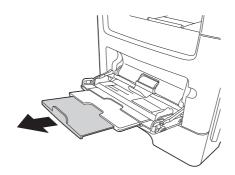
1 Open the Manual Feed Tray.



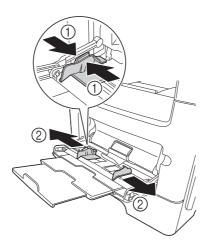
2 Pull out the extension guide of the **Manual Feed Tray**.



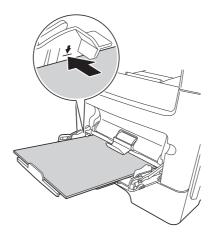
Fully pull out the extension guide of the Manual Feed Tray.



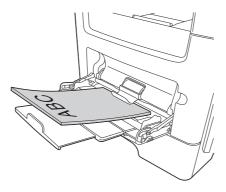
4 Hold the paper guide tab located at the left end, then move the paper guide to match the width of the paper to be loaded.



- 5 With the side to be printed on facing up, insert the paper as far as possible into the feed slot.
 - → If paper is curled, flatten it before loading.



→ When you load letterheads, set the side of the letterheads, on which the company name, preset text and other text are printed, face up.



→ If you allow printing on both sides of letterhead paper in [Letterhead duplex print permission settings] on this machine, set the side of the letterheads, on which the company name, preset text and other text are printed, face down.

NOTICE

Load paper within the guide indicating the upper limit.

6 Align the paper guide to the paper size.

- Change the paper type and paper size on the Control Panel. When loading custom sized paper, also specify the paper size.
 - → To configure settings: [Utility] [User Settings] [Printer Settings] [Paper Setting] [Paper Tray] [Manual Feed]

Loading envelopes

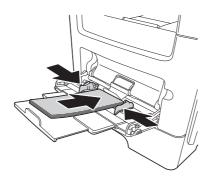
Up to 10 envelopes can be loaded into the tray at a time.

NOTICE

Before loading, remove air from the envelope(s), and securely press along the flap fold line. Otherwise, it will result in wrinkles or a paper jam.

Do not use an envelope with a stamp, staple, or metal, or a window envelope, glazed envelope, or adhesive envelope. Using such envelopes may cause serious damage to this product.

1 Load envelopes so that flap parts are set on the lower left.



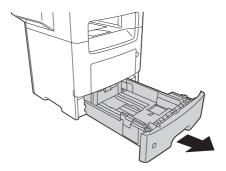
- Align the paper guide to the paper size.
- 3 Change the paper type and paper size on the **Control Panel**.
 - → To configure settings: [Utility] [User Settings] [Printer Settings] [Paper Setting] [Paper Tray] [Manual Feed]

6.3 Loading paper into Tray 1/2/3/4

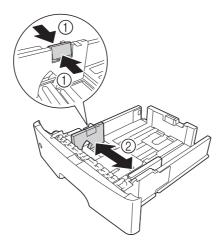
NOTICE

Individually feed paper into each tray to maintain balance of this machine. While loading paper into one tray, close all other trays.

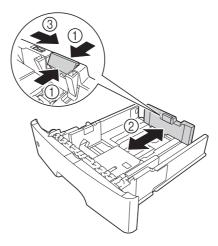
- ✓ This section describes how to load paper into Tray 1. The method for loading paper into Tray 2/3/4 is the same as for Tray 1.
- ✓ Tray 2/3/4 is available when the optional Paper Feed Unit is installed.
- 1 Fully pull out **Tray**.



2 Hold the crosswise paper guide tab, then move the paper guide to match the size of the paper to be loaded.

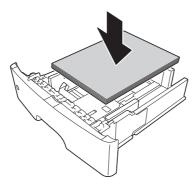


- 3 Hold the lengthwise paper guide tab, then move the paper guide to match the size of the paper to be loaded.
 - → After moving the paper guide, slide the lock tab (3) to lock the paper guide. You can use the lock/unlock mark to check whether or not the paper guide is locked.

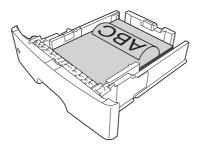


6.3

- 4 Load paper into the tray with the print side facing down.
 - → If paper is curled, flatten it before loading.
 - → To load long paper such as A4, letter size, or legal size, hold the lengthwise paper guide tab, then slide the paper guide backward to match the paper length.
 - → If legal-size paper is loaded, the lengthwise paper guide tab is beyond the length of the tray base, and it may cause paper to become dusty. To protect paper against dust, purchase and mount a dust cover. For details, contact your service representative.
 - → To load A6 paper, hold the lengthwise paper guide tab and slide it up to the A6-size position in the center of the tray.
 - → Check that the crosswise and lengthwise paper guides match the paper size indicators on the bottom of the tray.



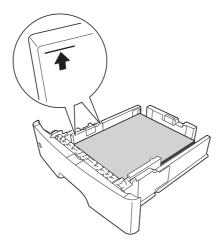
→ When you load letterheads, set the side of the letterheads, on which the company name, preset text and other text are printed, face down.



→ If you allow printing on both sides of letterhead paper in [Letterhead duplex print permission settings] on this machine, set the side of the letterheads, on which the company name, preset text and other text are printed, face up.

NOTICE

Do not load paper above the upper-limit indicator mark.



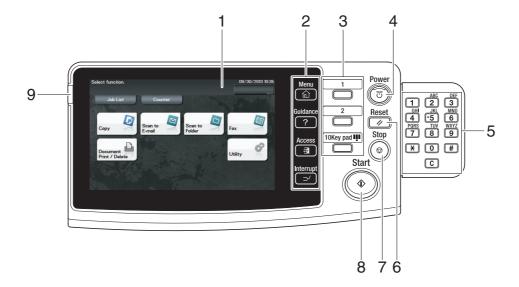
- 5 Align the paper guide to the paper size.
- 6 Close the Tray.

- Change the paper type and paper size on the **Control Panel**.
 - → To configure settings: [Utility] [User Settings] [Printer Settings] [Paper Setting] [Paper Tray] [Tray 1], [Tray 2], [Tray 3], or [Tray 4]
 - → The paper size of [Tray 2], [Tray 3], and [Tray 4] can be set automatically.

Control Panel

7 Control Panel

7.1 Names and functions of Control Panel keys





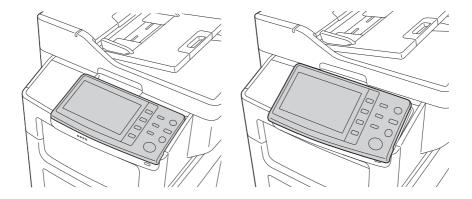
This figure shows the Control Panel with an optional **Keypad** installed.

No.	Name	Description		
1	Touch Panel	Displays setting screens and messages. Directly press this panel to carry out operations.		
2	[Menu]	Tap this key to display the Main Menu. The [Menu] lights up in blue when the Main Menu is displayed. For details on the Main Menu, refer to page 7-8.		
	[Guidance]	Tap this key to display the help screen. The [Guidance] lights up in blue when the Help Menu is displayed. This function displays the explanation and operation procedure of a function on the Touch Panel , enabling you to view them.		
	[Access]	Tap this key to perform authentication on the Login screen if user authentication or account track is employed on this machine. Tap [Access] under the login condition to log out. For details, refer to page 9-2.		
	[Interrupt]	Tap this key to interrupt active jobs on this machine and deal with a quick copy job. [Interrupt] lights up in blue during interrupt processing. For details, refer to Chapter 1 "Copy Operations" in [User's Guide: Copy Functions].		
3	Register Key 1 to Register Key 3	 Press each key to switch the display of the Touch Panel to a function assigned to a Register key. The default function assigned to the Register key varies depending on the region the machine is used in. A function to be assigned to a Register key can be changed to suit your environment. For details, refer to page 7-11. 		
4	Power key	Press this key to switch this machine to Power Save mode. For details, refer to page 4-4.		
5	Keypad	Use this keypad to enter numeric values such as the number of copies or zoom ratio. This keypad is also used to select a numbered setting key.		
	C (Clear)	All the numeric values (number of copies, magnification, size, etc), which have been entered by keypad, are canceled.		

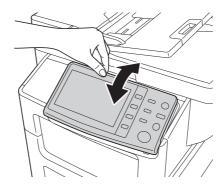
No.	Name	Description	
6	Reset	Press this key to reset the settings you entered or changed on the Control Panel .	
7	Stop	Press this key to temporarily stop an active copy, scan, or print job. To restart, press the Start key.	
8	Start	Press this key to start an operation such as copying, scanning, faxing, or printing. • Lights up blue: This machine is ready to start operating. • Lights up orange: This machine is not ready to start operating. Note If this indicator lamp lights up orange, check whether any warning or	
		message is displayed on the Touch Panel .	
9	Warning Indicator	Indicates the status of this machine by the lamp color, flashing, or a lamp lighting up. Flash in orange: Warning Lights up orange: The machine has stopped.	

7.2 Changing the angle of the Control Panel

The Control Panel can be adjusted to either of two angles.



To adjust the angle of the Control Panel, tilt the Control Panel up and down.



NOTICE

When a USB memory device is installed, do not change the angle of the **Control Panel**. Contact with the **Control Panel** or damage to a USB memory device may result depending on the size or shape of the USB memory device.



If the optional **Keypad** is installed, you cannot change the angle of the **Control Panel**.

7.3 Touch Panel

7.3.1 Operating the Touch Panel

Tap

Lightly touch the screen with your finger, then take your finger off the screen immediately. This action is available when selecting or determining a menu.



Flick

Make a slight fillip while sliding your finger on the screen.



7.3.2 Displaying the Keypad

Tap a number or input area on the screen to display the **Keypad**. Used to enter numerals.



7.3.3 Switching the entry or selection screen

Tap a target input area or icon to switch to the entry or selection screen.

Used to switch to the Select screen to enter text or select a registered item.





For details about the icon types, refer to page 7-10.

7.3.4 Precautions on using the Touch Panel

This machine features a capacitance-base touch panel. Note the following points when operating the **Touch Panel**.

- Use your finger or the Stylus Pen. Note that the Touch Panel will not respond appropriately if you operate it using your nail or a pen tip instead of your finger or the Stylus Pen.
- Applying a strong force to the Touch Panel will damage the Touch Panel, and potentially cause a breakage.
- When operating the **Touch Panel**, do not press on it using excessive force or with a pointed object such as a mechanical pencil.
- Be careful not to operate Touch Panel with wet fingers. It may cause Touch Panel to operate in unexpected ways.
- If you operate the **Touch Panel** with a gloved finger, the **Touch Panel** will not respond normally. You should operate it with a bare finger or using the **Stylus Pen**.
- Note that the **Touch Panel** may not respond normally if the distance between the user and fluorescent light is 19-11/16 inches (500 mm) or less when you operate the **Touch Panel**.
- You must not use the Touch Panel beside equipment that generates electrical noises such as an electric
 generator or air conditioner. Otherwise a malfunction may be caused by an influence of electrical noises.

7.4 Entering characters

When entering characters to register an address or program, use the keyboard screen displayed on the **Touch Panel**.



Item	Description	
Keyboard	Tap the keys of characters you want to enter.	
[C]	Tap this key to delete a character or value you entered.	
[←]/[→]	Tap this key to move the cursor.	
[×]	Tap this key to delete characters you entered one by one.	
[Cancel]	Text entry is interrupted and the page returns to the previous screen. The character or value you entered is deleted.	
[OK]	Define the entered character or numeric values.	

7.5 Screen layout

7.5.1 Main Menu

Tap [Menu] on the **Control Panel** to display the Main Menu.

The Main Menu is a basic screen to perform operations of this machine. Switch from the Main Menu to each function mode.



Item	Description		
[Job List]	Tap this button to check active jobs or job logs. If necessary, you can perform job operations such as deleting a standby job.		
	Note A job refers to an individual operation unit such as printing, sending, receiving, or saving.		
[Counter]	Tap this button to display the total number of pages printed on this machine on a function basis. This information will help you gain an understanding of the usage status of this machine.		
[Copy]	Tap this button to display the main screen in copy mode.		
[Scan to E-mail]	Tap this button to display the main screen in Scan to E-mail mode.		
[Scan to Folder]	Tap this button to display the main screen in Scan to Folder mode.		
[Fax]	Tap this button to display the main screen in Fax mode.		
[Document Print/De- lete]	Tap this button to operate files on this machine's HDD or on the USB memory device connected to this machine.		
[Utility]	Tap this button to configure settings of this machine, register destinations, and check the status of consumables. For details on Utility, refer to [User's Guide: Description of Utility Keys].		
[APP]	Displayed when an application that is supported by OpenAPI is registered on this machine.		
[Web Browser]	Tap this button to display the main Web browser screen. This function is available when the optional i-Option LK-101 v3 is installed while the Web browser is enabled. For details on the Web browser function, refer to [User's Guide: Advanced Functions].		
[Quick Security]	Tap this button to display [Quick Security Setting]. This function is available when a setting is configured to display the [Quick Security Setting] shortcut key on the main menu. For details on settings, refer to [Quick Security Setting] of Chapter 5 "Administrator Settings" in [User's Guide: Description of Utility Keys].		
[QR Code Display]	Tap this button to display the QR code in which the network information of this machine is recorded. This function is available when a setting is configured to display the [QR Code Display] shortcut key on the main menu.		



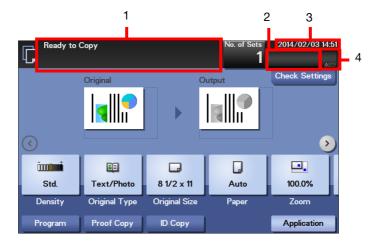
Related setting (for the administrator)

The copy program, fax program, scan program, [Quick Security Setting] and [QR Code Display] shortcut keys can be arranged on the main menu.

To configure settings: [Utility] - [Administrator Settings] - [System Settings] - [Main Menu Default Settings]

7.5.2 Main screen

This example shows the screen layout for the main screen of the copy mode.



No.	Name	Description
1	Message display area	Displays a message to show the status of this machine and operation procedures.
2	Icon display area	Displays an icon that indicates information such as the job status, warning, or USB memory connection status. Tapping the icon allows you to view the details. For details on the icons that indicate the status of this machine, refer to page 7-10.
3	Date and time display area	Displays the current date and time.
4	Toner level indicator area	Indicates the toner level.

7-9 [Introduction]

7.5.3 Icon types

Icons indicating the status of this machine

lcons indicating the status of this machine may appear in the icon display area. The types of icons to be displayed are as follows.

Icon	Description
\triangle	Indicates that a warning has occurred on this machine. Tapping an icon displays a warning screen.
ily.	Indicates that a copy job is active.
Alc	Indicates that a scan/fax job is currently loaded.
L	Indicates that there is a printing job such as a copy job, print job, Fax RX Print, or report printing.
(a	Indicates that the G3 fax line is busy.
4	Indicates that there is a document with Timer Send specified.
534	Indicates that there is a document to be received by fax such as Memory RX or PC-Fax RX.
	Indicates that data is being sent from the machine, regardless of the current mode.
Ċ Ļ ®	Indicates that the machine is receiving data, regardless of the current mode.
	Indicates that enhanced security mode is enabled.
÷	Indicates that a USB memory device is connected to this machine.

Icons to change to selection screen

When you select a registered item while operating this machine, the following icons may be displayed. Tap a target icon to change to the screen on which you want to select a registered item.

Icon	Description
	Displays a list of registered items. This icon is referred to as a "list icon" in the manual.

7.6 Changing the function assigned to a Register key (for administrators)

Select a function to be assigned to a **Register** key on the **Control Panel** to suit your requirements. It will be useful to assign frequently-used functions to Register keys.

This example explains how to change a function to be assigned to 1.

- 1 Tap [Utility] [Administrator Settings] [System Settings] [Registered Key Settings] [Register Key 1] [Basic Functions].
- Select a function to be assigned to 1, then tap [OK].
 - → You cannot select a function assigned to other **Register** key.

Settings	Description	
[Copy]	Tap this button to display the main screen in copy mode.	
[Fax]	Tap this button to display the main screen in Fax mode.	
[Scan to E-mail]	Tap this button to display the main screen in Scan to E-mail mode.	
[Scan to Folder]	Tap this button to display the main screen in Scan To Folder mode.	
[Utility]	Tap this button to display the [Utility] screen.	
[keypad]	Tap this button to display the Touch Panel on the Keypad when entering numeric values such as the number of copies or zoom ratio.	
[Menu]	Tap this button to display the Main Menu.	
[Access]	When user authentication and account authentication have been installed, perform the authentication on the login screen. Tapping this button while logged in enables you to log off this machine.	
[Web Browser]	Tap this button to display the main screen of the Web browser. This function is available when the optional i-Option LK-101 v3 is installed while the Web browser is enabled.	



7.6

If an OpenAPI application is registered on this machine, the registered application list or individual registered application can be assign to the **Register** key.

Viewing Active Job and Job Logs

8 Viewing Active Job and Job Logs

Displaying the Job List screen

A job refers to an individual operation unit such as printing, sending, receiving, or saving. If you tap [Job List] on the Main Menu, you can view the active job and job logs.



Viewing the active job

Tap [Active] to display current or standby jobs on this machine. If necessary, you can perform job operations such as deleting a standby job.



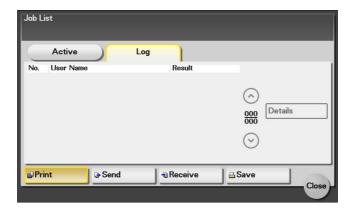
Item	Description	
[Print]	Tap this button to display a list of active or standby print jobs.	
[Send]	Tap this button to display a list of active or standby send jobs.	
[Receive]	Tap this button to display a list of active or standby fax receive jobs.	
[Save]	Tap this button to display a list of active or standby save jobs.	
[Delete]	Tap this button to delete a job selected in the list.	
[Forward]	Tap this button to forward a fax received by the in-memory proxy reception function to another destination. The forward destination can be specified using Address Book or Direct Input. For details on the in-memory proxy reception function, refer to Chapter 6 "Receiving Options" in [User's Guide: Fax Functions].	

Related setting (for the administrator)

- On the [Job List] screen, you can select whether or not to hide personal information such as destinations or job names.
 - To configure settings: [Utility] [Administrator Settings] [Security Settings] [Security Details] [Hide Personal Data] (Default: [OFF])
- You can select whether or not to permit a deletion of other user's job.
 To configure settings: [Utility] [Administrator Settings] [System Settings] [Restrict User Access] [Restrict Access to Job Settings] [Delete Other User Jobs] (Default: [Restrict])

Viewing job logs

Tap [Log] to display a list of jobs processed on this machine up till then. You can check a job that could not be ended due to an error.



Item	Description
[Print]	Tap this button to display a list of completed or deleted print jobs.
[Send]	Tap this button to display a list of completed or deleted send jobs.
[Receive]	Tap this button to display a list of completed or deleted fax receive jobs.
[Save]	Tap this button to display a list of completed or deleted save jobs.
[Details]	Tap this button to view detailed information of a job selected in the list.

Related setting (for the administrator)

On the [Job List] screen, you can select whether or not to hide personal information such as destinations or job names.

To configure settings: [Utility] - [Administrator Settings] - [Security Settings] - [Security Details] - [Hide Personal Data] (Default: [OFF])

Login Screen

9 Login Screen

Logging in to this machine

If user authentication or account track is installed on this machine, the Login screen appears on the **Touch**

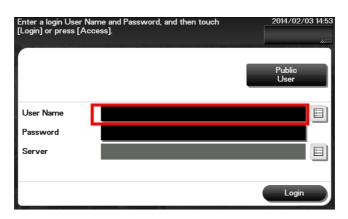
Enter the user or account track name and the password on the Login screen, then tap [Login] or [Access] to perform authentication. After the target operation was completed, tap [Access] to log out.



Performing user authentication (MFP authentication)

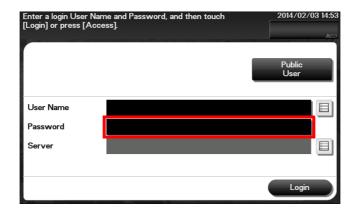
Enter the user name and the password, and perform user authentication.

- ✓ For details on how to configure user authentication settings, refer to Chapter 2 "Configuring the Operating Environment of This Machine" in [User's Guide: Applied Functions].
- 1 Tap the [User Name] entry field.
 - → If Public User Access (unregistered users) is enabled, tap [Public User] to log in to this machine.



- → If necessary, you can select whether or not to display the list icon that recalls the user name list on the login screen.
 - To configure settings: [Utility] [Administrator Settings] [User Authentication/Account Track] [User Name List] (Default: [OFF])
- → Tapping the list icon that recalls the user name list displays a list of user names and enables you to select a login user.
- 2 Enter the user name, then tap [OK].

3 Tap the [Password] entry area.



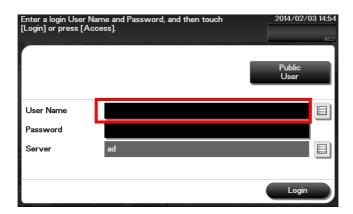
- 4 Enter the password, then tap [OK].
- 5 Tap [Login] or [Access] to log in to this machine.
 - → If user authentication and account track are installed without being synchronized, account track is required after this. For details, refer to page 9-5.
 - → If user authentication and account track are synchronized, account track is not required. If authentication succeeds, you can log in to this machine.
- 6 After the target operation was completed, tap [Access] to log out.
 - → If you do not operate this machine for a certain period of time during login (default: one min.), you will be automatically logged out.
- When a message has appeared to check whether you want to log out, tap [OK].
 - → If necessary, you can select whether or not to display the logout confirmation screen.

 To configure settings: [Utility] [Administrator Settings] [User Authentication/Account Track] [Logout Confirmation Screen Display Setting] (Default: [ON])

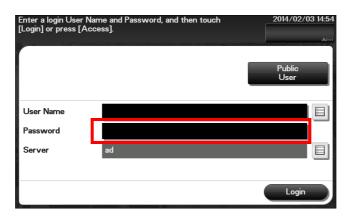
Performing user authentication (external server authentication)

Enter the user name and the password, and select a server to be authenticated.

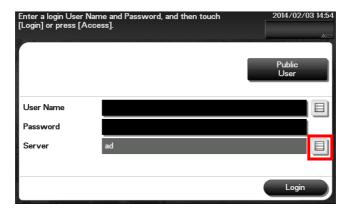
- ✓ For details on how to configure user authentication settings, refer to Chapter 2 "Configuring the Operating Environment of This Machine" in [User's Guide: Applied Functions].
- Tap the [User Name] entry field.
 - → If Public User Access (unregistered users) is enabled, tap [Public User] to log in to this machine.



- → If necessary, you can select whether or not to display the list icon that recalls the user name list on the login screen.
 - To configure settings: [Utility] [Administrator Settings] [User Authentication/Account Track] [User Name List] (Default: [OFF])
- → Tapping the list icon that recalls the user name list displays a list of user names and enables you to select a login user.
- 2 Enter the user name, then tap [OK].
- 3 Tap the [Password] entry area.



- 4 Enter the password, then tap [OK].
- When using multiple authentication servers, tap the list icon for [Server], then select a server to be authenticated.
 - → By default, the default authentication server is selected. When using the default authentication server, proceed to Step 6.



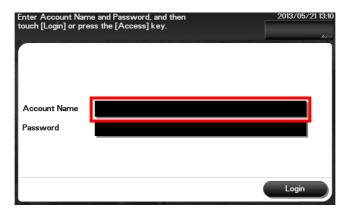
- 6 Tap [Login] or [Access] to log in to this machine.
 - → If user authentication and account track are installed without being synchronized, account track is required after this. For details, refer to page 9-5.
 - → If user authentication and account track are synchronized, account track is not required. If authentication succeeds, you can log in to this machine.
- After the target operation was completed, tap [Access] to log out.
 - → If you do not operate this machine for a certain period of time during login (default: one min.), you will be automatically logged out.
- 8 When a message has appeared to check whether you want to log out, tap [OK].
 - → If necessary, you can select whether or not to display the logout confirmation screen.

 To configure settings: [Utility] [Administrator Settings] [User Authentication/Account Track] [Logout Confirmation Screen Display Setting] (Default: [ON])

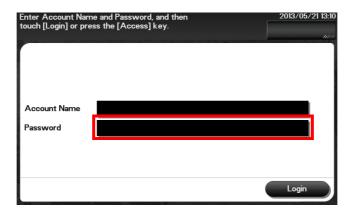
Performing account track

Enter the account name and the password to perform account track.

- For details on how to configure account track settings, refer to Chapter 2 "Configuring the Operating Environment of This Machine" in [User's Guide: Applied Functions].
- ✓ If user authentication and account track are installed without being synchronized, perform user authentication first. To perform MFP authentication, refer to page 9-2. To perform external server authentication, refer to page 9-3.
- If user authentication and account track are synchronized, account track is not required.
- Tap the [Account Name] entry field.



- 2 Enter the account name, then tap [OK].
- 3 Tap the [Password] entry area.



- 4 Enter the password, then tap [OK].
- 5 Tap [Login] or [Access] to log in to this machine.
 If authentication succeeds, you can log in to this machine.
- 6 After the target operation was completed, tap [Access] to log out.
 - → If you do not operate this machine for a certain period of time during login (default: one min.), you will be automatically logged out.
- When a message has appeared to check whether you want to log out, tap [OK].
 - → If necessary, you can select whether or not to display the logout confirmation screen. To configure settings: [Utility] - [Administrator Settings] - [User Authentication/Account Track] - [Logout Confirmation Screen Display Setting] (Default: [ON])

10 Specifications

10 Specifications

10.1

10.1 Checking the specifications of this machine

Item	Description		
Name	bizhub 4750 bizhub 4050		
Туре	Scanner, reverse automatic document feeder, desktop type printer		
Scanning resolution	600 dpi × 600 dpi	600 dpi × 600 dpi	
Writing resolution	600 dpi × 600 dpi (Standa 1200 dpi × 1200 dpi (High		
Memory size	2 GB		
HDD	320 GB		
Originals	Sheets, books, objects (N	Max. weight limit: 22-1/16 lb (10 kg))	
Max. original size	A4 or Legal		
Output size	Paper size	Main unit: Width: 4-1/8 inches to 8-1/2 inches (105 mm to 215.9 mm), Length: 5-13/16 inches to 14 inches (148 mm to 355.6 mm) Manual Feed Tray: Width: 3 inches to 8-1/2 inches (76.2 mm to 215.9 mm), Length: 5 inches to 14 inches (127 mm to 355.6 mm)	
	Image chipping width	Leading edge or trailing edge: 3/16 inch +/- 1/16 inch (4 mm +/- 2 mm), Left or right: 3/16 inch +/- 1/16 inch (4 mm +/- 2 mm)	
Warm-up time (73.4°F (23°C), std. voltage)	Time period from when the Power Switch is turned on to when this machine is ready for printing bizhub 4750: 77 sec. or less bizhub 4050: 77 sec. or less		
First copy time	bizhub 4750 : 8.5 sec. or less bizhub 4050 : 8.5 sec. or less		
Copy speed	bizhub 4750: 47 sheets/min. (A4, plain paper), 50 sheets/min. (Letter (8-1/2 × 11), plain paper) bizhub 4050: 40 sheets/min. (A4, plain paper), 42 sheets/min. (Letter (8-1/2 × 11), plain paper)		
Paper handling/paper capacity	One paper tray 550 sheets Manual Feed Tray 100 sheets		
Paper weight	Main unit: 16 lb to 32 lb (60 g/m ² to 120 g/m ²) Manual Feed Tray: 16 lb to 43 lb (60 g/m ² to 163 g/m ²)		
Auto duplex	Paper size	Width: 8-1/4 inches to 8-1/2 inches (209.6 mm to 215.9 mm), Length: 11 inches to 14 inches (279.4 mm to 355.6 mm)	
	Paper weight	15-15/16 lb to 23-15/16 lb (60 g/m ² to 90 g/m ²)	
Stacking capacity	250 sheets (Plain paper)		
Power supply	bizhub 4750/4050 : AC 110-127 V, 8.2 A, 50/60 Hz AC 220-240 V, 4.2 A, 50/60 Hz		
Maximum current during printing	bizhub 4750/4050 : 120 V: 8.2 A 230 V: 4.2 A		

Item	Description
Dimensions [W] × [D] × [H]	19-1/4 inches (489 mm) × 19 inches (482 mm) × 22-1/6 inches (561 mm) (Main unit + ADF)
Space Requirements [W] × [D] × [H]	26-5/16 inches (669 mm) × 34-15/16 inches (886.8 mm) × 53-9/16 inches (1361 mm) (with ADF and Manual Feed Tray opened)
Weight	bizhub 4750: Approx. 52 lb (24 kg (including consumables)) bizhub 4050: Approx. 52 lb (24 kg (including consumables))

10.2 Checking the specifications of optional devices

Paper Feed Unit PF-P11

10.2

Item	Specifications
Model number	PF-P11
Paper type	Plain paper, recycled paper, 1-sided special paper, special paper, colored paper, Thick 1, label sheets (15-15/16 lb to 23-15/16 lb (60 g/m² to 90 g/m²))
Paper size	A4, A5, B5 (JIS) Legal (8-1/2 × 14), Letter (8-1/2 × 11), Executive (7-1/4 × 10-1/2), Government legal (8-1/2 × 13)
Paper capacity	250 sheets
Power supply	Supply from machine
Dimensions [W] × [D] × [H]	15-5/16 inches (389 mm) × 15 inches (382 mm) × 3-1/16 inches (77 mm)
Weight	Approx. 9-1/4 lb (4.2 kg)

Paper Feed Unit PF-P12

Item	Specifications	
Model number	PF-P12	
Paper type	Plain paper, recycled paper, 1-sided special paper, special paper, colored paper, Thick 1, label sheets (15-15/16 lb to 23-15/16 lb (60 g/m² to 90 g/m²))	
Paper size	A4, A5, B5 (JIS) Legal (8-1/2 × 14), Letter (8-1/2 × 11), Executive (7-1/4 × 10-1/2), Government legal (8-1/2 × 13)	
Paper capacity	550 sheets	
Power supply	Supply from machine	
Dimensions [W] × [D] × [H]	15-5/16 inches (389 mm) × 15 inches (382 mm) × 4-5/16 inches (109 mm)	
Weight	Approx. 10-3/8 lb (4.7 kg)	

Fax Kit FK-512

Item	Specifications	
Model number	FK-512	
Communication	Super G3	
Compatible lines	Public switch telephone network (including fax communication line) PBX lines	
Line density	Ultra Fine: 600 dpi × 600 dpi Super Fine: 16 dot/mm × 15.4 line/mm, 400 dpi × 400 dpi Fine: 8 dot/mm × 7.7 line/mm, 200 dpi × 200 dpi Normal: 8 dot/mm × 3.85 line/mm Faxes are transmitted at any of the above scanning line densities according to the capabilities of a recipient's machine.	
Modem speed	2400/4800/7200/9600/12000/14400/16800/19200/ 21600/24000/26400/28800/31200/33600 bps	
Compression	JBIG, MMR, MR, MH	

10.2

Item	Specifications
Sending paper size	Max. A4 or legal Long original: 8-1/2 inches × 39-3/8 inches (215.9 mm × 1000 mm) (in use of ADF)
Recording paper size	Max. A4 or legal
Transmission speed	Approx. 3 sec. * Time when sending an our standard A4 original including 700 characters with the normal image quality (8 dot/mm × 3.85 line/mm) in super G3 mode (ITU-T V.34 base 33.6 kbps or more) with JBIG.
Number of abbr. dials	2000
Number of program dials	400
Number of group dials	100
Sequential multiple station transmission	Max. 500

Finisher FS-P02

Item	Specifications
Model number	FS-P02
Staple capacity	Max. 20 sheets (20 lb (75 g/m ²))
Types of staple modes	1 corner
Paper type	Plain paper, recycled paper, 1-sided special paper , special paper, colored paper, letterheads, user paper 1, user paper 2
Paper size	A4, Legal (8-1/2 × 14), Letter (8-1/2 × 11), Government legal (8-1/2 × 13), 8-1/2 × 13-1/2
Power supply	Input: AC 100 - 240 V, 50/60 Hz, 12.0 - 6.0 A (including the main unit) Output: AC 100 - 240 V, 50/60 Hz, 12.0 - 5.3 A (power for the main unit)
Consumables	Staple: Staple Kit SK-501
Dimensions [W] × [D] × [H]	15-5/16 inches (389 mm) \times 5-7/16 inches (138 mm) \times 7-11/16 inches (195 mm) (The depth includes the part inserted into the paper output section of the main unit.)
Weight	Approx. 11-11/16 lb (5.3 kg)

Authentication Unit AU-201

Item	Specifications	
Name	Card Authentication Unit AU-201	
Dimensions [W] \times [D] \times [H]	3-5/8 inches (92 mm) × 2-1/2 inches (64 mm) × 5/8 inches (16 mm)	
Weight	Approx. 1/4 lb (0.1 kg)	
Power supply	Power feeding from USB port	
System conditions (operating state)	Ambient temperature	32°F to 104°F (0°C to 40°C)
	Humidity	20% to 85% (No condensation)
System conditions (non-operating state)	Ambient temperature	-4°F to 122°F (-20°C to 50°C)
	Humidity	20% to 85% (No condensation)
Radio law division	Self-guided read-write communication facility	
Applicable card	FeliCa (IDm), SSFC, FCF, FCF (campus), MIFARE (UID)	
Acquired standard	VCCI class B	

Item	Specifications	
Compatible computer	Computer	PC-AT compatible machine
	CPU	Conforms to the recommended operating environment of your operating system.
	Memory (RAM)	Conforms to the recommended operating environment of your operating system.
	Free space on hard disk	600 MB or more
	Monitor	800 × 600 pixels or more
	Network	Must be configured with the correct TCP/IP or IPX/SPX protocol settings.
	Application	Microsoft Internet Explorer 6.0 (SP1) or later Windows Vista/8/8.1: Microsoft .NET Framework 3.5 (SP1 or later) Windows 7 is equipped with .NET Framework required to operate Data Administrator as the standard.
	Interface	Conforms to USB 1.1.
	Supported operating systems	For the supported operating systems, refer to Readme.

Authentication Unit AU-201S

Item	Specifications	
Name	Card Authentication Unit AU-201S	
Dimensions [W] × [D] × [H]	3-7/8 inches (98 mm) × 2-1/2 inches (64 mm) × 1/2 inches (13 mm)	
Weight	Approx. 1/4 lb (0.1 kg)	
Power supply	Power feeding from USB port	
System conditions (op-	Ambient temperature	32°F to 104°F (0°C to 40°C)
erating state)	Humidity	20% to 85% (No condensation)
System conditions	Ambient temperature	-4°F to 122°F (-20°C to 50°C)
(non-operating state)	Humidity	20% to 85% (No condensation)
Radio law division	Self-guided read-write communication facility	
Applicable card	FeliCa (IDm), SSFC, FCF, FCF (campus), MIFARE (UID)	
NFC reader	conforms to ISO 18092 (NFC)	
Acquired standard	VCCI class B	
Compatible computer	Computer	PC-AT compatible machine
	CPU	Conforms to the recommended operating environment of your operating system.
	Memory (RAM)	Conforms to the recommended operating environment of your operating system.
	Free space on hard disk	600 MB or more
	Monitor	800 × 600 pixels or more
	Network	Must be configured with the correct TCP/IP or IPX/SPX protocol settings.
	Application	Microsoft Internet Explorer 6.0 (SP1) or later Windows Vista/8/8.1: Microsoft .NET Framework 3.5 (SP1 or later) Windows 7 is equipped with .NET Framework required to operate Data Administrator as the standard.
	Interface	Conforms to USB 2.0.
	Supported operating systems	For the supported operating systems, refer to Readme.

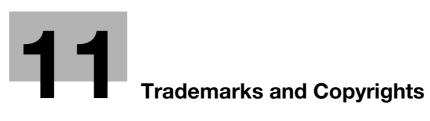
10.3 Standard operating life of consumables and periodic replacement parts

Item	Standard average operating life	
Toner Cartridge	Toner Cartridge supplied with the product: Approx. 7,500 pages Toner Cartridge for replacement: Approx. 20,000 pages	
Imaging Unit	Approx. 60,000 pages	



10.3

The above indicates a numeric value for 1-sided printing with A4- or letter-size paper. The actual operating life varies (decreases) depending on printing conditions (printing ratio, paper size, etc.), printing method such as the continuous printing (a print job of four pages on average is optimal for consumables) or the intermittent printing (when a print job of one page is executed multiple times), and the paper type such as thick paper printing. It is also affected by the ambient temperature and humidity.



11 Trademarks and Copyrights

Trademark acknowledgements

KONICA MINOLTA, the KONICA MINOLTA logo, Giving Shape to Ideas, PageScope, and bizhub are registered trademarks or trademarks of KONICA MINOLTA, INC.

Mozilla and Firefox are trademarks of the Mozilla Foundation.

Microsoft, Windows, Windows Vista, Windows 7, Windows 8, and Windows 8.1 are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

PowerPC is a trademark of IBM Corporation in the United States, or other countries, or both.

In regard to the Citrix Technology Member

KONICA MINOLTA, INC. is a Citrix Technology Member

The Citrix Technology Member is a program that, in combination with a solution of Citrix, promotes and develops solutions in order to be an industry leader in providing customers with better solutions.

XenAppTM. Citrix XenServerTM and Citrix Presentation ServerTM are trademarks of Citrix[®]

Apple, Safari, iPad, iPhone, iPod touch, Macintosh, Mac OS, OS X and Bonjour are trademarks of Apple Inc., registered in the U.S. and other countries. AirPrint and the AirPrint logo are trademarks of Apple Inc.



CUPS and CUPS logo are trademarks of Apple Inc.

Adobe, the Adobe logo, Acrobat and PostScript are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

Ethernet is a registered trademark of Xerox Corporation.

PCL is a registered trademark of Hewlett-Packard Company Limited.

TOYO is a registered trademark of TOYO INK MFG. CO., LTD. in the United States and/or other countries.

DIC and the DIC logo are registered trademarks or trademarks of DIC Corporation in the United States and/or other countries.

IEEE and the IEEE logo are registered trademarks or trademarks of The Institute of Electrical and Electronics Engineers, Inc. in the United States and/or other countries.

ThinPrint is a registered trademark or trademark of Cortado AG in Germany and other countries.

QR Code is a registered trademark of DENSO WAVE INCORPORATED.

Wi-Fi, Wi-Fi Alliance, Wi-Fi Direct, Wi-Fi Protected Setup, WPA, and WPA2 are either trademarks or registered trademarks of Wi-Fi Alliance.

Android is either a trademark or a registered trademark of Google Inc.

FeliCa is a registered trademark of Sony Corporation.

MIFARE is a registered trademark of NXP Semiconductors.

All other product and brand names are trademarks or registered trademarks of their respective companies or organizations.

OpenSSL Statement

OpenSSL License

Copyright ©1998-2006 The OpenSSL Project. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

 Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

- 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- All advertising materials mentioning features or use of this software must display the following acknowledgment:
 - "This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (http://www.openssl.org/)"
- The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact openssl-core@openssl.org.
- 5. Products derived from this software may not be called "OpenSSL" nor may "OpenSSL" appear in their names without prior written permission of the OpenSSL Project.
- 6. Redistributions of any form whatsoever must retain the following acknowledgment: "This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (http://www.openssl.org/)"

THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OPENSSL PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes software written by Tim Hudson (tih@cryptsoft.com).

Original SSLeay License

Copyright ©1995-1998 Eric Young (eay@cryptsoft.com) All rights reserved.

This package is an SSL implementation written by Eric Young (eay@cryptsoft.com).

The implementation was written so as to conform with Netscapes SSL.

This library is free for commercial and non-commercial use as long as the following conditions are aheared to. The following conditions apply to all code found in this distribution, be it the RC4, RSA, Ihash, DES, etc., code; not just the SSL code.

The SSL documentation included with this distribution is covered by the same copyright terms except that the holder is Tim Hudson (tjh@cryptsoft.com).

Copyright remains Eric Young's, and as such any Copyright notices in the code are not to be removed. If this package is used in a product, Eric Young should be given attribution as the author of the parts of the library used. This can be in the form of a textual message at program startup or in documentation (online or textual) provided with the package.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the copyright notice, this list of conditions and the following disclaimer.
- 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- All advertising materials mentioning features or use of this software must display the following acknowledgement:
 - "This product includes cryptographic software written by Eric Young (eay@crypt-soft.com)"

 The word 'cryptographic' can be left out if the rouines from the library being used are not cryptographic related.
- 4. If you include any Windows specific code (or a derivative thereof) from the apps directory (application code) you must include an acknowledgement:
 - "This product includes software written by Tim Hudson (tjh@cryptsoft.com)"

THIS SOFTWARE IS PROVIDED BY ERIC YOUNG "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND

ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The licence and distribution terms for any publically available version or derivative of this code cannot be changed. i.e. this code cannot simply be copied and put under another distribution licence [including the GNU Public Licence.]

OpenSLP License

Copyright ©2000 Caldera Systems, Inc All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

Neither the name of Caldera Systems nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE CALDERA SYSTEMS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Bonjour

Apache License

Version 2.0, January 2004

http://www.apache.org/licenses/

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include

works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License.

Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License.

Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution.

You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- a. You must give any other recipients of the Work or Derivative Works a copy of this License; and
- b. You must cause any modified files to carry prominent notices stating that You changed the files; and
- c. You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- d. If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License. You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions.

Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or

conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks.

This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty.

Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-IN-FRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability.

In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability.

While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work

To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

NetSNMP License

Part 1: CMU/UCD copyright notice: (BSD like)

Copyright 1989, 1991, 1992 by Carnegie Mellon University Derivative Work - 1996, 1998-2000 Copyright 1996, 1998-2000 The Regents of the University of California All Rights Reserved

Permission to use, copy, modify and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appears in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of CMU and The Regents of the University of California not be used in advertising or publicity pertaining to distribution of the software without specific written permission.

CMU AND THE REGENTS OF THE UNIVERSITY OF CALIFORNIA DISCLAIM ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL CMU OR THE REGENTS OF THE UNIVERSITY OF CALIFORNIA BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM THE LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGROUS AND THE CONTRACT AND T

LIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Part 2: Networks Associates Technology, Inc copyright notice (BSD)

Copyright ©2001-2003, Networks Associates Technology, Inc

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- * Neither the name of the Networks Associates Technology, Inc nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission. THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Part 3: Cambridge Broadband Ltd. copyright notice (BSD)

Portions of this code are copyright ©2001-2003, Cambridge Broadband Ltd.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- * The name of Cambridge Broadband Ltd. may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDER "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED.

IN NO EVENT SHALL THE COPYRIGHT HOLDER BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Part 4: Sun Microsystems, Inc. copyright notice (BSD)

Copyright ©2003 Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, California 95054, U.S.A. All rights reserved.

Use is subject to license terms below.

This distribution may include materials developed by third parties.

Sun, Sun Microsystems, the Sun logo and Solaris are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and other countries.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- * Neither the name of the Sun Microsystems, Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN

CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Part 5: Sparta, Inc copyright notice (BSD)

Copyright ©2003-2004, Sparta, Inc All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- * Neither the name of Sparta, Inc nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Part 6: Cisco/BUPTNIC copyright notice (BSD)

Copyright ©2004, Cisco, Inc and Information Network Center of Beijing University of Posts and Telecommunications. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- * Neither the name of Cisco, Inc, Beijing University of Posts and Telecommunications, nor the names of their contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Kerberos

Copyright ©1985-2007 by the Massachusetts Institute of Technology.

All rights reserved.

Export of this software from the United States of America may require a specific license from the United States Government. It is the responsibility of any person or organization contemplating export to obtain such a license before exporting.

WITHIN THAT CONSTRAINT, permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of M.I.T. not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. Furthermore if you modify this software you must label your software as modified software and not distribute it in such a fashion that it might be confused with the original MIT software. M.I.T. makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

THIS SOFTWARE IS PROVIDED "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTIBILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Individual source code files are copyright MIT, Cygnus Support, Novell, OpenVision Technologies, Oracle, Red Hat, Sun Microsystems, FundsXpress, and others.

Project Athena, Athena MUSE, Discuss, Hesiod, Kerberos, Moira, and Zephyr are trademarks of the Massachusetts Institute of Technology (MIT). No commercial use of these trademarks may be made without prior written permission of MIT.

"Commercial use" means use of a name in a product or other for-profit manner. It does NOT prevent a commercial firm from referring to the MIT trademarks in order to convey information (although in doing so, recognition of their trademark status should be given).

Portions of src/lib/crypto have the following copyright:

Copyright ©1998 by the FundsXpress, INC.

All rights reserved.

Export of this software from the United States of America may require a specific license from the United States Government. It is the responsibility of any person or organization contemplating export to obtain such a license before exporting.

WITHIN THAT CONSTRAINT, permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of FundsXpress. not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. FundsXpress makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

THIS SOFTWARE IS PROVIDED "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTIBILITY AND FITNESS FOR A PARTICULAR PURPOSE.

The implementation of the Yarrow pseudo-random number generator in src/lib/crypto/yarrow has the following copyright:

Copyright 2000 by Zero-Knowledge Systems, Inc.

Permission to use, copy, modify, distribute, and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Zero-Knowledge Systems, Inc. not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. Zero-Knowledge Systems, Inc. makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

ZERO-KNOWLEDGE SYSTEMS, INC. DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL ZERO-KNOWLEDGE SYSTEMS, INC. BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTUOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

The implementation of the AES encryption algorithm in src/lib/crypto/aes has the following copyright:

Copyright ©2001, Dr Brian Gladman

 cyg@gladman.uk.net>, Worcester, UK.All rights reserved.

LICENSE TERMS

The free distribution and use of this software in both source and binary form is allowed (with or without changes) provided that:

- 1. distributions of this source code include the above copyright notice, this list of conditions and the following disclaimer;
- 2. distributions in binary form include the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other associated materials;
- 3. the copyright holder's name is not used to endorse products built using this software without specific written permission.

DISCLAIMER

This software is provided 'as is' with no explcit or implied warranties in respect of any properties, including, but not limited to, correctness and fitness for purpose.

Portions contributed by Red Hat, including the pre-authentication plug-ins framework, contain the following copyright:

Copyright ©2006 Red Hat, Inc.

Portions copyright ©2006 Massachusetts Institute of Technology

All Rights Reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- * Neither the name of Red Hat, Inc., nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Portions funded by Sandia National Laboratory and developed by the University of Michigan's Center for Information Technology Integration, including the PKINIT implementation, are subject to the following license:

COPYRIGHT ©2006-2007

THE REGENTS OF THE UNIVERSITY OF MICHIGAN

ALL RIGHTS RESERVED

Permission is granted to use, copy, create derivative works and redistribute this software and such derivative works for any purpose, so long as the name of The University of Michigan is not used in any advertising or publicity pertaining to the use of distribution of this software without specific, written prior authorization. If the above copyright notice or any other identification of the University of Michigan is included in any copy of any portion of this software, then the disclaimer below must also be included.

THIS SOFTWARE IS PROVIDED AS IS, WITHOUT REPRESENTATION FROM THE UNIVERSITY OF MICHIGAN AS TO ITS FITNESS FOR ANY PURPOSE, AND WITHOUT WARRANTY BY THE UNIVERSITY OF MICHIGAN OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE REGENTS OF THE UNIVERSITY OF MICHIGAN SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, WITH RESPECT TO ANY CLAIM ARISING OUT OF OR IN CONNECTION WITH THE USE OF THE SOFTWARE, EVEN IF IT HAS BEEN OR IS HEREAFTER ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

The pkcs11.h file included in the PKINIT code has the following license:

Copyright 2006 g10 Code GmbH

Copyright 2006 Andreas Jellinghaus

This file is free software; as a special exception the author gives unlimited permission to copy and/or distribute it, with or without modifications, as long as this notice is preserved.

This file is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY, to the extent permitted by law; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

WPA Supplicant

Copyright ©2003-2008, Jouni Malinen < j@w1.fi> and contributors All Rights Reserved.

License

This software may be distributed under the terms of BSD license:

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- 1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- Neither the name(s) of the above-listed copyright holder(s) nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The WPA Supplicant is provided to Licensee under the terms of the BSD license set forth below and any use of the WPA Supplicant Patch shall comply with the terms and conditions of the following:

Copyright ©2002-2007, Jouni Malinen <j@w1.fi> and contributors Copyright ©Marvell International Ltd. and its affiliates All rights reserved.

- 1. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- 2. Neither the name of the copyright owner, Marvell, nor the names of contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Copyright

KONICA MINOLTA, INC. maintains the copyright of the printer drivers.

© 2013 KONICA MINOLTA, INC. All Rights Reserved.

Note

User's Guide may not be reproduced in part or in full without permission.

KONICA MINOLTA, INC. will not be held liable for any incidents caused by using this printing system or User's Guide.

Information included in User's Guide is subject to change without notice.

SOFTWARE LICENSE AGREEMENT

This package contains the following materials provided by KONICA MINOLTA, INC. (KM): software included as part of the printing system ("Printing Software"), the digitally-encoded machine-readable outline data encoded in the special format and in the encrypted form ("Font Programs"), other software which runs on a computer system for use in conjunction with the Printing Software ("Host Software"), and related explanatory written materials ("Documentation"). The term "Software" shall be used to describe Printing Software, Font Programs and/or Host Software and also include any upgrades, modified versions, additions, and copies of the Software.

The Software is being licensed to you under the terms of this Agreement.

KM grants to you a non-exclusive sublicense to use the Software and Documentation, provided that you agree to the following:

- 1. You may use the Software and accompanying Font Programs for imaging to the licensed output device(s), solely for your own internal business purposes.
- In addition to the license for Font Programs set forth in Section 1 above, you may use Roman Font Programs to reproduce weights, styles, and versions of letters, numerals, characters and symbols ("Typefaces") on the display or monitor for your own internal business purposes.
- 3. You may make one backup copy of the Host Software, provided your backup copy is not installed or used on any computer. Notwithstanding the above restrictions, you may install the on any number of computers solely for use with one or more printing systems running the Printing Software.
- 4. You may assign its rights under this Agreement to an assignee of all of Licensee's right and interest to such Software and Documentation ("Assignee") provided you transfer to Assignee all copies of such Software and Documentation Assignee agrees to be bound by all of the terms and conditions of this Agreement.
- 5. You agree not to modify, adapt or translate the Software and Documentation.
- You agree that you will not attempt to alter, disassemble, decrypt, reverse engineer or decompile the Software.
- 7. Title to and ownership of the Software and Documentation and any reproductions thereof shall remain with KM and its licensor.
- 8. Trademarks shall be used in accordance with accepted trademark practice, including identification of the trademark owner's name. Trademarks can only be used to identify printed output produced by the Software. Such use of any trademark does not give you any rights of ownership in that trademark.
- You may not rent, lease, sublicense, lend or transfer versions or copies of the Software Licensee does
 not use, or Software contained on any unused media, except as part of the permanent transfer of all
 Software and Documentation as described above.
- 10. IN NO EVENT WILL KM OR ITS LICENSOR BE LIABLE TO YOU FOR ANY CONSEQUENTIAL, INCIDENTAL INDIRECT, PUNITIVE OR SPECIAL DAMAGES, INCLUDING ANY LOST PROFITS OR LOST SAVING, EVEN IF KM HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, OR FOR ANY CLAIM BY ANY THIRD PARTY. KM OR ITS LICENSOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THE SOFTWARE, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT OF THIRD PARTY RIGHTS. SOME STATES OR JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTIAL, CONSEQUENTIAL OR SPECIAL DAMAGES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.
- 11. Notice to Government End Users: The Software is a "commercial item," as that term is defined at 48 C.F.R.2.101, consisting of "commercial computer software" and "commercial computer software documentation," as such terms are used in 48 C.F.R. 12.212. Consistent with 48 C.F.R. 12.212 and 48 C.F.R. 227.7202-1 through 227.7202-4, all U.S. Government End Users acquire the Software with only those rights set forth herein.
- 12. You agree that you will not export the Software in any form in violation of any applicable laws and regulations regarding export control of any countries.

FIRMWARE UPDATES

FIRMWARE UPDATES MAY MODIFY PRINTER SETTINGS AND CAUSE COUNTERFEIT AND/OR UNAUTHORIZED PRODUCTS, SUPPLIES, PARTS, MATERIALS (SUCH AS TONERS AND INKS), SOFTWARE, OR INTERFACES TO STOP WORKING. AUTHORIZED USE OF GENUINE PRODUCTS WILL NOT BE IMPACTED.

PRINTER LICENSE

The patented printer is licensed for, and designed to work with only genuine toner and/or ink cartridges (and developer components, in the case of a laser printer) made by the manufacturer of this printer for the life of the patented printer. Under this patent license, you agree to: (1) use only genuine toner and/or ink cartridges made by the manufacturer of this printer with this licensed printer except as otherwise provided below, (2) if the patented printer is a laser printer, use only genuine developer components made by the manufacturer of this printer with this licensed laser printer except as otherwise provided below, and (3) pass this license/agreement to any subsequent user of this licensed printer. The patented toner and/or ink cartridges (and developer components in the case of a laser printer) inside are licensed subject to a restriction that they may be used only once. Following their initial use, you agree to return them only to us or the manufacturer for recycling. Please contact us for information regarding free empty toner cartridge returns. The genuine toner and/or ink cartridges are designed to stop working after delivering a fixed amount of toner and/or ink. A variable amount of toner and/or ink may remain in them when replacement is required. If you do not accept the terms of this single use license/agreement; return this product in its original packaging to your point of purchase. Replacement toner and/or ink cartridge(s) sold without these terms are available. Please contact us or your place of purchase for more information regarding the availability of these regular cartridges. Please be aware that a regular cartridge, that is cartridges not sold subject to this single use patent license, may be refilled by you, or a third party, as the only cartridge alternative to be used with the licensed printer.

CARTRIDGE LICENSE AGREEMENT

I agree that the patented print cartridge(s) shipped with this printing device is (are) sold subject to the following license/agreement: The patented print cartridge(s) contained inside is (are) licensed for a single use only and is (are) designed to stop working after the delivery of a fixed amount of toner/ink. A variable amount of toner/ink will remain in the cartridge when replacement is required. After this single use, the license/right to use the print cartridge terminates and the used cartridge must be returned only to the manufacturer for remanufacturing, refilling or recycling. If I buy another cartridge in the future that is sold subject to the same or similar terms, I hereby accept such terms as to that cartridge as well. If you do not accept the terms of this single use license/agreement; return this product in its original packaging to your point of purchase. Replacement cartridges sold without these terms are available. Please contact us or your place of purchase for more information regarding the availability of these regular cartridges.

Fuser/Imaging Unit License - Single Use: Please read before opening.

Opening this package or using the patented fuser and/or imaging unit inside confirms your acceptance of the following license/agreement. The patented fuser and imaging unit are each sold at a special price subject to a patent restriction that each be used only once. Following the initial use, you agree to return the fuser and/or imaging unit only to the manufacturer for remanufacture and/or recycling. The fuser and imaging unit are designed to stop working once they reach their respective rated life (as established by the manufacturer). If you do not accept these terms, return the unopened package to your point of purchase. Replacement fuser(s) and imaging unit(s) sold without these terms are available.

Our Concern for Environmental Protection



As an ENERGY STAR® Partner, we have determined that this machine meets the ENERGY STAR Guidelines for energy efficiency.

What is an ENERGY STAR product?

An ENERGY STAR product has a special feature that allows it to automatically switch to a "low-power mode" after a period of inactivity. An ENERGY STAR product uses energy more efficiently, saves you money on utility bills and helps protect the environment.

Index

12 Index

A
Account Track9-2, 9-5
ADF5-2
C
CD-ROM2-2
Consumables
Control Panel7-2, 7-4
_
E
Entering Characters7-7
I
lcon7-10
Installation
Installation environment2-3
Installation Location2-3
J
Job8-2
Active Job8-2
Log8-3
K
Keypad7-5
-
L
Loading Paper
Manual Feed Tray6-5 Tray 16-8
Loading the Original
ADF5-2
Original Glass5-4
M
Main Menu7-8
N
Name of each Part3-2
0
Option Configuration3-4
Original Glass5-4
P
•
Paper Available Paper Sizes6-3
Available Paper Types6-2
Storing Paper6-4
Unavailable Paper6-4
Power Supply4-2
Power Key4-4 Power Switch4-3
1 OWEI OWILGI14-3
R
Register Key7-11

10-2
10-2
10-4
7-5
7-6
9-2
9-3
9-2



http://konicaminolta.com

2015. 3