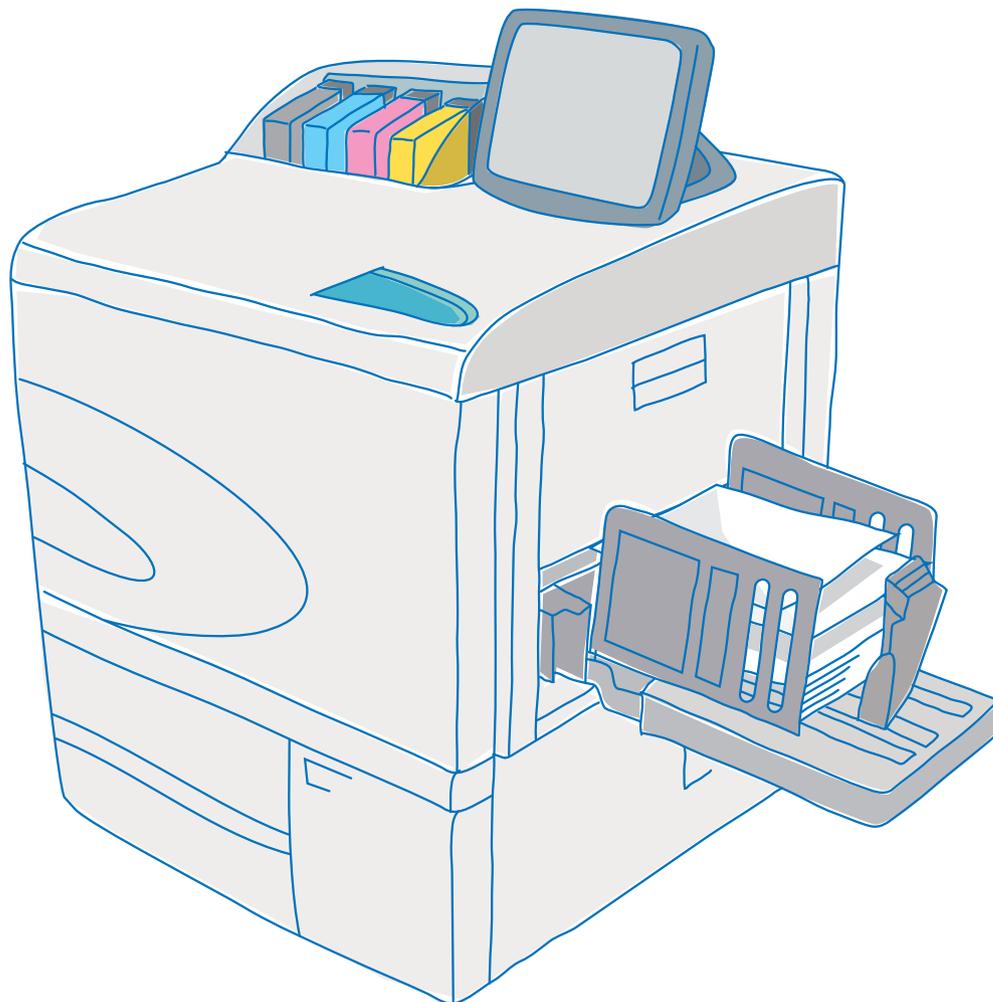## Reference Guide

NAVIGATION BOOK

This Reference Guide is designed to explain the basic features and functions of the HC5500 Series.
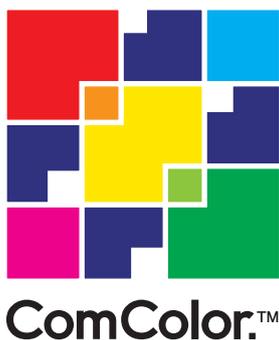Please take a few moments to familiarise yourself with the printer.

RISO HC5500 Series

Communicate in
Colour

Enhancing Communication through Colour

ComColor.™ is a RISO innovation for
a "fast, practical and on-demand" printer.
"Become more connected through
the World of ComColor™."

ComColor.™

NAVIGATION BOOK

RISO HC5500 Series

CONTENTS

There are 2 types of printer controllers: RISO Controller HC3R-5000 (GDI) and RISO Controllers PS7R-9000 (PS).
The screen shots shown in this manual are from RISO Controller HC3R-5000. Please note that the screen shots may differ from the ones shown depending on the printer controller in use.

The **RISO HC5500** Series:
One of the world's fastest and most economical full colour printers.

Features such as high-speed and inexpensive printing make the HC5500 useful in a wide range of applications. Applications of colour printing will increase even more, including leaflets and direct mail for advertising, product manuals and educational materials for the company's internal use, and presentations.

The HC5500 achieves high-speed full-colour printing thanks to its the control engine (FORCEJET™ engine) that controls 4 independent in-line inkjet heads, one for each colour (CMYK - cyan, magenta, yellow, black). And the optional scanner and finisher enhance the convenience of your company's colour printing environment.

• The fastest in the world (*1): up to 120 sheets/minute (*2)

(*1): As of September 2005; based on internal data obtained with colour printers for office use.

(*2): Continuous cross-feeding, single-side printing, standard setting, A4-size

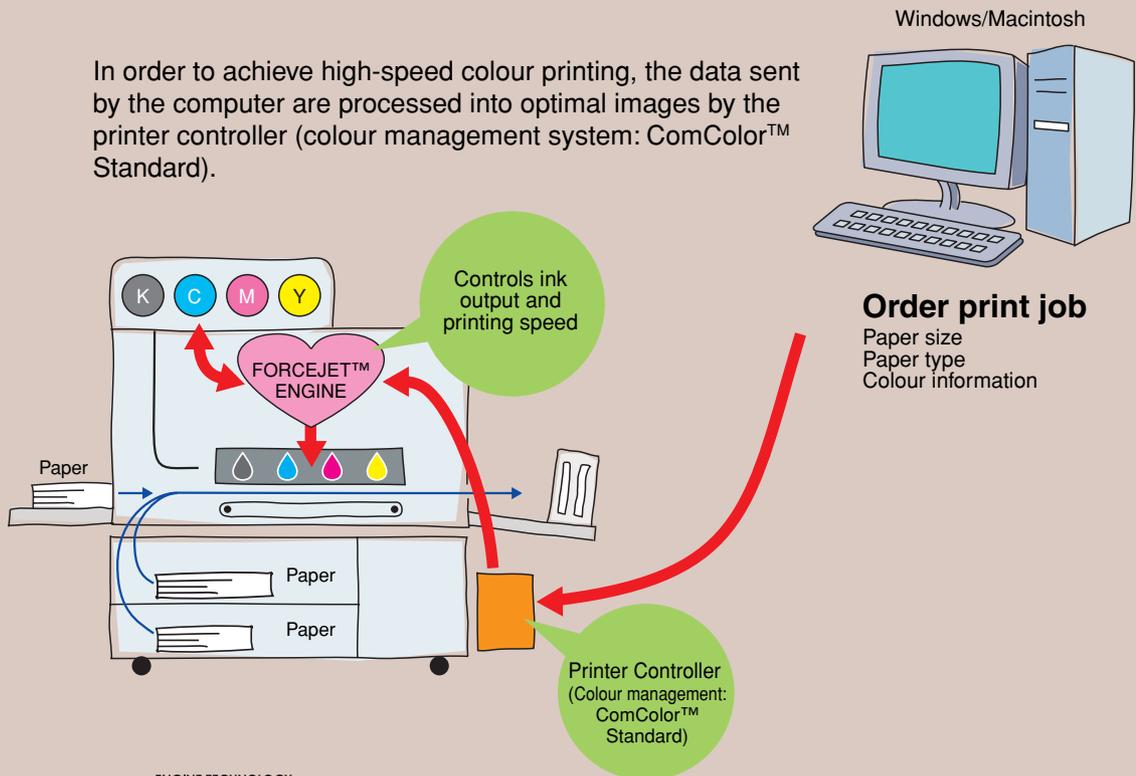The example shown in the photograph is equipped with optional items.

What is ComColor.™ ?

ComColor.™ is a term invented by RISO, formed by merging Communication and Colour. It represents a new form of colour printing targeted on high-speed, low-cost, and prompt (on-demand) response, driven by our business and daily life needs.
Haven't you ever given up on printing a proposal document or a leaflet because of the high cost and long time required for large-scale colour printing?
ComColor™ is RISO's answer to make colour printing more affordable.

HC5500 Mechanism

In order to achieve high-speed colour printing, the data sent by the computer are processed into optimal images by the printer controller (colour management system: ComColor™ Standard).

Windows/Macintosh

Controls ink output and printing speed

K C M Y

FORCEJET™ ENGINE

Paper

Paper

Paper

Order print job
Paper size
Paper type
Colour information

Printer Controller
(Colour management: ComColor™ Standard)

ENGINE TECHNOLOGY
FORCEJET

The FORCEJET™ engine is the printing mechanism created by the "high-speed in-line inkjet system", which can be considered as the heart of the HC5500.
It was developed as a convergence of technologies to achieve full-colour, fast, durable, and low-running-cost printing.
Welcome to the new world of affordable colour printing offered by ComColor.™.

What you can do with the **RISO** HC5500 Series

The high-speed HC5500 full-colour printer can be used in a wide range of applications.
Here we will explain what kind of printing the HC5500 is capable of, and introduce its most important features.

Printing without being seen by other people

Security Print

You can assign security codes to jobs.
After sending a print command to the HC5500 from the computer, the printing starts in front of you after typing the security code on the HC5500's touch panel (optional).
You can print without having the printout seen by anyone else, and the data (job) does not remain in the HC5500.

Reducing the quantity of paper used

Multi-Up (2 in 1) duplex printing

Reducing the number of pages is a fundamental ecological measure. The HC5500 can do duplex printing and paginate several pages into one. By combining duplex printing with Multi-Up, you can make your documents even more compact.

Quickly preparing a large quantity of printouts

Job Separation

Preparing a large quantity of meeting documents or materials to be distributed is straightforward using the Job Separation function. Available types of job separation are "by job", "collate", or "non-collate". By inserting a separation paper, it is easy to sort out the printouts. The optional finisher provides additional efficiency with offset output.

Printing booklets with automatic pagination

Booklet Pagination

The HC5500 can do double-page foldable pagination without using an application software to prepare the data. You can print data as they are, without deteriorating image quality and saving a significant amount of time.
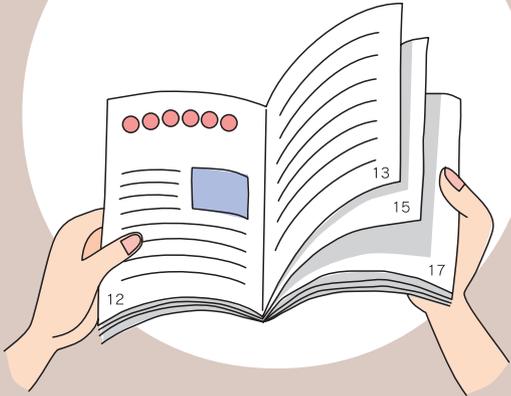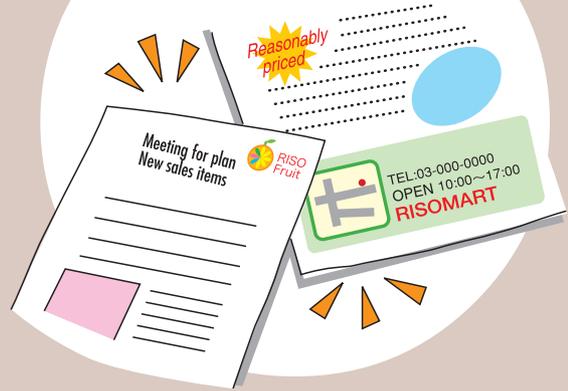
Printing repeated marks and phrases

Using Forms

(Only when connected to RISO PS7R-9000)

You can print documents and add a common mark or text. By storing texts or images in the print controller as forms, they can be easily used for printing.

Adding comments to the printing data as printing instructions

Job Comments

You can add comments to the data sent to the person in charge of printing. The comments may include type of paper, colour, size, and other information. This feature can be used as a convenient printing specifications form.
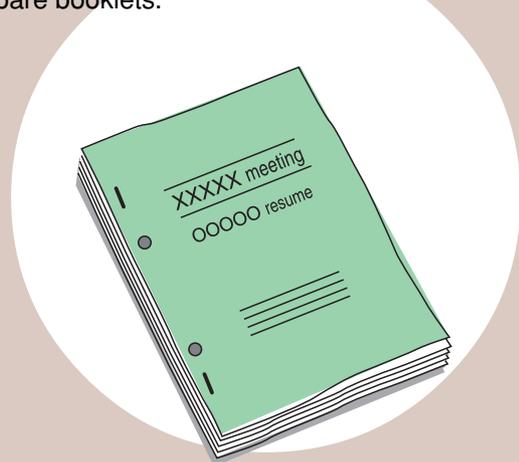
Using the scanner/finisher

Scanner/Finisher
(optional)

With the scanner, you can use the HC5500 as a colour copying machine. In addition, with the HC finisher you can do stapling, hole punching, and prepare booklets.

1 Getting Started

Names of parts

Ink Unit Cover

Ink cartridges for 4 colours are installed here. Open this cover to replace empty ink cartridges.

📖 **[Changing the ink cartridge], page 53 of this manual**

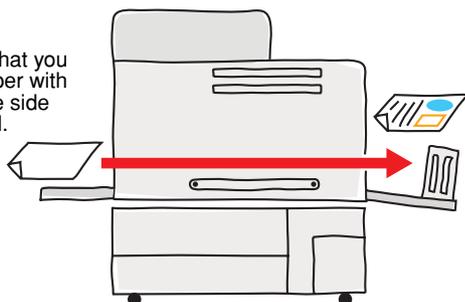📖 **User's Manual for Printer Main Body, page 3-18**

Standard Paper Feed Tray

Used for special paper such as postcards, cardboards, and envelopes.

This tray should be left closed when not in use. (We recommend setting conventional paper in Tray 1 and Tray 2.)

After printing, return the paper remaining on the feed tray to the original package. Leaving paper on the tray may cause curling, possibly resulting in paper jamming.

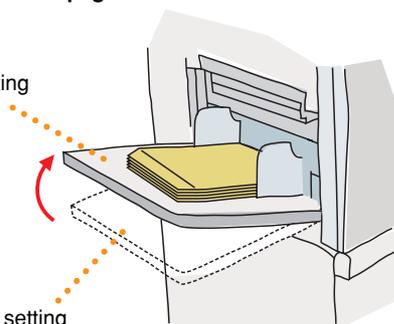Make sure that you load the paper with the printable side face upward.

When setting the Standard Feed Tray for printing envelopes, tilt it slightly upward.
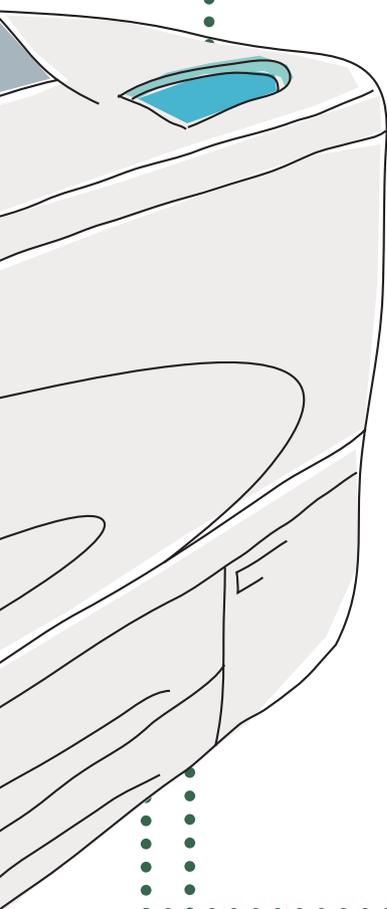
📖 **See User's Manual for Printer Main Body page 1-22.**
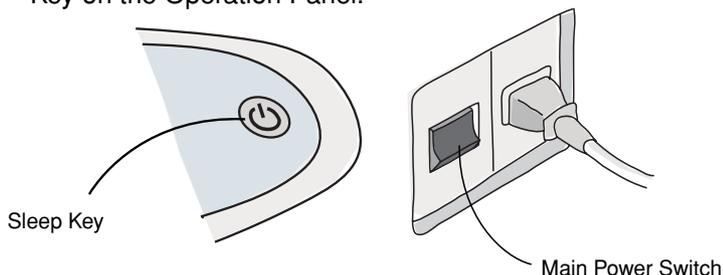
Envelope setting

Standard setting

Operation Panel

Power Switch and Sleep Key

The power switch located on the right side of the main body is usually left in the ON position. To turn the sleep mode ON/OFF upon the start and end of daily work, use the Sleep Key on the Operation Panel.

Sleep Key

Main Power Switch

## Receiving Tray

(Auto-Control Stacking Tray)

The printed paper is ejected here. The stack guides calculate the size based on the data received from the computer and move automatically. (Please do not force them manually.)

Stack Guide (Side)

Stack Guide (End)
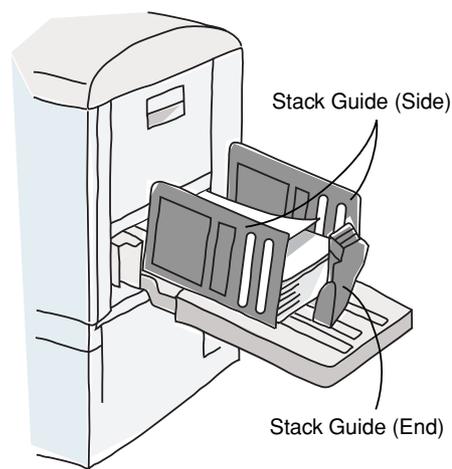
Paper Feed Tray 1/ Tray 2

The paper to be printed is loaded here. Since the paper is inverted when taken inside the printer from the tray, thick or other special type of paper cannot be loaded. Please check the types of paper that can be loaded.
Load the tray with the same type of paper that was used in the previous time. The paper type can be checked on the Monitoring screen of the [RISO Console].
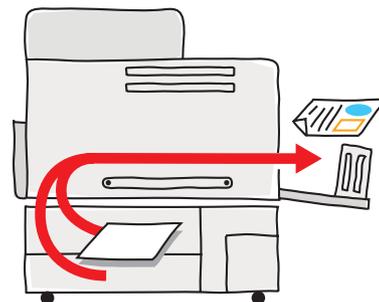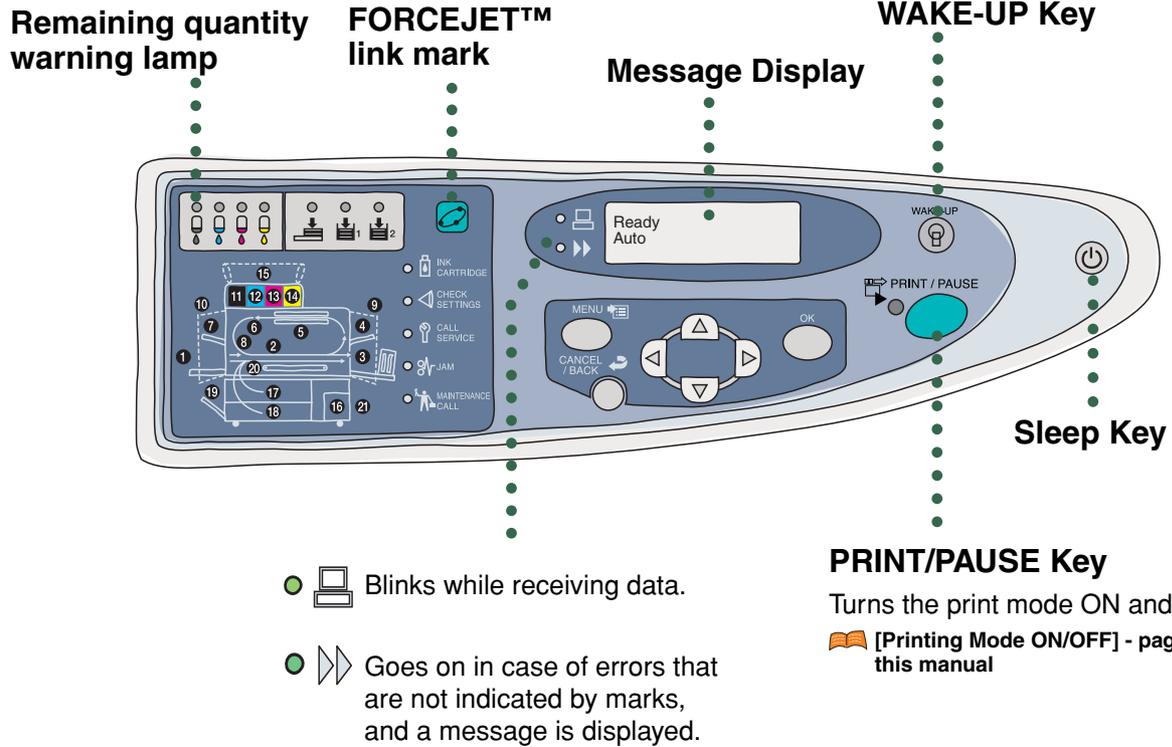
Make sure that you load the paper with the printable side face downward.

Operation Panel

The operation panel performs menu settings and displays printing instructions. In addition, it indicates paper jamming locations and depleted consumable items.

Remaining quantity warning lamp

FORCEJET™ link mark

Message Display

WAKE-UP Key

Ready
Auto

Sleep Key

○ 🖥 Blinks while receiving data.

○ ▷▷ Goes on in case of errors that are not indicated by marks, and a message is displayed.

PRINT/PAUSE Key

Turns the print mode ON and OFF.

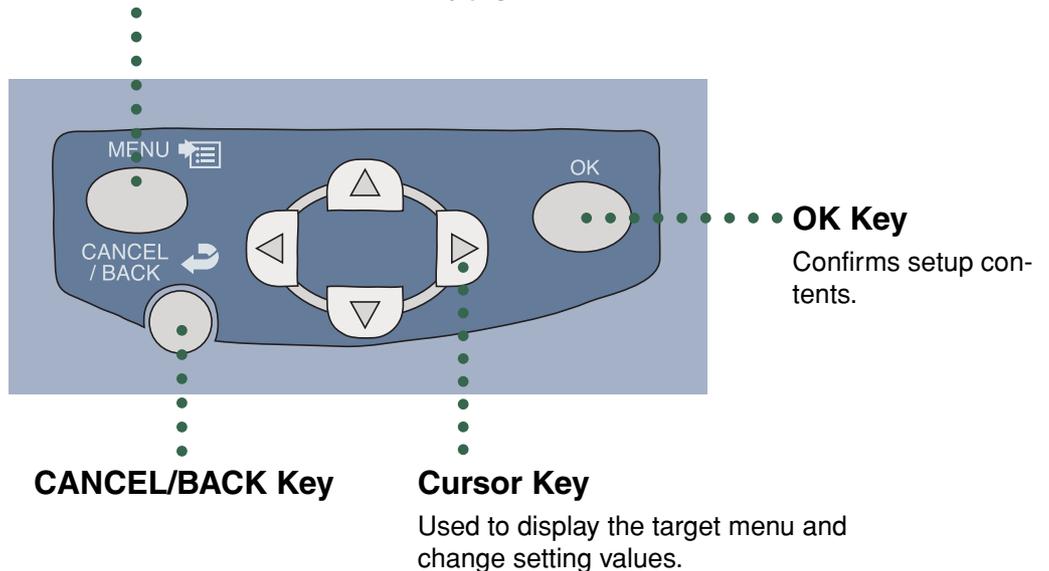📖 **[Printing Mode ON/OFF] - page 20 of this manual**

Keys used in operations

MENU Key

This key is used at the operation panel during [Menu setting] operations.

📖 **User's Manual for Printer Main Body, page 2-10**

OK Key

Confirms setup contents.

CANCEL/BACK Key

Cursor Key

Used to display the target menu and change setting values.

Mark display

The light of the operation panel display goes on and the printer stops during paper jamming or when a consumable item such as ink runs out.
Please check the mark whose light is on and take appropriate measures.
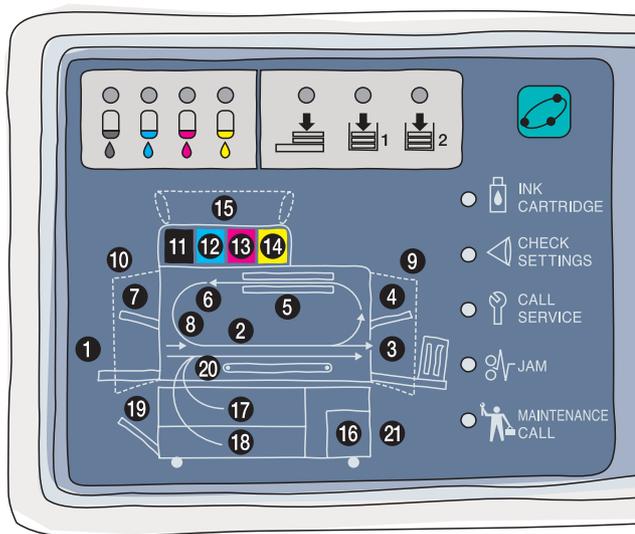
INK CARTRIDGE

The ink cartridge is empty. Please change the ink cartridge of the colour whose light is on.

CHECK SETTINGS

A door or internal lever of the printer is not properly fixed. Please check the area whose light is on.

CALL SERVICE

An error that requires servicing has occurred. Write down the error number and contact your local dealer (or service representative).

JAM

Indicates paper jam. Check the area where the light is on and remove the jammed paper. You will see a seal explaining the procedure when you open the front cover.

MAINTENANCE CALL

The ink drain tank is full or the maintenance time has come. Please contact your local dealer (or service representative).

FORCEJET™ link mark

The FORCEJET engine adjusts printing speed, paper size, and quality in a global manner. This mark is ON when these functions are working properly.

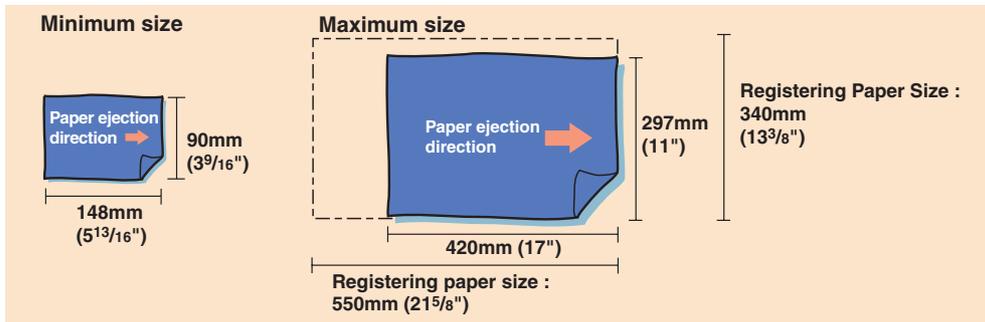📖 **User's Manual for Printer Main Body, page 3-3**
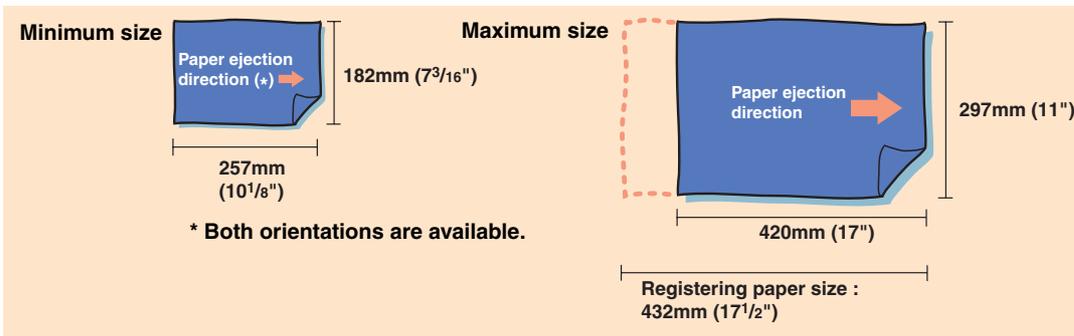
Paper Specifications

Usable Paper:

Paper that conforms to the following specifications can be used for printing.

- **Paper sizes that can be used in the Standard Feed Tray :** 46g/m² – 210g/m² (12-lb bond to 56-lb bond)

Minimum size

Paper ejection direction
90mm (3⁹/₁₆")
148mm (5¹³/₁₆")

Maximum size

Paper ejection direction
297mm (11")
420mm (17")
Registering paper size : 550mm (21⁵/₈")

Registering Paper Size : 340mm (13³/₈")

- **Paper sizes that can be used in Paper Feed Tray 1/2 :** 52g/m² – 104g/m² (14-lb bond to 28-lb bond)

Minimum size

Paper ejection direction (∗)
182mm (7³/₁₆")
257mm (10¹/₈")

∗ Both orientations are available.

Maximum size

Paper ejection direction
297mm (11")
420mm (17")
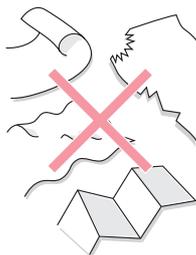Registering paper size : 432mm (17¹/₂")

Printing envelopes

The following settings are required for printing envelopes:
- Specify the envelope size in "Custom Size Entry."
- Select "Envelope" as "Paper Type."
- Select "Envelope" for "Paper Feed Control."

📖 **See "Printing Envelopes" — page US/UK-22 of this Manual.**

Types of paper that cannot be used:

Curled, ripped, wavy, folded, or wet paper

Regular inkjet paper

Certain types of paper designated as "for photograph" or "fine-grain" that are sold at computer or stationery shops; they are glossy as a result of processing and cannot be properly printed due to ink incompatibility.

For superior printing quality, we can provide the paper that brings out the best of your machine. Please contact your local dealer (or service representative).

Handling Ink Cartridges
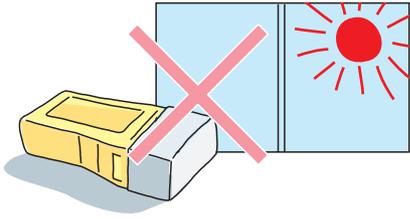
Do not store the ink for a long period

Do not leave the ink under direct sunlight or in places subject to large variations of temperature, nor store it for a long period after purchasing. We recommend you to use it as soon as possible.
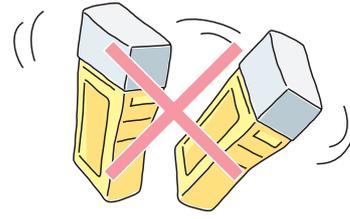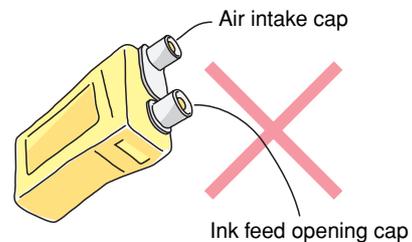
Do not shake the ink cartridge

Do not shake the ink cartridge when replacing it. Shaking can cause bubbles that may clog the print head or make the colour uneven.

Take care to avoid contact with your hands or clothes

Since the ink is made of oil-based pigment, any stains in hand or clothes must be immediately washed with a detergent.

Air intake cap

Ink feed opening cap

Do not remove the cap

There is a small amount of ink inside the cartridge when replacing it. Do not remove the caps at the ink outlet or air inlet to fill with new ink or to drain the remaining ink.

Be aware of ink/paper replacing times

Placing orders after running out of ink or paper and having to reset the printer decreases its efficiency. When the remaining quantity of ink or paper is low, the corresponding places light up. Knowing in advance that the remaining quantity is low lets you prepare the replacements in time.
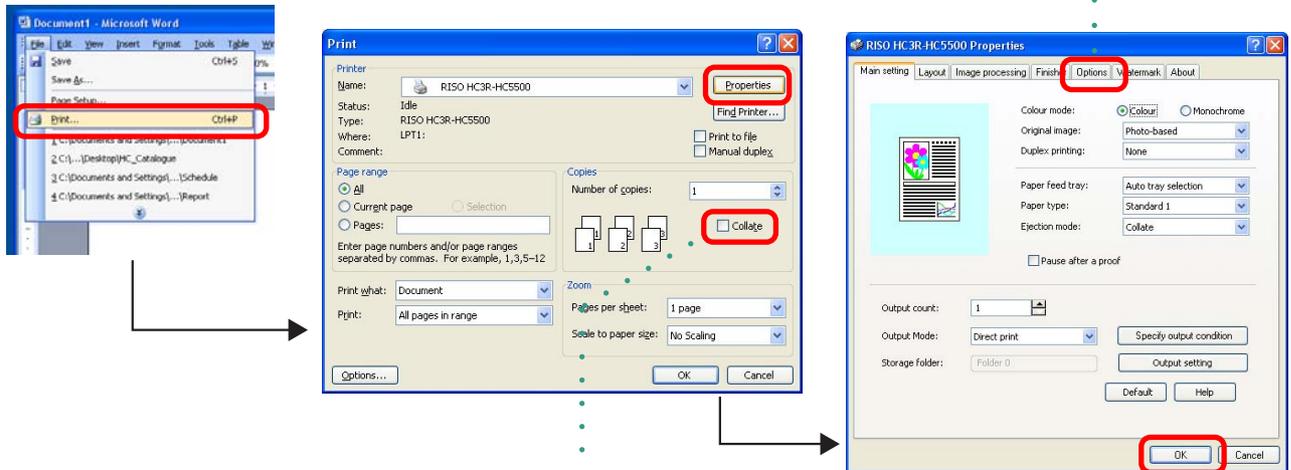
Black ink is low.
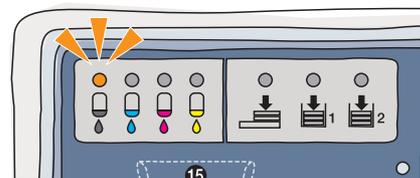
2 Let's Start Printing

A special printer driver needs to be installed before use.

Open the data to be printed with the PC and start printing.

Select [Print] from the [File] menu and enter printer driver settings if necessary.

The security code is set in [Option] - [Security Print].

Make sure to remove this check mark.
Define the [Collate] settings in the printer driver screen.

After completing the necessary settings, click on the [OK] button.

Using as a network printer

The [RISO Console] is a useful tool that permits verifying the conditions of the printer at the PC monitor. The RISO console provides the following information related to the printer:

Monitoring : Operating conditions of the printer (whether the power is ON/the type of paper loaded on the tray, etc.)

Job manager : Checking job processing conditions, performing operations on jobs stored in the printer controller.

Account records: Viewing job processing history (in [User setting])

When set as [Security Print]

The job is [Requesting...]. Go to the main body of the HC5500 and send an output instruction from the touch panel.
Select the job to be printed from the [Job status] screen of the Job Manager, press the output button, and enter the security code to start printing.
(Similar instructions can be sent from the [RISO Console/Job Manager] of the computer.)

For [normal] printing

The printing procedure may vary depending on the setup performed by the administrator. Please consult the administrator to learn details about the setting.

The printing starts when an instruction is sent from the printer driver. Go to the printer and take the printout.

Go to the printer and send an output instruction from the touch panel. Select the job to be printed from the [Job status] screen of the Job Manager and press the output button to start printing.

In order to use the "Security Print" function of the printer driver effectively, an optional touch panel is needed.

Taking advantage of Security Print

You probably face the problems described below in your network printing environment.

Typical network printers are shared by a large number of people and their receiving trays accumulate multiple printouts. The sizes of the printouts also show significant variations. Sometimes, your document is mixed in the middle of many others. Some people do not come to take their printouts or take someone else's by mistake. In other cases, printouts that you want to keep private may be seen by other people. The problems faced by such a printing environment relate not only to security, but also the waste incurred by the need of reprinting or sending forgotten printouts to the shredder. These issues can be associated with the use of network connection or centralised printers.
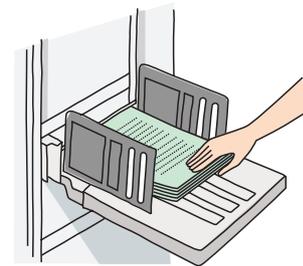
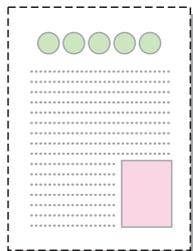## Customers who use network printers have the following requirements:

They do not want other people to see their printouts.

They do not want to have mixed printouts.

They want to delete the data (job) after printing.

They do not want to have titles, etc. shown in [Account record] and [Processing status].

The HC5500 Series addresses such customer needs by offering security function.

Since the Security Print assumes that you approach the HC5500 for the printing, it is necessary to install a touch panel or a PC near the HC5500 where the RISO Console can be seen.

Security means safe, reassuring printing

The data to be printed is first converted into RIP (printable status) and printing starts immediately after you enter the security code directly at the HC5500. The most effective form of security is to watch the printing and take the output right away. And the data must be completely erased from the printer. These security functions improve safety and efficiency in the current office workflow.

Using the PS7R RISO Controller, you can assign security codes not only to data but also folders. Intelligent control is possible by preparing separate folders with security codes for each group or department.

Reducing waste also means preserving the environment

Printing in front of your eyes when you need and taking the printout as soon as they come out will save you the effort of searching for your documents among multiple printouts. In addition, problems such as printouts left for ever or taken by mistake will disappear. This will save time and money previously spent on reprinting and disposing of unclaimed printouts. Daily workflow improvements really make a difference.
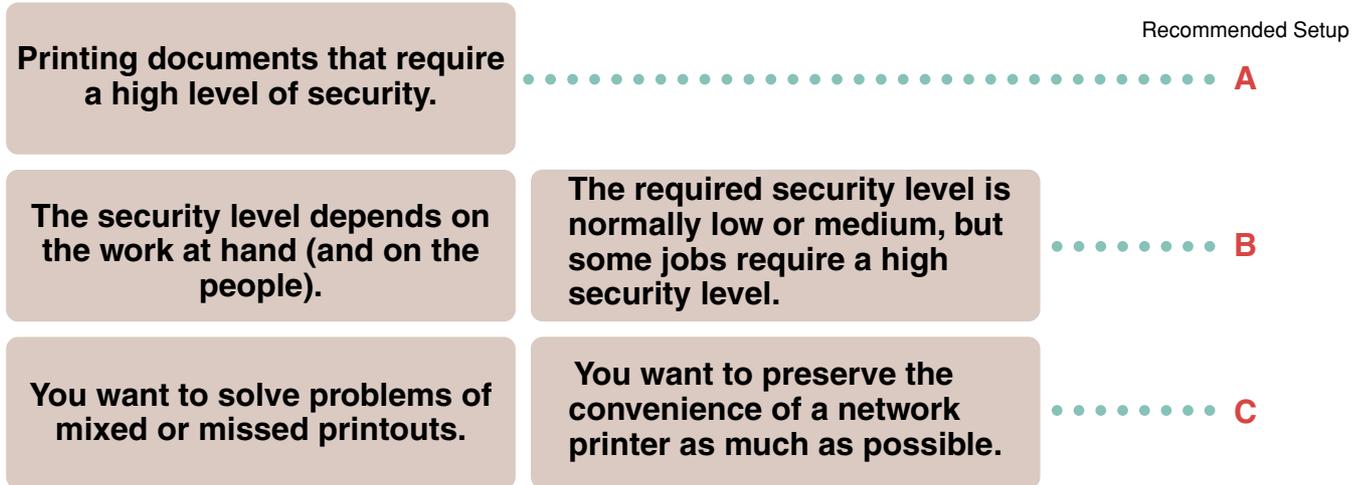
Taking Advantage of Security Print

Taking full advantage of Security Print in your work.

The HC5500 allows you to select a Security Print function adapted to you and your working place. First, find out what security level you and your working place need.

How do you want to use the HC5500? (Setting up Security Print)

Recommended Setup

Printing documents that require a high level of security.		A

The security level depends on the work at hand (and on the people).	The required security level is normally low or medium, but some jobs require a high security level.	B
You want to solve problems of mixed or missed printouts.	You want to preserve the convenience of a network printer as much as possible.	C

Recommended Setup [A]: the security setting is defined by each one

For sending a print command using the printer driver, use the [Security Print] function of the [Option] tab. The job enters [Requesting...] and the printing does not start unless you enter the security code. After printing, the data does not remain in the printer.

Operations from the job manager are accepted. Try to use [Recommended Setup B]. If you put a check mark in [Job name is not indicated on Job Manager], the job name is not displayed regardless of the administrator's setting in the console.
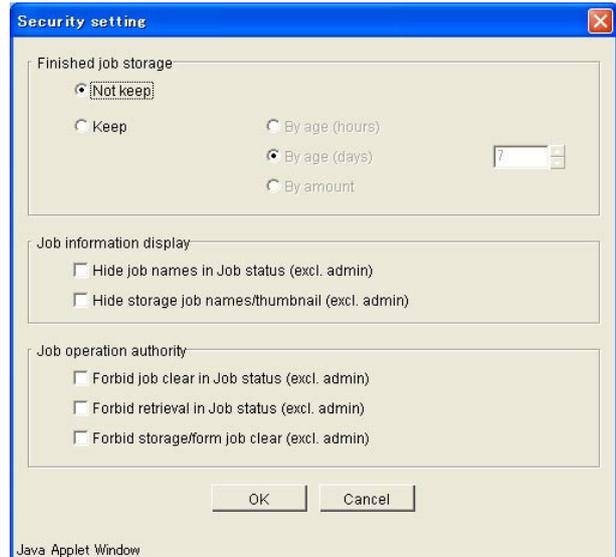
Recommended Setup [B]: the administrator is responsible for security settings

It is possible to select whether or not to store the job in the printer controller after printing. "Discard" is recommended for security, but even when jobs are stored, it is possible to impose restrictions on the display of job names and operations.
Reference: regardless of the [Store/discard] setting, the print history can be viewed in the [Accounting Record] in the Console/User Setting.

The Job Manager is a convenient application that permits viewing a job processing status, but with certain settings it can also output or delete other people's jobs. When considering how to set the security configurations, the administrator must define settings that restrict display details and operation scopes.

Recommended Setup [C]: the administrator is responsible for security settings

It is possible to define whether only jobs sent with the Security Print function or every job will require waiting for the output. To eliminate the waste caused by abandoned printouts or printouts taken by mistake, please select [Store all direct jobs as jobs that require waiting].
Jobs set to require waiting accumulate in the job manager until they are printed out. The printer can be adjusted to automatically delete accumulated jobs after a fixed period of time or not.
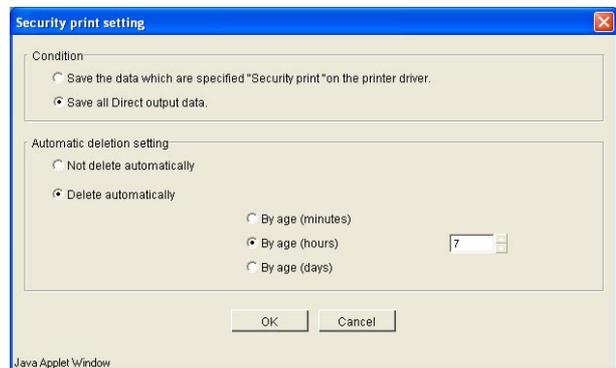
Keeping data

The HC5500 can be adjusted to store the last data (only the last page in the case of jobs that comprise several pages) or not. It is convenient to store the last data if you constantly do additional printing such as for advertising leaflets. When the Security Print function is used, the final data are not stored. If you do not wish to store any data, go to [Administrator] [Controller setting 2] [Initial settings] and remove the check mark in [Keep the last page of the job in the printer.]. The data will no longer be stored.

Useful information about the HC5500 Series

The HC5500 differs from ordinary inkjet printers in some ways. Here we will explain about those differences. Please understand these features to take full advantage of the printer.

The ink is oil-based.

Personal inkjet printers often use water-based ink. The HC5500, on the other hand, uses special oil-based ink for high-speed printing.
In order to take advantage of the features of oil-based ink and obtain superb printing quality, we recommend the use of special paper.
Conventional types of paper for inkjet printers (especially glossy ones) are suitable for water-based ink and should not be used with the HC5500.
Moreover, use PET files for storing printouts in order to retain their quality.

Special paper for the HC, the best appealing power.

The RISO IJ paper was especially developed for the RISO HC Series. A special colour profile was developed to match the special paper, taking full advantage of the features of our special ink. For the best printing quality, combine the paper type set in the printer driver with the type of paper loaded in the tray. For the paper, contact your local dealer (or service representative).

RISO IJ Double-Side Matte Paper

[No paper] error occurs even with paper loaded in the tray.

After loading paper in the tray, adjust the type and size of paper in the menu setting of the main printer body ([4.1 Standard Feed Tray] [4.2 Feed Tray 1] [4.3 Feed Tray 2]). If the settings do not match the paper type adjusted at the printer driver during the printing, a [No paper] error occurs.
By setting the menu setting [5.8.17 Tray Selection Rule] in the main printer body to [Size], you will not have to mind the paper type. Printing will be possible whenever the size matches. In that case, the printing quality may not be good if the paper type does not match.
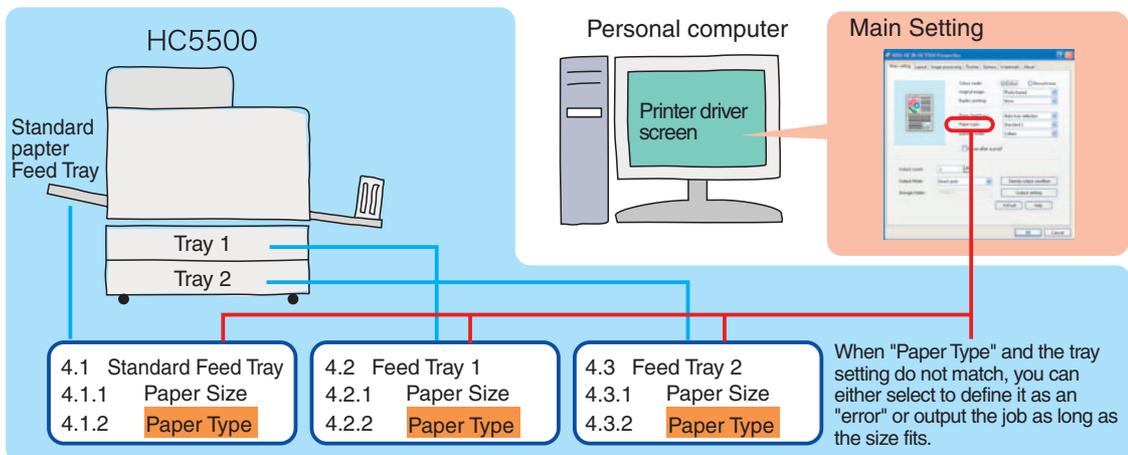
Does the quality of the printout differ from other printers?

Whereas colours displayed in monitors and the like are expressed in terms of the primary colours of light - red, green, and blue (RGB), for ink printing the 3 primary colours are cyan, magenta, and yellow (CMY). In general, CMY cannot form as many colours as RGB, and as a consequence it is not possible to print the same colours seen at the monitor. Therefore, it is necessary to convert RGB into CMY while trying to reproduce colours as faithfully and naturally as possible. This conversion mechanism is called "colour management." Rules used in the conversion vary from manufacturer to manufacturer; we, at RISO, use a proprietary conversion table (colour profile). HC5500's colour management is performed using our proprietary colour profile ComColor™ Standard, which focuses on the reproduction of colour images based on our fundamental concept of fast, inexpensive, and instant printing.

ComColor™ Standard Features

- **Colour tones are adjusted (colour profile changes) according to the paper.**
- **Colour tones are adjusted according to the original image mode (predominantly text or predominantly photo).**
- **Colour photographs are adjusted to achieve beautiful results with a limited range of colours.**

Due to this feature, the item [Paper size and type] adjusted at the printer driver should correspond to the actual size and type when printing with the HC5500. If the settings do not match, it is not possible to achieve beautiful results.
In addition, the ink used is also important for the reproduction of colours.
The FORCEJET Link mark of the HC5500 indicates the usage of appropriate ink and correct colour management.

Operating on the printer's panel

The usual printing procedure consists of clicking on [Print] [OK] at the Computer's printer driver screen. With the HC5500, it is possible to do it that way too. However, in some situations such as when you want to print a large amount of data or manipulate data that have been already finished (for example, to print someone else's data), it is possible to give instruc-tions/do adjustments from the operation panel by setting the print mode to [OFF].

📖 **[More Useful Functions], page 32 of this manual**

Select [Job Clear] from the menu if you want to [Clear].

To interrupt or cancel the printing, execute [Menu 7 Job Clear]. Pressing the cancel key does not clear an ongoing printing job.
After selecting [Job Clear] in Menu 7, make sure to press the Print/Pause key and restore the print mode to [ON]. If left in [OFF], the printer does not respond to print commands sent from the computer.

Be careful with curled paper

A strongly curled paper cannot pass through the printer.
If the paper is curled, the amount of curling should be less than 3mm (0.12").
Make sure to use "fresh-pack" (brand-new) paper in the standard paper feed tray, and wrap it with paper for storage. When left for a long time, the paper absorbs humidity from the air and tends to get curled. If you frequently experience paper jam even when the paper is curled by less than 3mm (0.12"), try to put the curled surface facing down.



Curl should be less than 3mm (0.12").
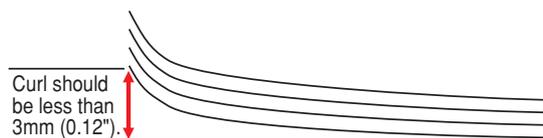
Use narrow margins

The HC5500 uses 5mm ($^5/_{16}$") vertical and horizontal margins by default due to its high-speed paper feed mechanism. These margins can be reduced to 1mm (0.04") by selecting [Maximum] in [Menu 4.10 Image Area].

The printing mode is switched ON/OFF with the PRINT/PAUSE key of the Operation Panel.
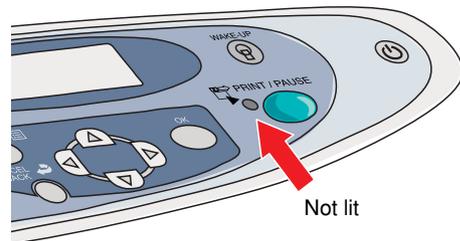
Printing mode ON

Prints upon a command from the printer controller.

Lit green
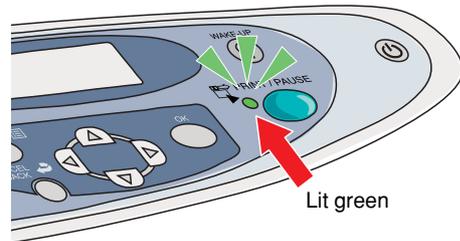
Printing Mode ON

Printing mode OFF

The printer does not accept commands from the printer controller and keeps waiting for a command from the Operation Panel. Panel operations permit changing settings, as well as adjusting position and contrast of the data currently being printed.

Not lit

Printing Mode OFF

Sleep Mode and Stand-by Mode

When the printer is switched ON and is left unused for a certain period of time, it automatically enters an energy saving mode.
Two types of energy saving modes are available: [Stand-by mode] and [Sleep mode].

Stand-by mode

In the Stand-by mode, power consumption drops from the usual 800W to less than 150W. Any print operation sent from the computer calls the printer back from the Stand-by mode to start printing. For menu operations, use the WAKE-UP key.

WAKE-UP Key

WAKE-UP

PRINT / PAUSE

OK

Sleep Key

Sleep mode

The sleep mode is more economical than the wait mode. Power consumption falls to less than 20W. To bring the printer back from the sleep mode to the printable state on Macintosh machines, use the [RISO Wake-Up Tool] available in the RISO Controller CD-ROM to send a command from the computer or press the Sleep Key of the HC5500. (On Windows machines, the data is automatically received when sent.)
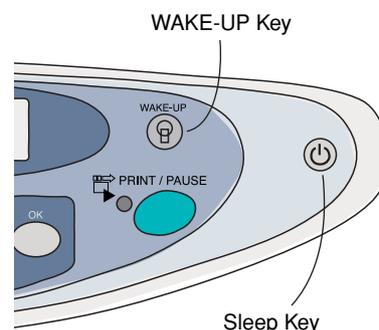
It is possible to set up the times required to enter the stand-by and sleep modes.

HC5500 time setting relations

Menu	Contents	Adjusted item	
Menu 5.8.1 Sleep	Defines whether or not to enter the sleep mode when the printer is left unused for a certain period, in order to save energy.	ON (Default) OFF	**A**
Menu 5.8.2 Waiting Time	Defines the time required to enter the sleep mode when [Sleep] in menu 5.8.1 is set to [ON].	60 minutes (Default) 1 to 99 minutes	
Menu 5.8.18 Print Mode Auto-ON	Defines whether or not the Print mode will be set to [ON] when left unused in the OFF state for a certain period of time.	ON (Default) OFF	**B**
Menu 5.8.19 Print Auto-ON Time	Defines the time required to set the Print mode to [ON] when [Print Mode Auto ON] is set to [ON].	5 minutes (Default) 1 to 60 minutes	
Menu 5.8.20 Menu Auto-Shut OFF	Defines whether or not to switch the Print mode to [OFF] when no operation is performed on the menu setting screen for a certain period of time.	ON (Default) OFF	**C**
Menu 5.8.21 Menu Shut OFF Time	Defines the time required to set the Print mode to [OFF] when [Menu Auto Shut OFF] is set to [ON].	5 minutes (Default) 1 to 60 minutes	
Menu 5.8.22 Stand-by	Defines whether the printer enters the Stand-by mode to save energy when not used for a certain period of time.	ON (Default) OFF	**D**
Menu 5.8.23 Stand-by Period	Defines the time required to enter the Stand-by mode when the [Stand-by Mode] in Menu 5.8.22 is set to [ON].	5 minutes (Default) 1 to 99 minutes	

Operation on the menu setting screen

1. Automatic transition to Print Mode OFF
2. Automatic transition to Print Mode ON
3. Automatic transition to Stand-by mode
4. Automatic transition to Sleep mode

C   B   D

Time elapsed without any operation and menu screen displayed

Time elapsed without any operation and Print Mode OFF

Time elapsed without any operation and Print Mode ON

Time elapsed without any operation and Print Mode ON

A

In the HC5500, the time transitions shown in [1 to 4] are continuously repeated when settings [A to D] are performed.
When using a Macintosh, setting [A (Sleep)] makes the printer controller not receive data from the computer during sleep mode. Send the data after waking up the HC5500 using the RISO Wake-Up Tool.

## Duplex Printing = [Switch Back] + [Stackless] System

By default, the HC5500 can do duplex printing* in any size varying from postcards to A3W (ledger) (46g/m^2 - 210g/m^2). The printer uses the "switch back" method that consists of printing the front page first, reversing the paper and then printing the back page. This method tries to alleviate the burden suffered by the paper and carefully considers the size of the body. Furthermore, in order to take advantage of high speed, the "stackless" method is used. Soon after printing the front page and reversing the paper, the sheet passes through the back of the print head. This mechanism permits efficient duplex printing without losing speed.

After printing the front page of the sheet, it passes through the vertical paper feeder and is turned over at the Switch Back Paper Guide.
The reversed sheet enters the space between the sheets fed by the feed trays and then passes under the print head again.
The front and back pages are printed alternately. The back page is printed according to the print unit specified by the printer driver command, and the sheet is output to the stacking tray.

*Except envelopes and special paper
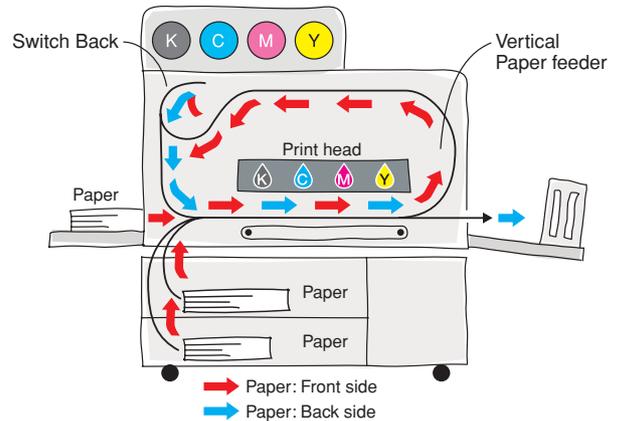
Printing envelops

- The [Paper Size Entry] is necessary for printing envelopes.
  The size (length) of the envelope to be registered must include its flap.
  Differently from the case of usual paper, the Maximum Print Area (Image Area) corresponds to the registered value subtracted by a margin of 10mm ($^3/_8$").
- Load the envelope on the Standard Paper Feed Tray with the flap on the left side.
- Some types of envelopes cannot be used for printing.
  Example: windowed envelopes
  For details, contact your local dealer (or sales representative).
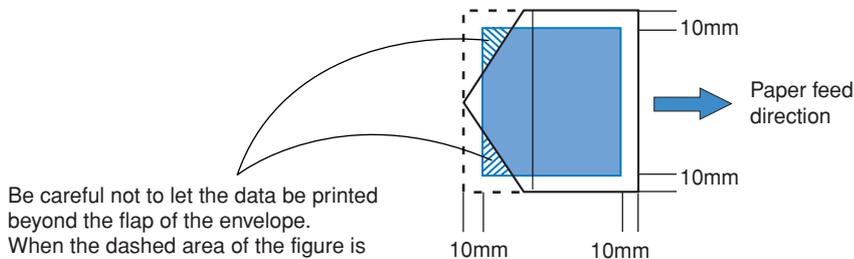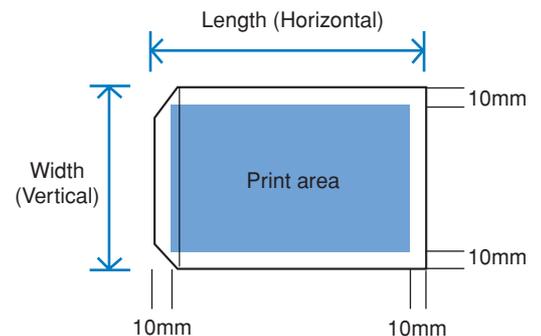
Be careful not to let the data be printed beyond the flap of the envelope. When the dashed area of the figure is covered with the data to be printed, the transportation belt inside the HC5500 gets soiled and may cause malfunction.

GDI and PS controllers

The output from a printer can use standard OS functions such as GDI (Windows) or QuickDraw (Macintosh), or may use a page description language such as PS (PostScript) and PCL. The HC5500 Series uses a special GDI controller and a PS controller.

The GDI controller (HC3R) uses drawing functions of the OS and sends data rasterized at the computer to the printer controller for printing. The data rasterized for the HC5500 can only be used by the HC5500.

The PS controller (PS7R) uses PS as a page description language. The page data sent from the computer to the controller (PS data) are converted into printable data (rasterized) and then sent to the printer. The data transfer from the computer occurs at high speed and does not overload the computer, making it possible to immediately start the next DTP work. The PS data can reproduce (print) pictures and characters regardless of the equipment. (The printer controller is compatible with Adobe Postscript ® 3.™)

Windows (GDI)

HC5500

The printer driver creates a BMP image

Prints out without any conversion

HC3R-5000

Windows / Machintosh

PS data

HC5500

Prints out after the controller rasterizes the job (RIP).

PS7R-9000
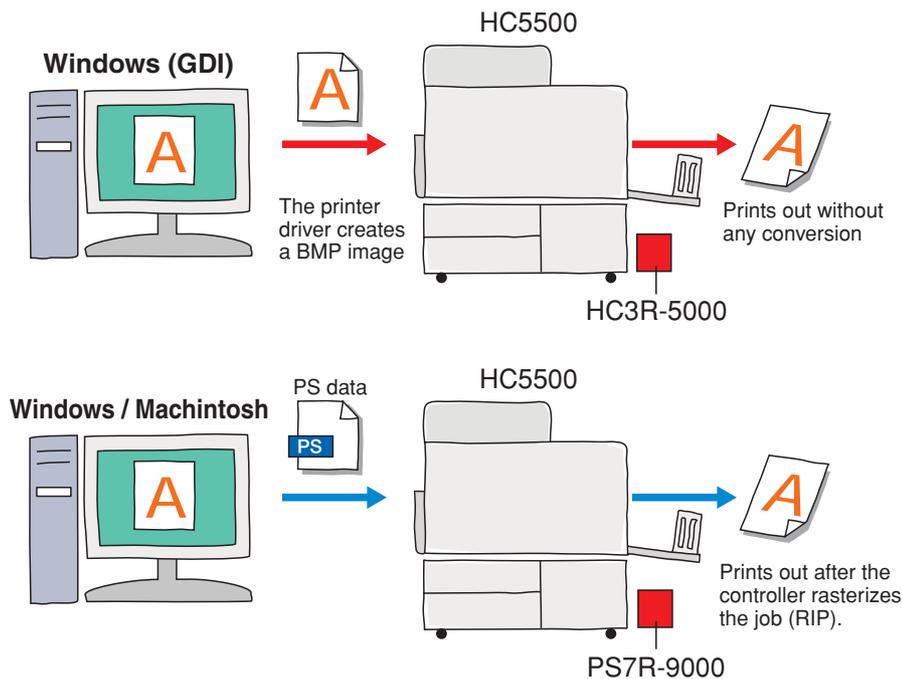
Frequently Used Basic Functions

Duplex printing

Consists of printing on both sides of the paper. By combining this function with the Multi-Up, you can make your documents more compact.

📖 **See User's Manual for Printer Driver page 2-6.**

By setting duplex printing as the printer's default in [Properties], you can save the effort of repeating the setting every time.

This function can be combined with the (optional) HC Finisher, which performs stapling and hole punching automatically - the printout is ready for distribution or filing, for better efficiency.

How to do duplex printing

1 **Click on the [Main Setting] tab of the Printer Driver screen.**
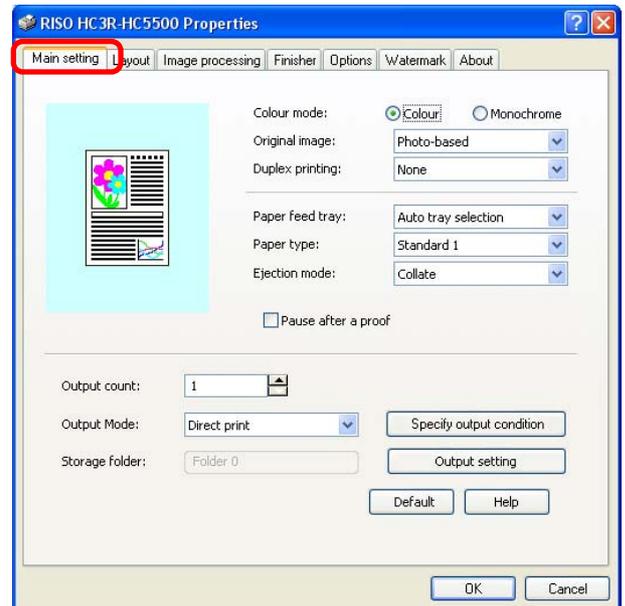
2 **Choose the binding direction in [Duplex printing].**
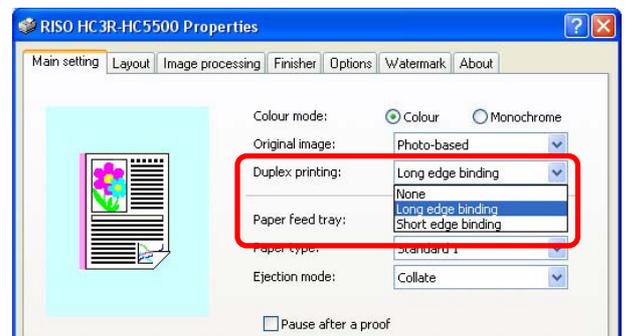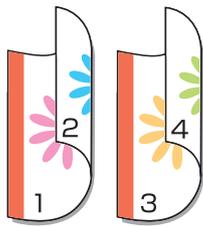
Long edge binding
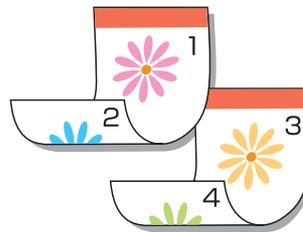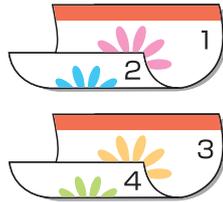
Short edge binding
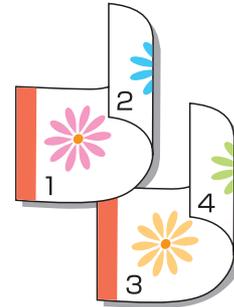
Even more convenient ways of printing are possible by combining duplex printing with the Booklet (Pagination) function.
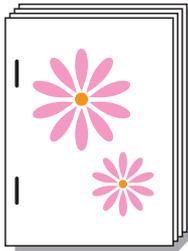
For example, 4 single-sided pages (4 x A4)
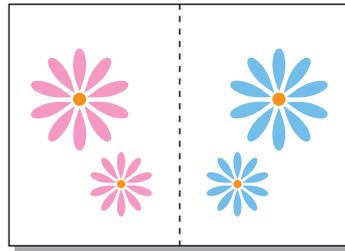
You can print on one A3 sheet (stapling is unnecessary)
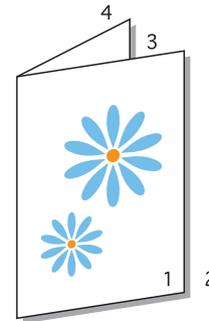
In case of paper jam during duplex printing...

During printing, paper travels at high speed inside the printer. For this reason, not only the jammed paper but also the ones in motion should be removed.
This is especially true for the duplex transfer unit, which may contain several papers. When paper jam occurs during duplex printing, rotate dial B inside the printer until all the paper is removed.
For your reference, a seal showing instructions related to paper jam becomes visible by opening the front cover of the printer.

📖 **See User's Manual for Printer Main Body page 3-9.**

Duplex Transfer Unit

Dial B

Multi-up (Multi-page)

Prints multiple pages on 1 paper by pagination (arrangement). Pagination can be selected for 2, 4, 8, or 16* pages. It is also possible to select the order of the pages.

* 16-page selection is only possible when connected with a RISO PS7R-9000 controller.

📖 **For HC3R-5000, see User's Manual for Printer Driver page 2-14.**
For PS7R-9000, see User's Manual for Printer Driver page 3-14.

Multi-up
(Two pages in one)
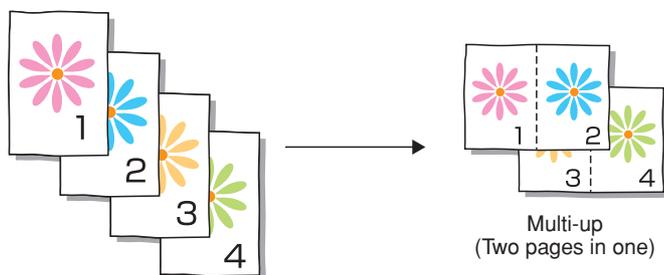
How to Use Multi-Up

1 **Click on the [Layout] tab of the Printer Driver screen.**
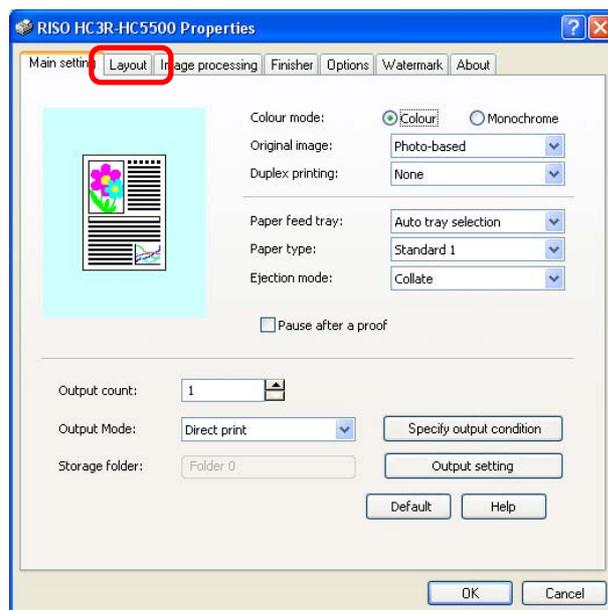
② **Select [Multi-up].**

Select [Pages per sheet]

Select [Page order] as well.

The usual setting is [Auto].

RISO HC3R-HC5500 Properties

Main setting | Layout | Image processing | Finisher | Options | Watermark | About

Original size:	A4
Output paper size:	Same as original
Zoom:	100 %
Orientation:	● Portrait ○ Landscape
Pagination:	Multi-up(Multi-page)
Pages per sheet:	4 pages
Page order:	○ Vertical ● Horizontal
	☐ Reverse order(from R to L)
Output face:	Auto

Default | Help

OK | Cancel
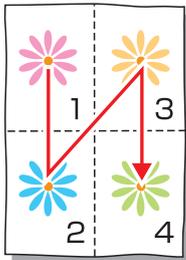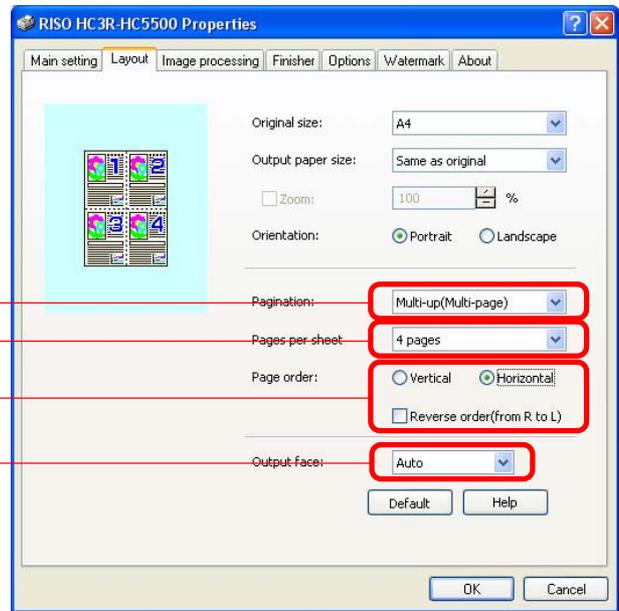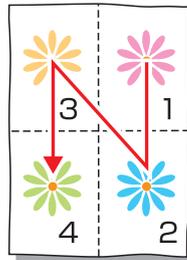
Vertical

Vertical & Reverse order (from right to left)
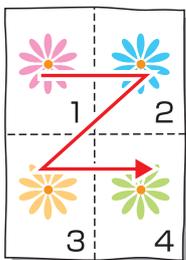
Horizontal
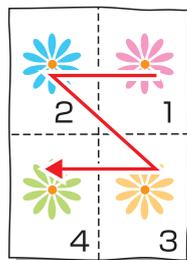
Horizontal & Reverse order (from right to left)

Job Separation

Preparing a large quantity of documents for meetings is straightforward using the Job Separation function.

📖 **For HC3R-5000, see User's Manual for Printer Driver page 2-26.**
For PS7R-9000, see User's Manual for Printer Driver page 3-25.

Types of Job Separation

Between jobs

A separating paper is inserted after completing each job sent by the computer.

■ :Separation Paper
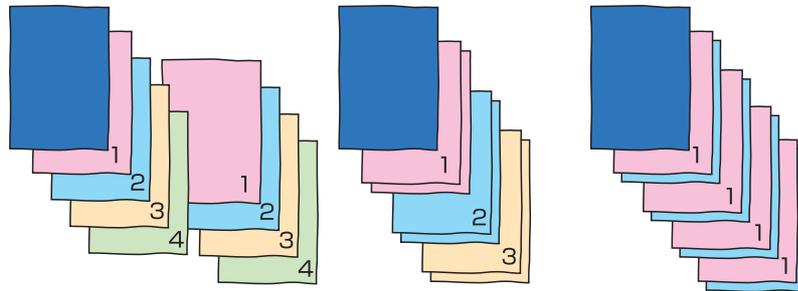
Every division

A separating paper is inserted after completing each section of a single job.

• **For collate printing**
  Prints and groups by set.
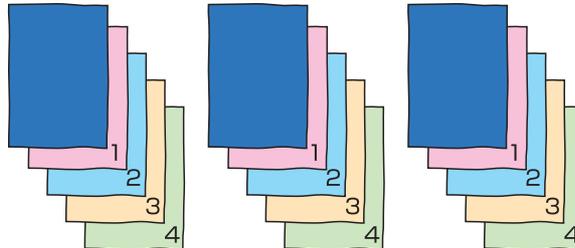
Previously printed covers can be used as separation papers.

📖 **"Loading separation papaers" on page 29 of this manual.**

• **For non-collate printing**
  Prints and groups by page.
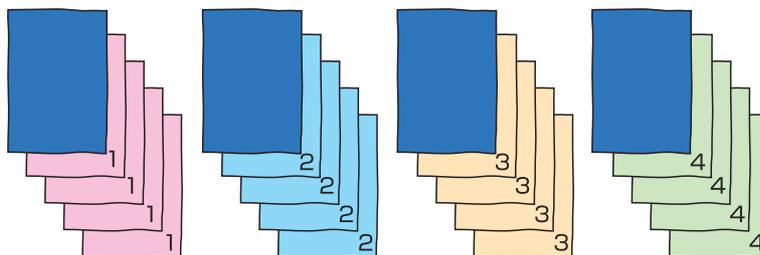
How to Do Job Separation

① **Click on the [Options] tab of the Printer Driver screen.**
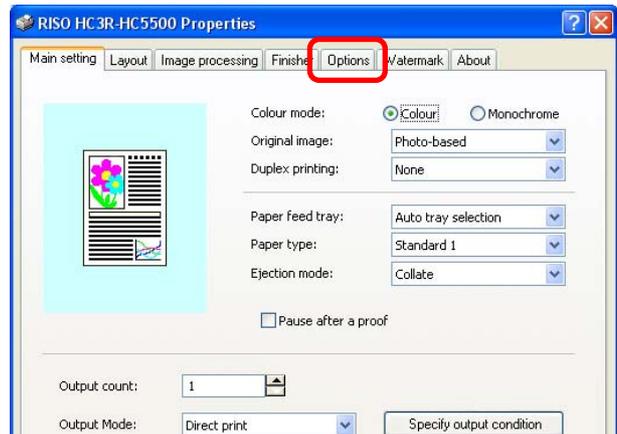
② **Select the type of Job Separation**
When [Every division] is selected, separation papers are inserted according to [Ejection mode] of the [Main setting] tab.
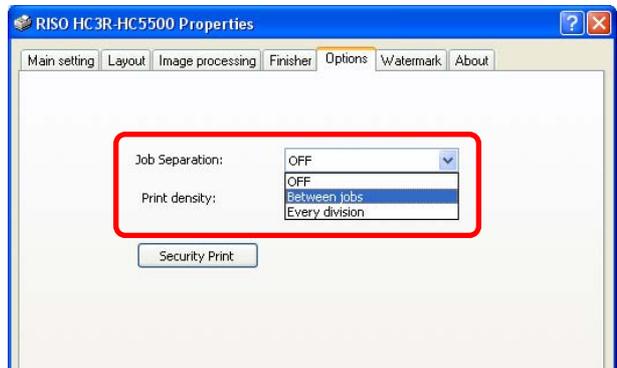
Loading separation papers

Define in advance in which tray the separation paper will be loaded. In the explanation of this example, the separation paper will be loaded in the Standard Paper Feed tray.
① Load the separation paper on the Standard Paper Feed tray.
② Press the Menu key on the printer.
③ In [Menu 5 Administration] - [5.3 Separation paper], choose [Standard Feed Tray].
📖 **See User's Manual for Printer Main Body page 2-36.**

If you select [OFF], the printer will stop regularly for a few seconds. During these intervals, it is possible to attach labels or insert sheets that have been printed separately.
The tray (Standard Paper Feed tray) assigned to load separation paper cannot be selected by the printer driver when the tray selection is set to [Auto tray selection]. To use it as a standard tray, change the setting to [OFF].

Separation paper

Standard Paper Feed Tray

Paper Feed Tray 1
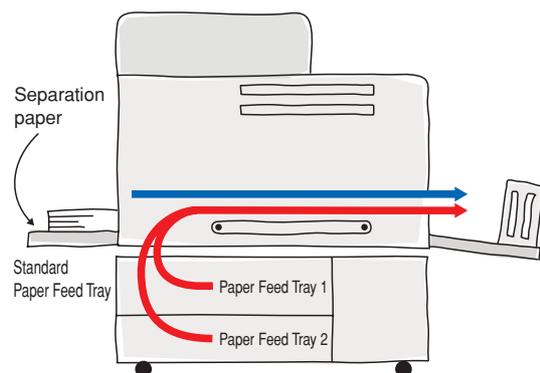
Paper Feed Tray 2

Use paper in Paper Feed Tray 1 or Paper Feed Tray 2 for printing

RISO Console

When connected to the LAN, the HC5500 not only is capable of high-speed data transfer but can use the network, for several purposes. Operations can be executed at the local computer rather than at the printer itself.

The console screen is displayed when you enter the IP address assigned to the HC5500 in the browser address field.

📖 See User's Manual for Console page 1-3.

Monitoring

The printer's current operation status can be checked. In addition, the conditions of consumable items are displayed via icons and messages.

📖 See User's Manual for Console page 1-4.

Status
The printer's current status is displayed.

About...
The settings of the printer controller and the printer are displayed.

① **Message**
Information related to the printer is displayed.

② **Comment**
Complementary information related to the message is displayed.

③ **Printer Icon**
Information related to the printer is displayed.

④ **Power Icon**
The status of the printer's power supply is displayed.

⑤ **Paper Information**
The size, type, and direction of the paper loaded in the paper feed trays are displayed.

⑥ **Printer Information**
The size of the paper loaded in the selected tray is displayed.
If [Auto tray selection] is selected in [Paper feed tray] for printing, [Auto] is displayed.

⑦ **Controller Information**
Displays the space available in the hard disk, data receiving conditions, and the name of the job being processed.

Job Manager

Job Manager lets you output the job currently being stored in the printer controller. Also, the status of the job currently processed by the printer controller can be displayed.

📖 See User's Manual for Console page 1-6.

Archive
Can check and output currently stored RIP-processed jobs.
(Only when connected with RISO Controller PS7R-9000)
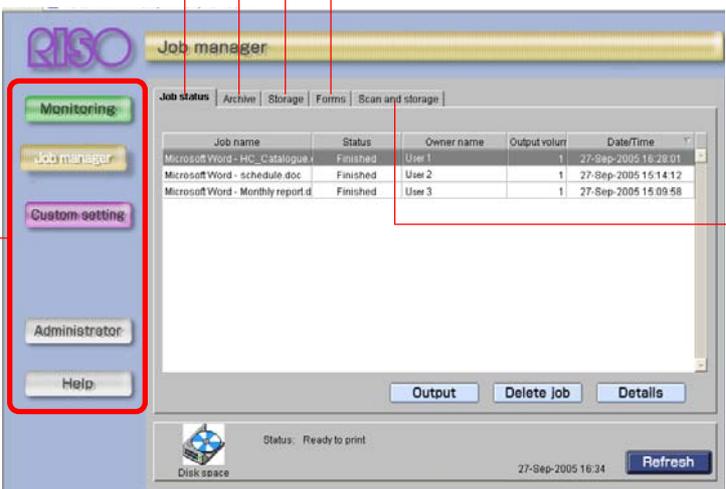
Job status
The name, status, owner, number of sets, and receiving date and time of the job under process are displayed.

Storage
The stored job can be checked and output.

Forms
The job registered in the forms can be checked and output.
(Only when connected with RISO Controller PS7R-9000)

The corresponding screen is displayed when clicked.

Scan and storage
If the optional scanner (RISO Scanner HS2000) is installed, the scanned page data (data stored by the copy) are stored here.

Other functions

Custom setting ..... It is possible to view the history of jobs processed by the printer controller by clicking on [Custom setting]. Data saved by the [Network scan] function can also be downloaded.

Administrator .... Specifies operations of the printer controller, etc.
Settings can only be changed by users who logged in using the administrator's password.

Help .... Instructions on how to use the RISO Console are displayed.

4 Other Useful Features

Pause after a proof

For jobs involving a large number of pages, it is possible to print just one page or one set and check the results before printing the specified number of pages. If no problem is found, the printing is resumed by pressing the Print/Pause key at the printer. The printing position can be adjusted at the printer while pausing. The initial setting is disabled (no check mark).
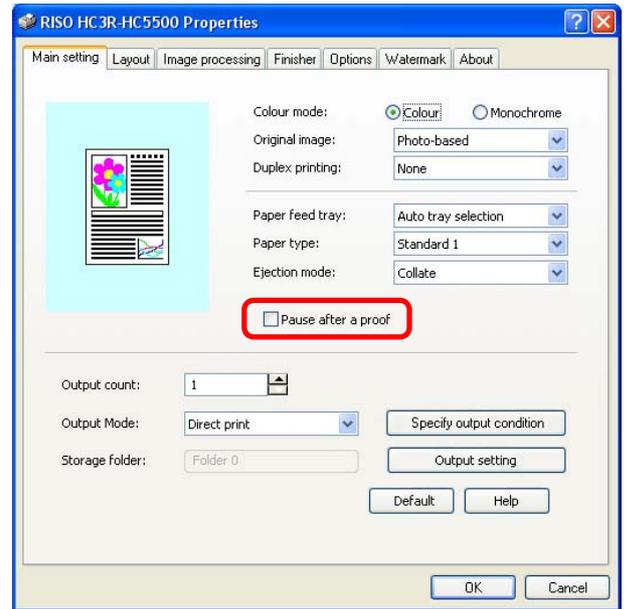
Print Position Adjustment

It is possible to change printing position during the printing, and also adjust the position for binding or stapling. The results can be checked by pressing the menu key and then "Test Print" after adjusting the printing position.

📖 See User's Manual for Printer Main Body page 2-14.

$\uparrow$ 0 – 20.0mm (0" - $^{13}/_{16}$")

$\leftarrow$ 0 – 20.0mm (0" - $^{13}/_{16}$")
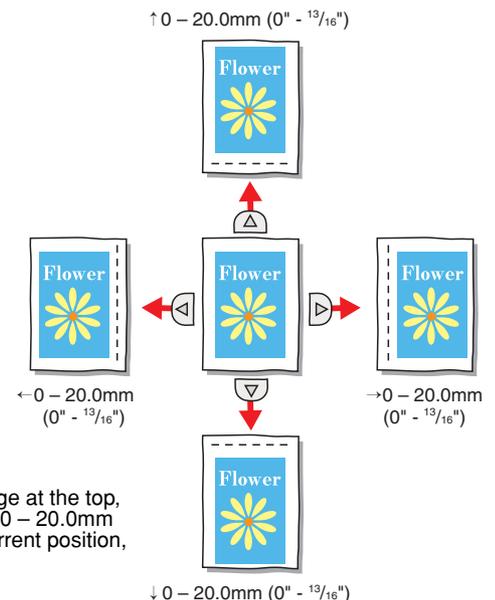
$\rightarrow$ 0 – 20.0mm (0" - $^{13}/_{16}$")

The position can change at the top, bottom, left, and right, 0 – 20.0mm (0" – $^{13}/_{16}$") from the current position, by 0.5mm ($^{3}/_{16}$") units.

$\downarrow$ 0 – 20.0mm (0" - $^{13}/_{16}$")

How to adjust printing position

1   **Press the PRINT/PAUSE key during printing.**
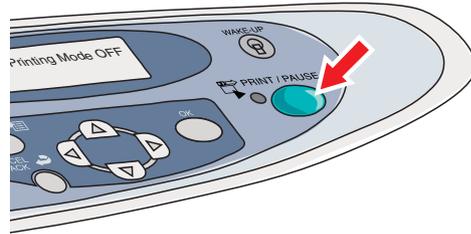
2   **Press the Menu key.**
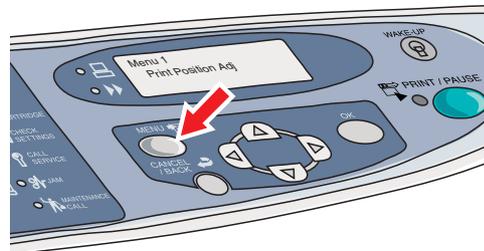
3   **When Menu 1 is displayed, press the OK key.**

> Menu 1
>   Print Position Adj
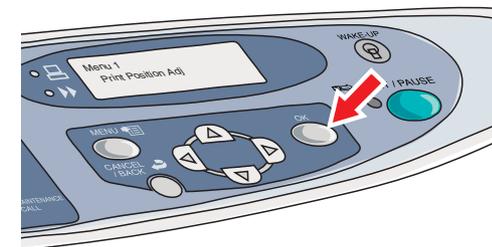
4   **Adjust the printing position using cursor keys and start printing by pressing the Print/Pause key. It is also possible to check the results using test printing. (Next page)**

> Print Position Adj
>   ↑   10 mm
>   ← → 00.0 mm
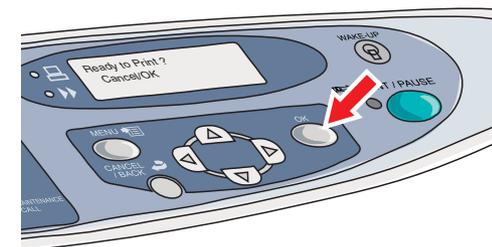
Test Print

You can check the results after adjusting printing position or density.

📖 **See User's Manual for Printer Main Body page 2-16.**

# How to do test printing

1 **Press the PRINT/PAUSE key during printing.**

2 **Press the Menu key.**

3 **Display [Test Print] by pressing the cursor keys and then press the OK key.**

Menu 2
  Test Print

4 **Test printing starts after pressing the OK key. Check the result.**

Ready to Print ?
  Cancel/OK
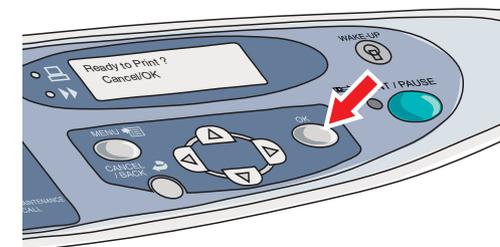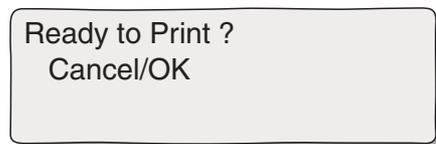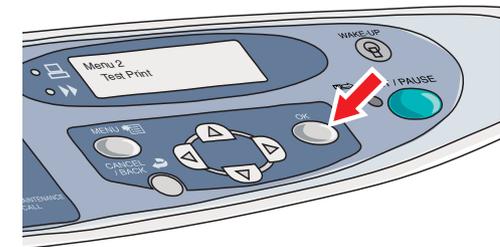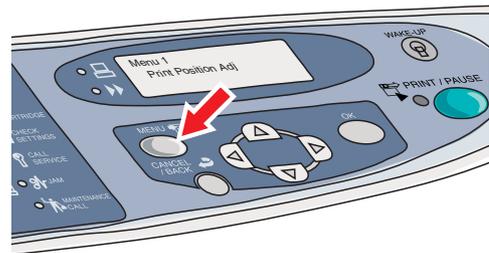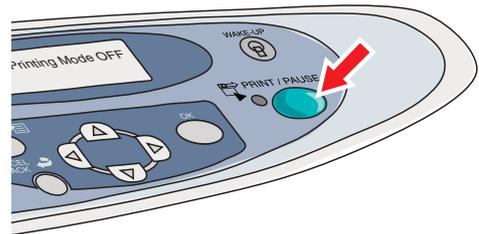
Job comments

Comments can be added to the data when a person who prepares and edits the page sends the DTP data to the controller and another person in charge of printing executes printing. Comments may include paper type or colour, size specifications, and any other information that needs to be communicated to the person in charge of printing. This feature can be used as printing specifications in case the environment where the data are prepared is separated from the printing environment.
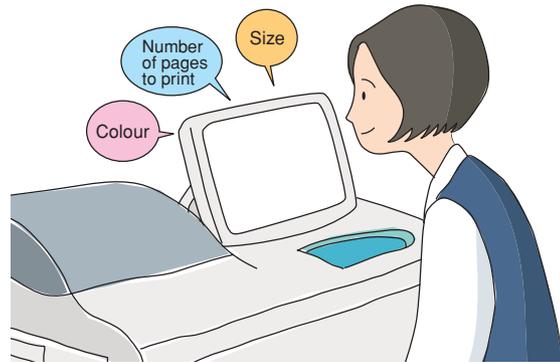
Adding job comments

1 **Click on the [Main setting] tab of the Printer Driver screen.**

2 **Click on [Specify output condition].**

3 **Input job comments.**
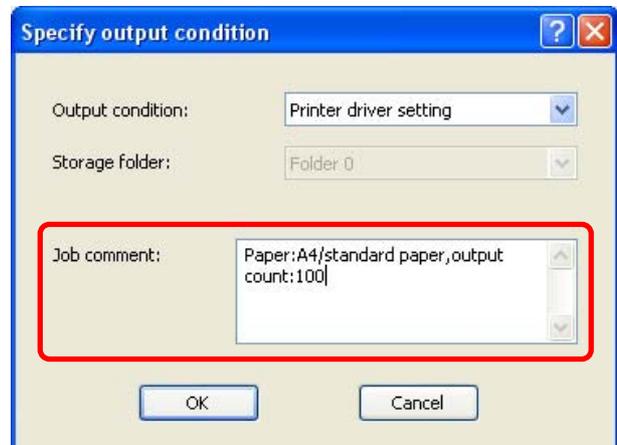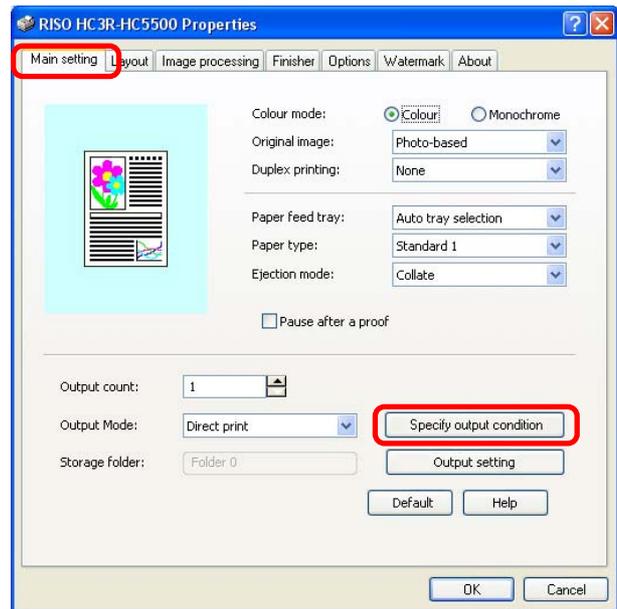
Reprinting (Temporary Data Retrieve)

After completing a printing job, it is possible to reprint the last page specifying the desired number of copies.

This feature is useful when you want to print a few more copies than the specified number.
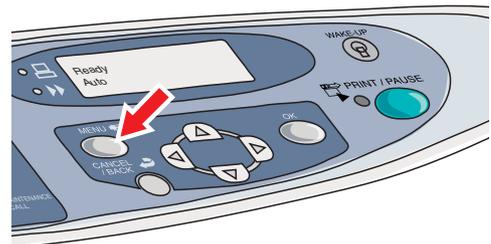
For reprinting, [Initial Setting] in [Administrator Setting] of the RISO Console needs to be changed.

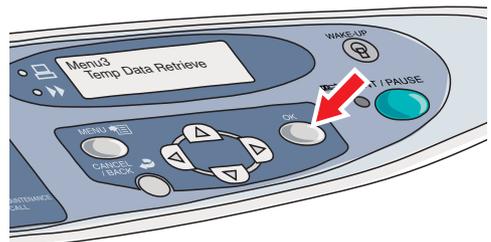📖 **See User's Manual for Console, page 2-18**

Use the printer's control panel to enter the number of pages to be reprinted.
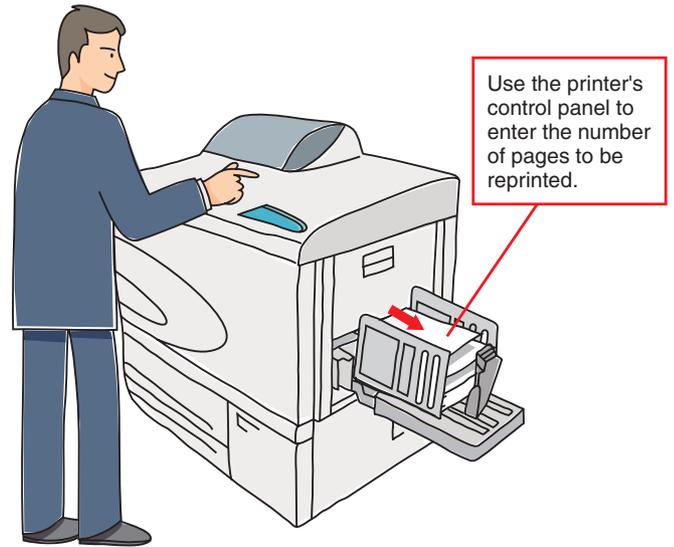
Reprinting

① **Press the Menu key during the [Ready] state.**

Ready
Auto

② **Display [Menu 3 Temp Data Retrieve] and press the OK key.**

Menu3
  Temp Data Retrieve

3 **Specify the number of copies with the cursor keys. The printing starts when you press the PRINT/PAUSE key.**

Print Quantity

0100
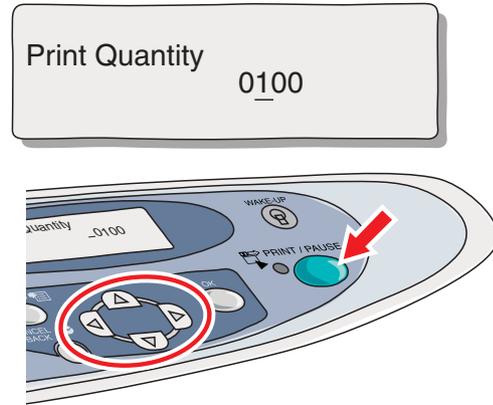
Temporary Data ("Temp Date")

After printing, the printer can internally store the last page of the printed job, which is called "Temp Data". The printer keeps these data until the arrival of the next data (job). The following usage is possible by selecting whether or not to keep temporary data.

Discarding temporary data

The factory setting is to discard temporary data.. For printing private documents that you do not wish to be copied such as examinations and directories, you can avoid unwanted printing by unselecting [Keep the last page of the job in the printer].

Keeping temporary data

If you check the option [Keep the last page of the job in the printer] in the [Initial setting] of the [Administrator] screen of the RISO Console, you can print a specified number of copies of the last printed page. This feature is useful when you want to print a few more copies than the number specified in the printer driver.

Printing PS or PDF data through FTP or LPR connection

It is possible to connect with the HC5500 via FTP (or LPR) to send and print PS (or PDF) data. PS data are generated by putting a check mark on [Output to file] in the print dialog screen and clicking on the [Print] button.
* To print data using the HC5500, the PPD information of the HC5500 needs to be in the correct order.

Login name: anonymous
Password   : none

It is possible to specify the destination of the PS (or PDF) data. However, the setting may not work correctly for PS (or PDF) data created without using HC5500's PPD.

Other Useful Features

Using Forms (only when connected with RISO Controller PS7R-9000)

It is possible to add constant marks or texts - called "forms" - to printed documents.
By previously storing texts or images as forms, adding them to the printout requires just a simple operation. You can also combine different data for duplex printing by storing one page in the printer controller.

📖 **See User's Manual for Printer Driver page 3-29.**


Using forms in different ways

In the office

• Confidential documents to be circulated in meetings, etc.

Form   Output data   Final output

• Printing the company's logo on letter heads
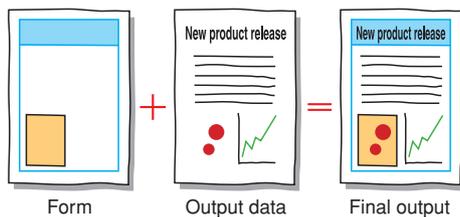
Leaflets and direct mail

• Using forms to print leaflet frames or shop logos

Form

Map   Store name and information

• Postcards used as direct mail
Combining the contents (including the shop or the description of a promotion) and the destination address written by the application software (by insertion) in one printout.
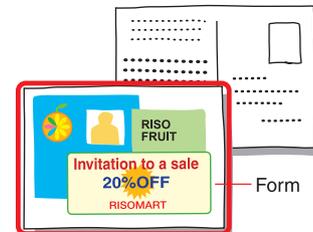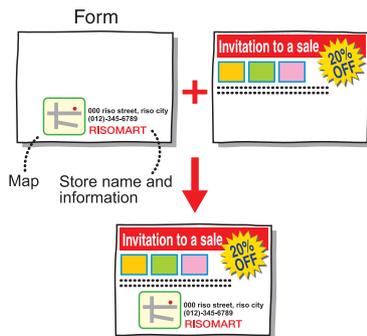
Form

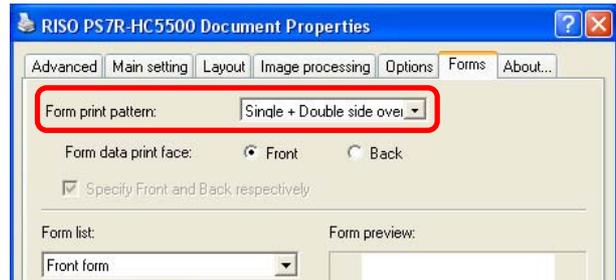# Selecting Forms

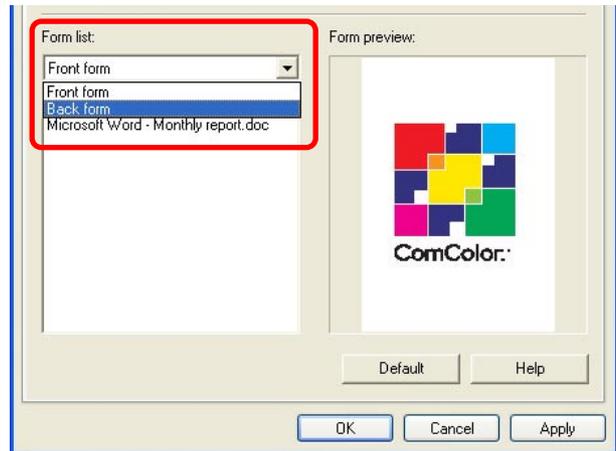**①** **Click on the [Forms] tab of the Printer Driver screen.**
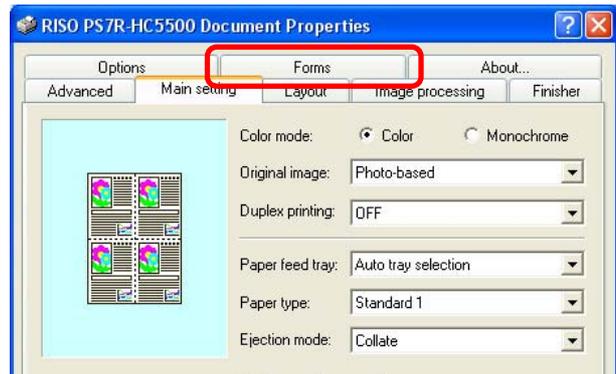
② **Select whether or not to do duplex printing in [Form print pattern].**
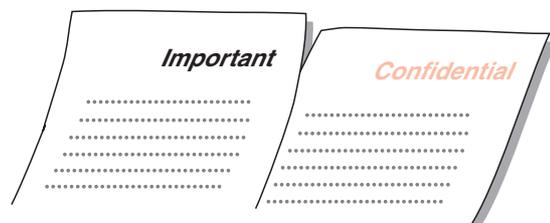
③ **Select the data to be used as a form and click on [OK].**

Using watermarks (only when connected with RISO Controller HC3R-5000)

Previously registered strings of characters can be applied as watermarks for printing.

📖 **See User's Manual for Printer Driver, page 2-28.**

Important   *Confidential*

Storing Data and Settings (Storage)

The most common usage of the printer is printing data sent by a computer. However, when you need to select several features at the printer driver screen for every printout, it is possible to store printing data and settings in the printer controller. This feature is called "Storage". According to the data to be printed, you can just store data or just print.

📖 **For HC3R-5000, see User's Manual for Printer Driver page 2-9.**
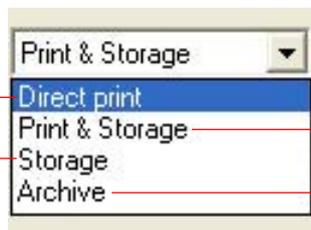**For PS7R-9000, see User's Manual for Printer Driver page 3-9.**
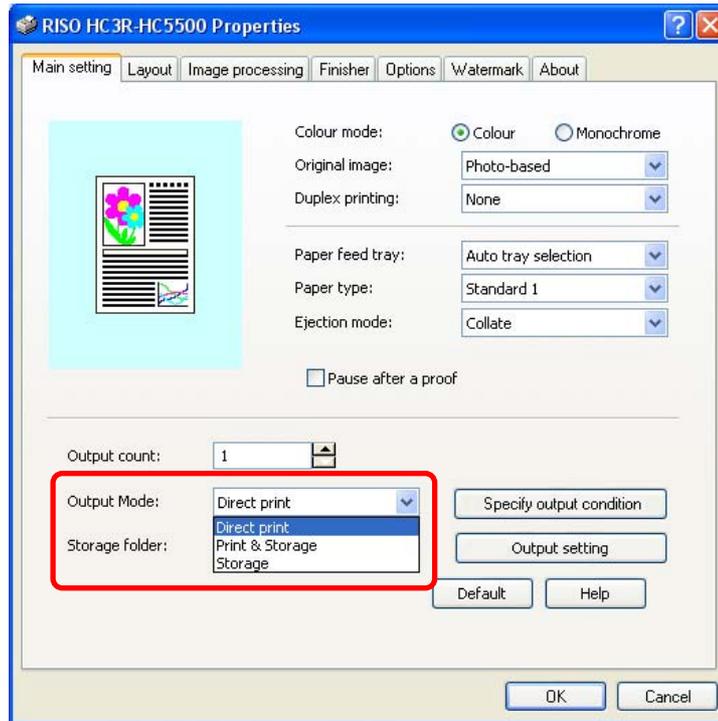
Four output modes are available

Direct print

Printing directly on the paper.

Print & Storage

Prints and stores the data in the printer controller.

Storage

Stores the data in the printer controller. The printing condition is stored together.
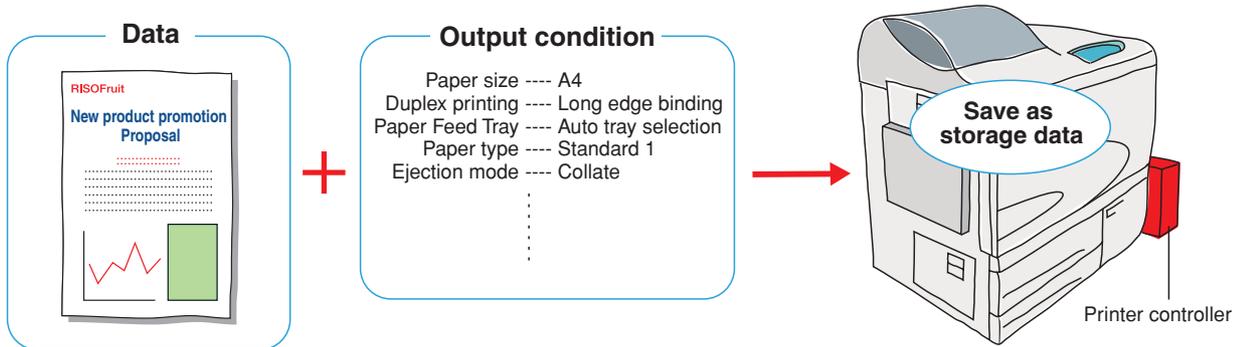
Archive

Stores data as RIP (archive) in the printer controller. (Only when connected with RISO Controller PS7R-9000)

The useful "Storage" function

Often used data can be stored as "storage data" in the printer controller. Storage data have the 2 features below.

Feature 1: Output conditions stored together

It is possible to always use the same printing conditions without setting the driver every time.
Nine storage folders are available and can be used to store/control data separated by objective and type.

Data

RISOFruit
New product promotion Proposal

Output condition

Paper size ---- A4
Duplex printing ---- Long edge binding
Paper Feed Tray ---- Auto tray selection
Paper type ---- Standard 1
Ejection mode ---- Collate

Save as storage data

Printer controller

Feature 2: OS-independent data storage format
(only when connected with RISO Controller PS7R-9000)

The data received from the computer are stored in the printer controller in the PS format. Storage data can be called by any computer for duplex or paginated printing regardless of the OS (Windows, Macintosh, etc.)
By converting to PS data, it is possible to avoid output errors due to OS type or version. Printing time is also reduced because of the data that are not transmitted.

Other Useful Features

Making Booklets (Pagination)

Using the [Layout] tab of the printer driver, it is possible paginate booklets without the help of an application software to prepare the data. You can print data as they are, without deteriorating image quality and saving a significant amount of work.

📖 **For HC3R-5000, see User's Manual for Printer Driver page 2-14.**
**For PS7R-9000, see User's Manual for Printer Driver page 3-14.**

Choose booklet
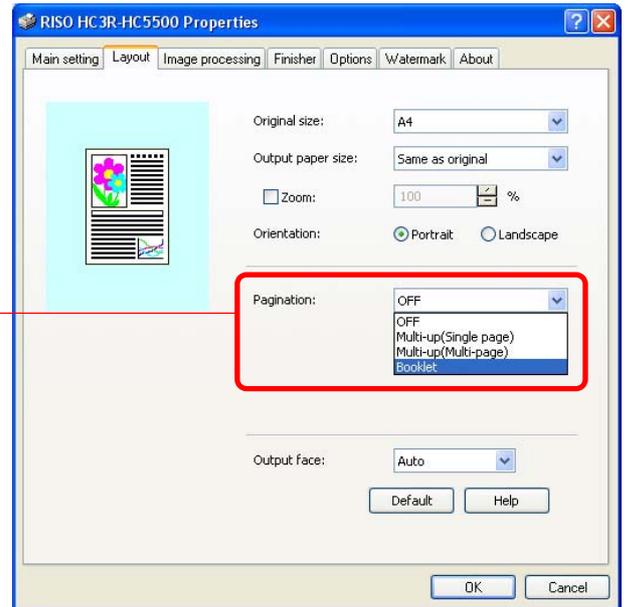
Preparing booklets from data

Data

Duplex print / both sides
2-in-1 pagination

Booklet completed
with binding.
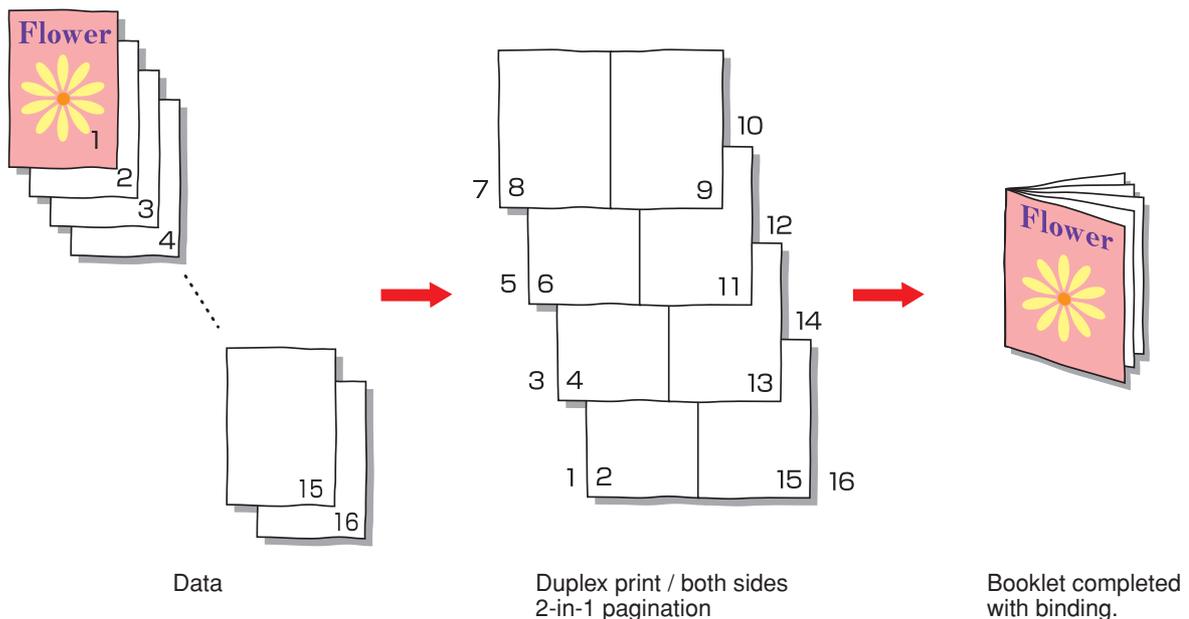
Binding

- Since booklets require duplex printing, please load papers that allow for that.
- Four pages are printed on one sheet. The first page of the original data becomes the first page of the booklet. Fractional pages are left blank. Arrange the paper considering the size of the finished result.

- The pagination order can be selected.
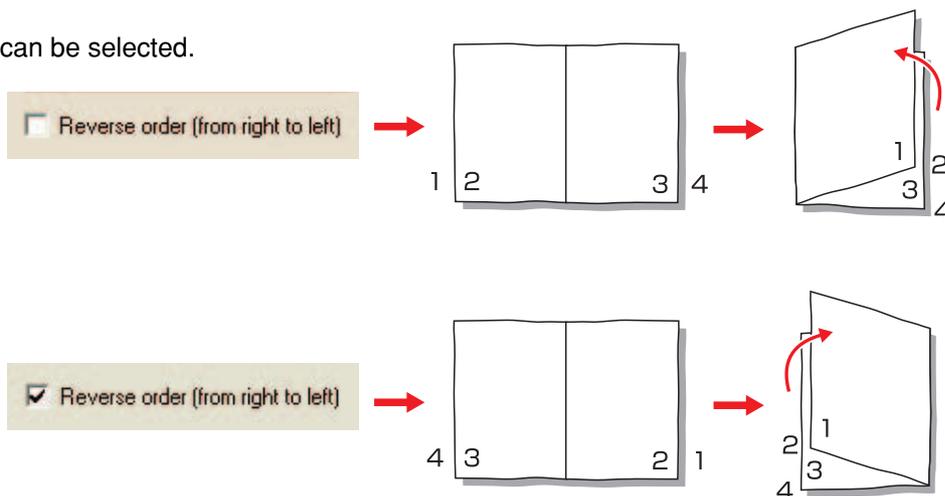
Printing on large-sized paper

Do not use the stacking guide when printing on a paper larger than 320mm x 432mm (12 $^5/_8$" x 17").
In that case, set [4.8.2 Stack Guide] in the printer menu to [OFF].
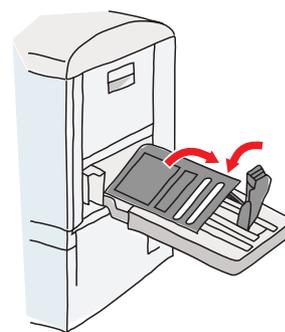
Other Useful Features

Adjusting the Image

In the printer driver, it is possible to adjust the reproduction of half-tone images such as photographs. Since the adjustment applies uniformly to the entire image, individual pictures cannot be processed separately. For changing colours or performing individual processing, use an image processing software.

To adjust image quality, click on the [Image processing] tab of the printer driver screen.
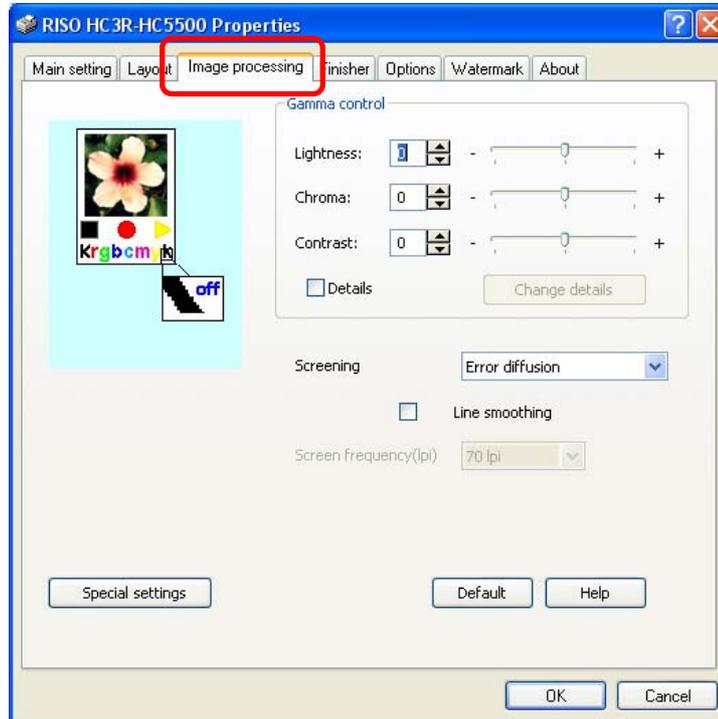

Changing the contrast of the entire image (Contrast)

Pictures with low contrast can be adjusted and transformed into sharper images. Selecting [High] stresses the differences between bright and dark areas, resulting in a sharp image. On the other hand, [Low] reduces the differences between bright and dark areas, resulting in images closer to gray.

📖 **For HC3R-5000, see User's Manual for Printer Driver page 2-19.**
   For PS7R-9000, see User's Manual for Printer Driver page 3-19.

| Lower contrast: – | Standard | Higher contrast: + |
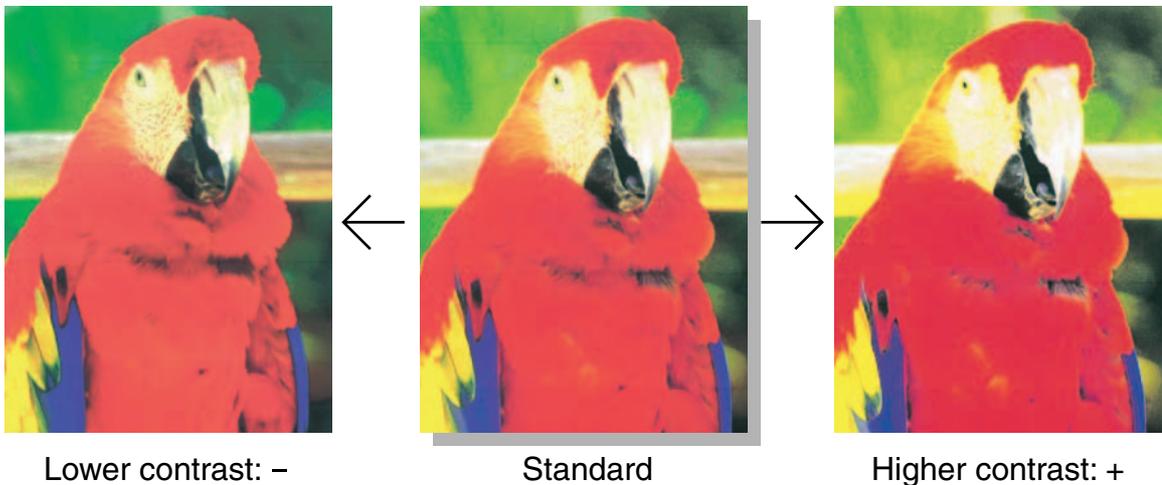
Changing Total Density (Print Density)

The total colour density is adjusted.
To make adjustments using the printer driver, select [Print density] in the [Options] tab; to make adjustments using the printer's operation panel, select [Menu 4.7 Print Density].

📖 **For HC3R-5000, see User's Manual for Printer Driver page 2-19.**
　 For PS7R-9000, see User's Manual for Printer Driver page 3-19.

Light	Standard	Dark
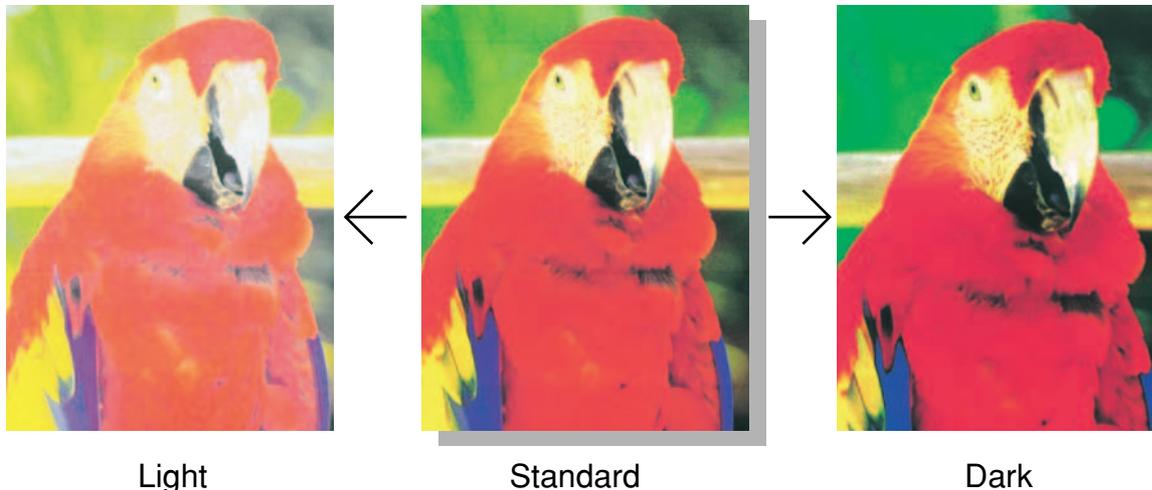
RISO Controller HC3R-5000 permits adjusting "Chroma" and "Lightness."
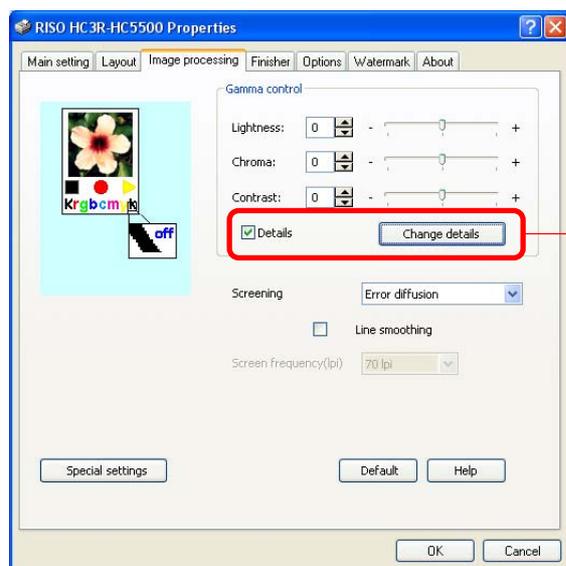
Adjusting gamma level

To adjust gamma levels for R (red), G (green), and B (blue), put a check mark in [Details] and open the [Change Details] screen.
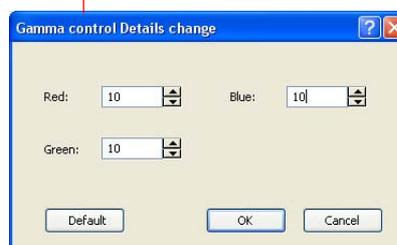
📖 **See User's Manual for Printer Driver page 2-20.**

For RISO Controllers PS7R-9000, the gamma levels of C (cyan), M (magenta), Y (yellow), and K (black) can be adjusted separately.

📖 **See User's Manual for Printer Driver page 3-19.**

Setting the gamma level of the colour to be adjusted.

Lower values for brighter images and higher values for dark images.

Other Useful Features

Reproducing Half Tones with Dot Density (Error Diffusion)

Half tones are reproduced by the density of component dots. We recommend this setting to print pages containing photographs.

📖 **For HC3R-5000, see User's Manual for Printer Driver page 2-21.**

For PS7R-9000, see User's Manual for Printer Driver page 3-20.

Reproducing Half Tones with Dot Size (Dot Screen)

Half tones are reproduced by the size of component dots. We recommend this setting for images containing just one or a small number of colours.

📖 **For HC3R-5000, see User's Manual for Printer Driver page 2-21.**

For PS7R-9000, see User's Manual for Printer Driver page 3-20.

70 lpi (lines per inch)

100 lpi (lines per inch)

The enlarged view is just an example image.

Printing characters in higher quality

The characters to be printed undergo a smoothing process, resulting in more beautiful lines. Click on [Line smoothing] in the [Image processing] tab.

📖 **For HC3R-5000, see User's Manual for Printer Driver page 2-22.**

For PS7R-9000, see User's Manual for Printer Driver page 3-21.

Print characters in smoothed line. Check [Line smoothing] in the [Image processing] tab.
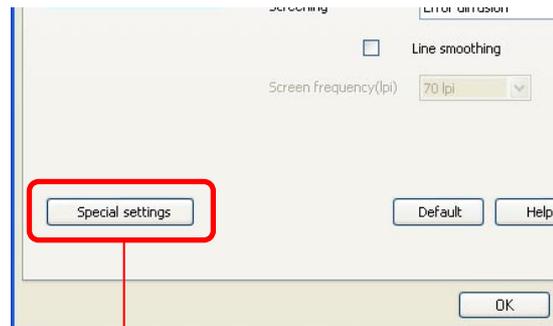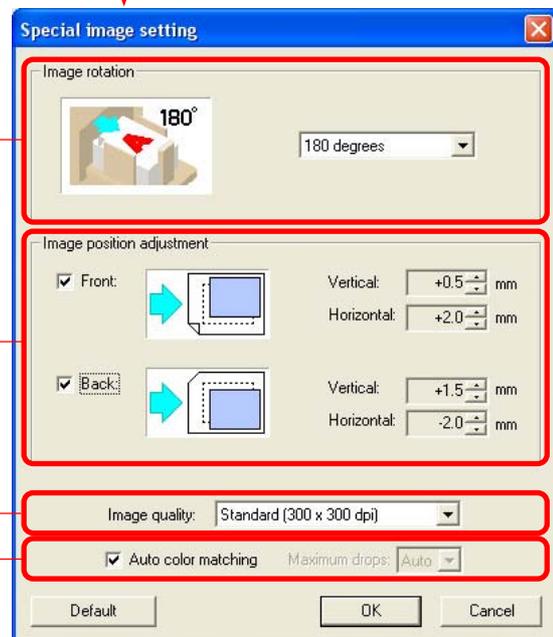
ooth
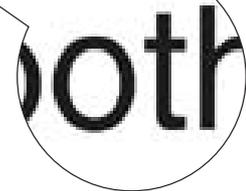
The special image setting

Click on the [Special setting] button of the [Image processing] tab.

📖 **For HC3R-5000, see User's Manual for Printer Driver page 2-23**

For PS7R-9000, see User's Manual for Printer Driver page 3-22

The image can be rotated. Adjusts the printing

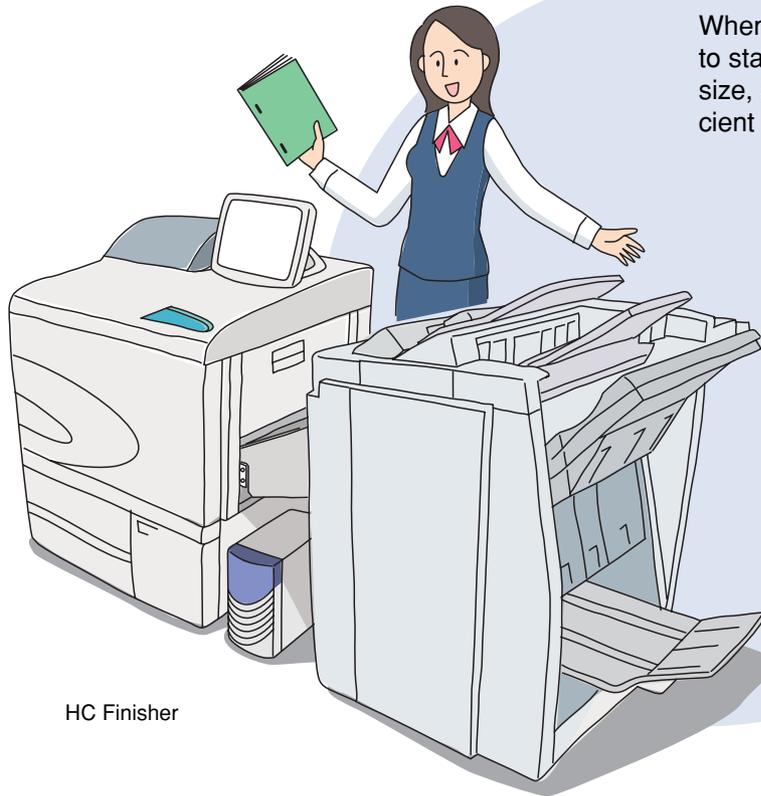positions of the front and back pages. Sets the printing quality.

Selects whether or not to

perform colour matching using ComColor™ Standard.(Only when connected with RISO Controller PS7R-9000)

Using the Optional Finisher

When printing a large number of copies, it is possible to staple, punch, and fold each set in the specified size, and documents can be prepared in a very efficient manner.

HC Finisher

Punching/stapling

Punching and stapling are useful for preparing business documents and presentations. It is possible to insert previously printed sheets as covers, or papers whose colour differs from the rest of the document.

REPORT

Preparing catalogues and bulletins (Booklet)

You can prepare booklets by folding printed sheets in two. This represents a great progress in terms of reducing the cost required to prepare printed matter, considering how expensive small-quantity colour printing used to be. Now you can prepare exclusive plans and catalogues to satisfy customer needs.
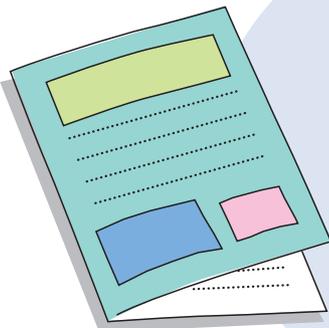
Offset output

The output position can be changed for each set. This way, sets can be easily separated even before binding.

Slightly offset output
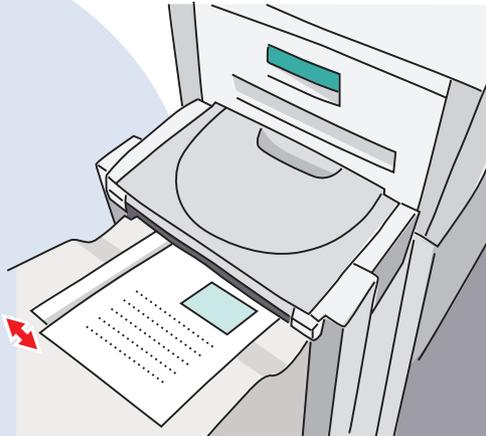
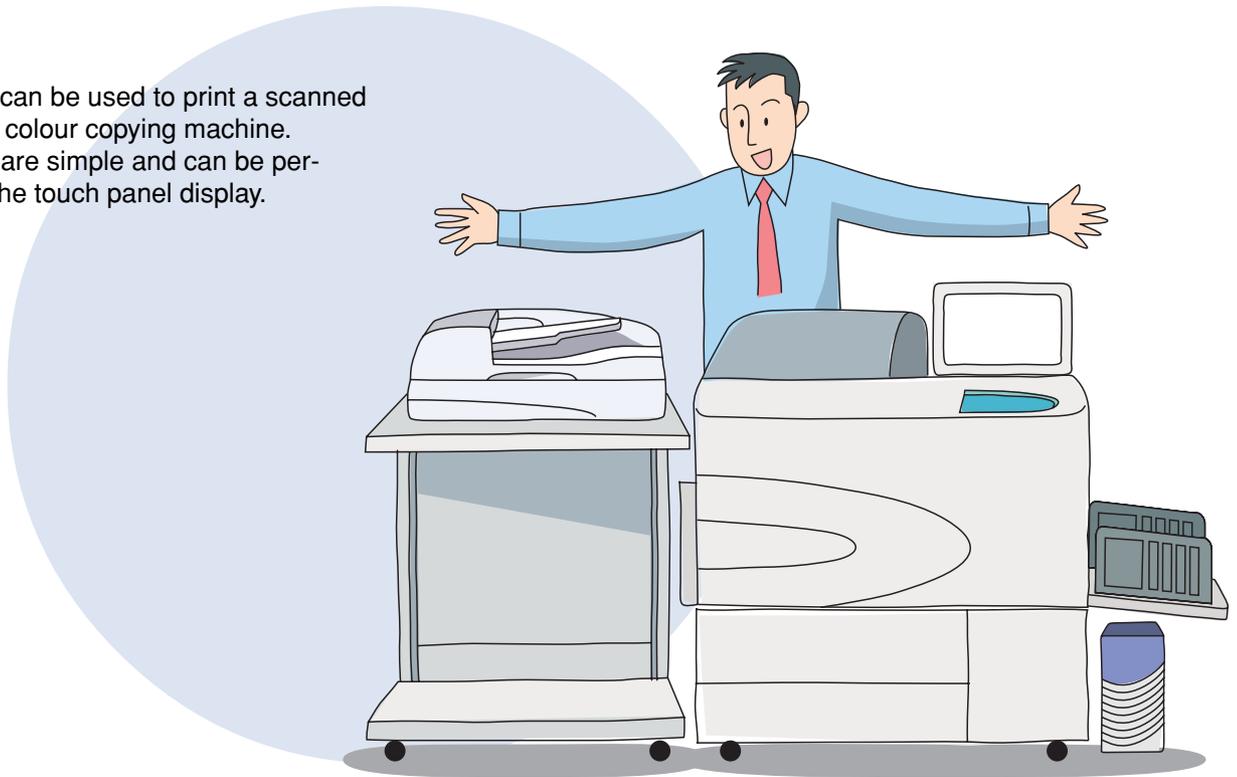HC Auto Stocker or
HC Finisher

Paper folding

The finisher is capable of folding in half. This feature is useful for preparing leaflets and direct mail, as well as posters for events.

Using the Optional Scanner

The printer can be used to print a scanned page, like a colour copying machine. Operations are simple and can be performed on the touch panel display.

A handy feature: saving as storage data

Frequently used data can be scanned and saved (with the "Storage" function). By storing reusable marks, texts, and illustrations in the printer controller, they can be called and printed multiple times.

For school or church

Children and teachers can scan their own illustrations and titles and use them in internal communications (school newspapers), invitations, etc. Having direct contact with colours will enhance everyone's artistic talents. Several other applications are possible: seasonal greeting cards, paper craft, programs, etc. It is a good idea to prepare frames for every season, ready to fill with messages.

In the office

Scanning documents containing comments written by hand is practical in several ways.

Scanning and copying ("Copy" function)
The necessary number of pages can be printed or stored ("Storage" function). Stored data can be used for additional printing any time.

Data storage and transmission ("Network Scan" function)
Scanned data can be stored and downloaded by a PC via the network. It is also possible to attach data to e-mail without needing to file the document.

Security
Assigning a security code to stored data prevents access by other people.

Printing service

Different modes such as text or photograph can be selected according to the type of document. Even a hardcopy original can be entirely processed.

5 Troubleshooting

If the printing quality is not as good as expected

Change the paper

Check if the paper is appropriate and has been loaded correctly.

📖 **See "Paper Specifications" — in this booklet page US/UK-10.**

📗 **See User's Manual for Printer Main Body page 1-7.**

Clean the print head

In some cases the print head may get clogged. Head cleaning can be performed from the operation panel.

📖 **See "Head Maintenance" — in this booklet page US/UK-54.**

📗 **See User's Manual for Printer Main Body page 2-40.**

Adjust the original data and colours

Changing the resolution of the data and adjusting colours may be helpful.

📖 **See "Adjusting the images" — in this booklet page US/UK-44.**

📗 **For HC3R-5000, see User's Manual for Printer Driver page 2-18.**

For PS7R-9000, see User's Manual for Printer Driver page 3-18.
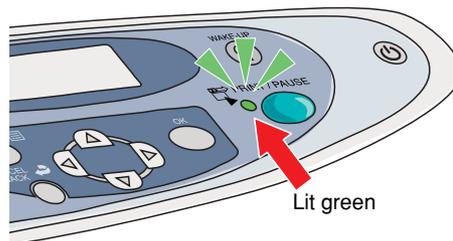
If the printer has stopped

1 Check the operation panel display.
Has any error occurred?
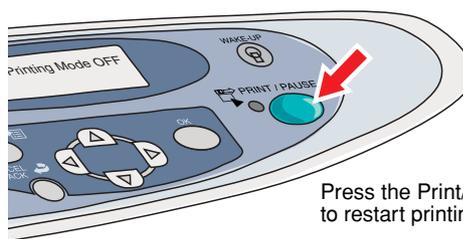Check the display.

2 Check the printing mode.
Isn't the printing mode set to OFF?

Lit green

3 Have you tried test printing?

When the [Pause after a proof] checkbox is checked, the printer keeps waiting for a print command after printing the proof. If you find a paper on the receiving tray, check the printed contents and continue the printing.

Press the Print/Pause key to restart printing.

4

① Check the Console monitor and the status of processed jobs in the job manager.

② Refer to Chapter 3 "Troubleshooting" of the User's Manual for Printer Main Body. If the problem persists, contact your local dealer (or service representative).

Changing the ink cartridge

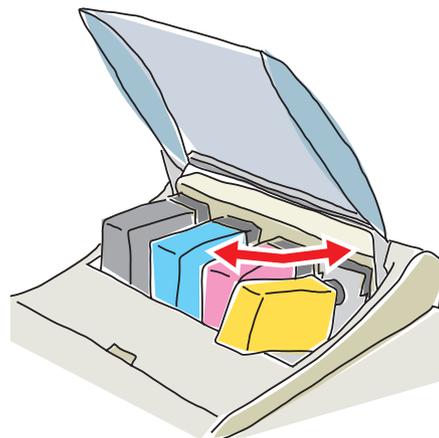📖 See User's Manual for Printer Main Body page 3-18.

1 Detect the colour of the lamp that is on.
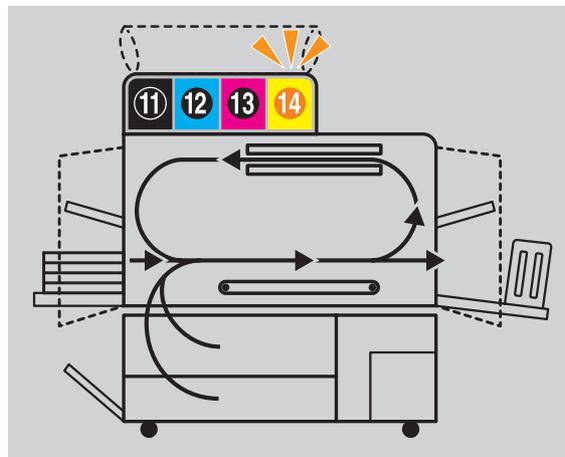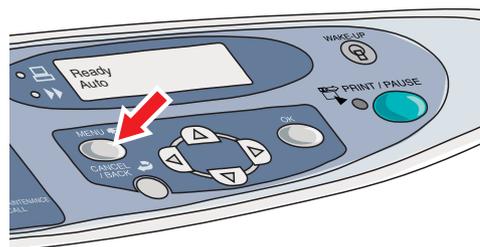
2 Remove the ink cartridge and install a new one.

Head Maintenance

📖 **See User's Manual for Printer Main Body page 2-40.**
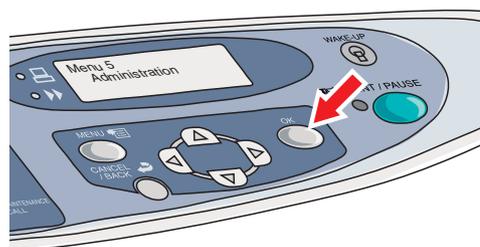
1 **Press the Menu key during the [Ready] state.**

```
Ready
Auto
```

2 **Press the cursor keys to display [Menu 5 Administration] and press the OK key.**
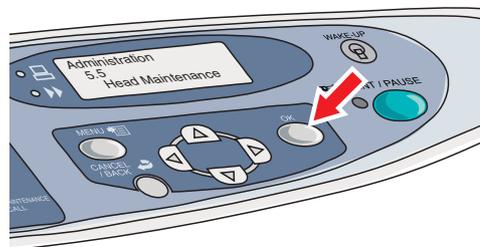
```
Menu 5
   Administration
```

3 **Display [5.5 Head Maintenance] and press the OK key.**

```
Administration
   5.5
      Head Maintenance
```
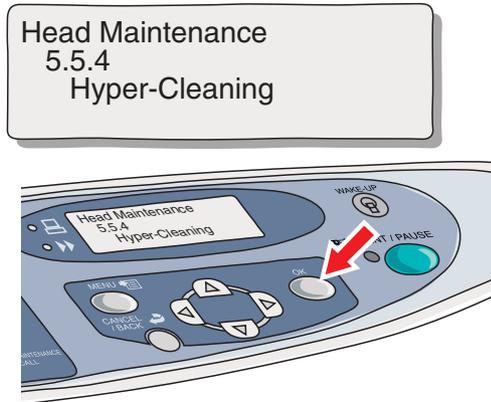
④ **Press the cursor keys to choose the mainte-nance mode and press the OK key.**

5.5.4 Hyper-Cleaning
Performs thorough cleaning of each head.

5.5.5 Normal Cleaning
Cleans all heads at the same time.

```
Head Maintenance
  5.5.4
    Hyper-Cleaning
```

Optional Items

Scanner (HS2000)

The printer can be used as a colour copying machine when connected with an exclusive colour scanner (com-patible to full A3-size/Ledger-size paper). The scanner is operated from a large touch panel (specified item). The scanned data can also be stored in the printer controller (using the "Storage" function).

HC Finisher

By connecting the printer with the HC Finisher, you can perform stapling and hole punching and prepare book-lets.

HC Auto Stacker

When the printer is connected with the HC Auto Stacker, the printouts can be arranged in "offset output" (sets arranged in different positions).

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