

# Product Support Guide B286/B289/D344



## Introduction

**Launch Date: 07/16/2007**

**S/N Configuration: B286 M32YXXXXX  
B289 M33YXXXXX**

**Product Code: B286/B289**

**Brand/Model Name:**

Product Code	Lanier	Ricoh	Savin
B286	LW324	MP W2400	2404 WD
B289	LW326	MP W3600	2406 WD
D344	RW 3600	RW 3600	RW 3600

## Product Concept:

**Major technical enhancements from the previous model listed below.**

### Hardware:

- High Productivity (4 PPM B286/6 PPM B289)
- 15M Paper Support
- Large Touch Screen display

### Connectivity:

- Optional Embedded GW Controller
- Optional Embedded Scanner
- Optional External Controller



# Product Support Guide B286/B289/D344

## Order Number

### Main Frame

Item	Model Name	EDP Code	Lanier ID	Notes
B286	LW324 MP W 2400 2404WD	413694	479-1805	
B289	LW326 MP W 3600 2406WD	413698	479-1806	

### Options

Item	Description	EDP Code	Lanier ID	Product Code	Common / Unique
Roll Feeder 1 Roll	Roll Feeder Type A (Cannot be Upgraded to a 2 Roll Feeder)	412702	481-0792	B851	C (B125)
Roll Feeder 2 Roll	Roll Feeder Type B	412705	481-0793	B852	C (B125)
Paper Cassette	Paper Cassette Type 240	412708	481-0794	B853	C (B125)
Table	Table Type 240	412711	481-0796	B854	C (B125)
Roll Holder	Roll Holder Unit Type A	410844	481-0630	B394	C (B188)
Original Hanger	Original Hanger	413717	481-7315	D311	U
Rear Stacker	Rear Stacker	413718	481-7316	D312	U
Embedded Print Option	Printer Option Type W3600	413703	481-7319	D320	U
Embedded Scanner Option	Scanner Option Type W3600	413707	481-7320	D321	U
Browser Unit Type C	Browser Unit Type C	413724	481-7381	B828	U
Data Overwrite Security Kit	Data Overwrite Security Kit Type D	412152	216-7093	B735	C (B178,B180,B202)
VM Card	VM Card Type E	420302	481-7350	D338	U

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Item	Description	EDP Code	Lanier ID	Product Code	Common / Unique
IEEE 802.11b Interface Unit	IEEE802.11b Interface Unit Type I	402631	481-7106	G874	C (G161)
USB host Interface PCB	USB Host Interface Unit Type 7300	402304	481-0894	G819	C (G130/G131)
GIGABIT Ethernet Board	Ethernet Board Type A	402547	481-7029	G874	C (G161)
File Format Converter*	File Format Converter Type C	412823	481-7053	B609	C (B234)
I/F Ratio Controller	Interface PCB Type W3600	413709	481-7351	D329	U
Ratio Controller	Printer Controller RW-3600	413710	4817375	D344	U
PS Option for Ratio Controller	RW-3600 PostScript Level 3	413711	4817376	D344	U
CGM Option for Ratio Controller	RW-3600 CGM Option	413712	481-7377	D344	U
DWG Option for Ratio Controller	RW-3600 DWG/DXF/DWF Option	413713	481-7378	D344	U
VIC Option for Ratio Controller	RW-3600 VIC Option	413715	481-7379	D344	U
Scanner Option for Ratio Controller	RW-3600 Scanner Option	413716	481-7380	D344	U

**\*File Format Converter is required for scanning.**

# Product Support Guide

## B286/B289/D344

### Main Frame Specifications

**B286/B289**

Configuration:	Desktop
Copy Process:	Dry electrostatic transfer system
Originals:	Sheet
Original Image Size (W x L):	<p>Maximum: 914 x 15,000 mm (36" x 590")            Minimum: 210 x 182 mm (8.5" x 7")</p> <ul style="list-style-type: none"> <li>▪ Maximum length copying (15 m) is limited to wide paper.</li> <li>▪ Copies at maximum length must be done one at a time (multiple copies are not allowed).</li> </ul>
Max Original Width:	960 mm (37.7")
Original Weight	<p>18 ~ 135 g/m<sup>2</sup>            35 μm ~ 1.0 mm</p> <p><b>Note:</b> Less than 70 μm must be used with carrier sheet.</p>
Copy Paper Size (W x L):	<p><b>Maximum:</b>            Manual feed: 914 x 2,000 mm (36" x 78")            Roll Feed: 914 x 15,000 mm (36" x 590")            Paper Cassette: 297 x 420mm (12" x 18")</p> <p><b>Minimum:</b>            Manual Feed: 210 x 257 mm (8½" x 10")            Roll Feed: 210 x 280 mm (8½" x 11")            Paper Cassette: 210 x 297 mm (8½" x 11")</p>
Copy Paper Weight	<p>52.3 ~ 110 g/m<sup>2</sup> (13.9 ~ 29.3 lb)            68 ~ 148 μm (Plain paper, Translucent)            3 ~ 4 mils (Film)</p>
Copying Speed (cpm: copies/minute):	<p>B286: 2 cpm (A0/E SEF), 4 cpm (A1/D LEF)            B289: 3 cpm (A0/E SEF), 6 cpm (A1/D LEF)</p>
Photoconductor:	Organic photoconductor drum
Reduction/Enlargement:	<p><b>Inch Version, Engineering:</b>            Reduction: 25.0, 32.4, 50.0, 64.7%            Enlargement: 129.4, 200.0, 258.8, 400.0%</p> <p><b>Inch Version, Architecture:</b>            Reduction: 25.0, 33.3, 50.0, 66.7%            Enlargement: 133.3, 200.0, 266.7, 400.0%</p> <p><b>Metric Version</b>            Reduction: 25.0, 35.4, 50.0, 70.7%            Enlargement: 141.4, 200.0, 282.8, 400.0%</p>
Zoom:	<p>25 to 400% (0.1%/step)            200.1 to 400% (0.1%/step)</p>

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Resolution:	Scanning 600 dpi, Printing 600 dpi
Gradation:	Scanning: 256 levels Printing: 2 levels
Warm-up Time:	Less than 2 minutes Room temperature 23°C, Plain Paper mode AC 120V/220-240V
First Copy Time:	1 <sup>st</sup> Roll Feed: 18 s (A1/LEF/D LEF) Cassette: 19 s (A3 LEF/B LEF) Manual Feed: 31 s (A1/LEF/D LEF)
Copy Number Input:	Ten-key pad, 1 to 99 (standard sizes only)
Copy Paper Capacity:	<b>Bypass Feed:</b> 1 sheet <b>Roll Feed:</b> Max. Diameter: 175 mm (6.9") Max. Length: 150 m (16.4 yd) Roll Core Diameter: 76.4 ±0.25 mm (about 3") <b>Paper Cassette:</b> 250 sheets
Output Tray Capacity:	<b>Upper Output Stacker</b> Plain paper: 50 sheets (maximum A1/D LEF) Translucent: 10 sheets (maximum A1/D LEF) <b>Roll Feeder or Table</b> Plain paper: 40 sheets (A1/D or A0/E) Translucent: 1 sheet

### Enhanced Features

Copy mode	Drawing mode (Default) Text mode Text/Photo mode Other modes Photo mode Generation mode Pasted Original mode Background Line mode
Paper selection	Auto Paper Selection(APS) 1 <sup>st</sup> roll tray (Available when roll feeder option is installed) 2 <sup>nd</sup> roll tray (only available when 2 roll feeder option is installed) A3 cut sheet tray (option) Bypass Tray
Jog program	Standard (10 jobs)
Interrupt job	Standard
Reduce / Enlarge	Auto Reduce/Enlargement User Auto Reduce/Enlargement Preset Reduce/Enlargement Zoom Size Magnification Directional Magnification (%) Directional Size Magnification (mm/inch)

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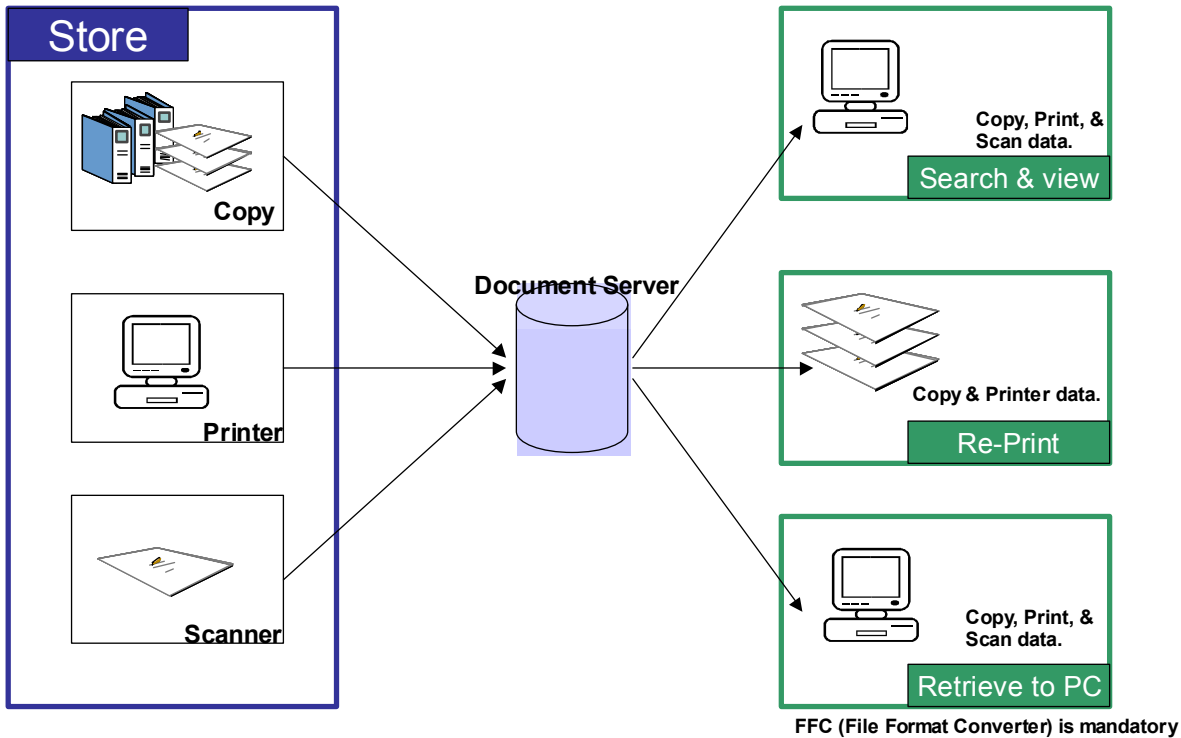
## B286/B289/D344

		Fine Magnification												
Image Editing		Image Overlay Format Overlay												
Image Editing		Negative / Positive Mirroring Double Copy Repeat Copy												
Image shift		Front / Rear / Left / Right : 0-+/-200mm by 1mm												
Erase		Erase edge / inside / outside												
Margin adjustment		0 to +200mm (by 1mm step)												
Stamp		Preset stamps User preset stamps Date stamp Page stamp												
Preset job		Standard <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Size</th> <th># of pages available for preset job</th> </tr> </thead> <tbody> <tr> <td>A0/E</td> <td>100 or less</td> </tr> <tr> <td>A1/D</td> <td>100 or less</td> </tr> <tr> <td>A2/C</td> <td>200 or less</td> </tr> <tr> <td>A3/B</td> <td>400 or less</td> </tr> <tr> <td>A4/A</td> <td>400 or less</td> </tr> </tbody> </table>	Size	# of pages available for preset job	A0/E	100 or less	A1/D	100 or less	A2/C	200 or less	A3/B	400 or less	A4/A	400 or less
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A2/C	200 or less													
A3/B	400 or less													
A4/A	400 or less													
Emergency Stop		Standard : key												
Sample copy		1 <sup>st</sup> set of job out of multiple set of jobs will be printed.												
Partial copy		210mm to 15,000mm length can be defined as partial												
Additional copy		NO. (Please use document server function for additional copy.)												
Combine		Standard [2in1/4in1/8in1] up to A2/C size												
Clear		Standard : Clear/Stop key												
Copy Auto clear		Standard												
Auto off		Standard												
Energy saver		Standard: Energy saver key												
Auto energy save mode		Standard												
Reset		Standard: Reset key												
Auto Start		Standard												
User code		Standard : up to 500 users												
Limitless paper feeding		Only with 2 roll feeder option. Not with cassette option.												
Display of Paper type		Standard												
Finishing	Electronic sort	Standard <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Size</th> <th># of pages available for sorting</th> </tr> </thead> <tbody> <tr> <td>A0/E</td> <td>100 or less</td> </tr> <tr> <td>A1/D</td> <td>100 or less</td> </tr> <tr> <td>A2/C</td> <td>200 or less</td> </tr> <tr> <td>A3/B</td> <td>400 or less</td> </tr> <tr> <td>A4/A</td> <td>400 or less</td> </tr> </tbody> </table> <p>*Electric sort is not available for custom sizes: 880, 800, 707, 680, 660, 625, 620, 490, 440mm</p>	Size	# of pages available for sorting	A0/E	100 or less	A1/D	100 or less	A2/C	200 or less	A3/B	400 or less	A4/A	400 or less
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A4/A	400 or less													

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## Document Server

Documents from different applications such as Copy, Print, or Scan can be stored in the HDD for re-use. With Web Image Monitor, you can easily search and view the saved documents in the document Server through your web browser.



### Reuse way of stored data

	Copy	Printer	Scanner
Reprint	Yes	Yes(*4)	NO(*3)
Unify documents and Reprint	Yes	Yes	NO(*3)
Retrieve to PC	Yes(*1)	Yes(*1)	Yes(*2)

(\*1) FFC option is mandatory for Document Server.

(\*2) File format can be selected among TIFF and PDF when retrieving to PC

(\*3) Reprinting is possible via printer driver after managing retrieved data with utility software.

(\*4) Customize paper size output is not available from document server.

### Data Format of stored data

	Data Format
Copy	Ricoh unique format
Print	Ricoh unique format
Scanner	TIFF/ PDF

## Capacity of Document Server

Items	Capability
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HDD capacity	80GB
HDD capacity for Document Server	38.4GB
Maximum stored document	3,000 documents/A4size 375 documents/A1size
Maximum pages per document	1,000 pages per document / A4 size 125 pages per document/A1 size
Maximum pages of all stored documents	3,000 pages/A4 size 375 pages per document/A1 size

**<Notes>** Document Server Capacity depends on the image coverage of each document. Therefore, the actual capacity may vary in each case.

Changeable settings when printing from the Document Server:

- The number of sets
- Paper tray selection (Auto, manual)
- Preset cut, Variable cut, Synchro cut
- Manual image density
- Preset magnification / Zoom / AMS : Available for copy job.

	<b>Preset image density, magnification, zoom, AMS.</b>
Copy job	Yes
Print to Document Server	No
Scan to Document Server	No



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## Supplies/Yields

Item	Name	Order Code	Target Yield
<b>Ricoh MP W2400/MP W3600</b>			
Ricoh Toner Type 1160W Black	Toner Black	888029	Average 2.2K Copies @A1/D LEF, Ricoh 6% chart/cartridge
Ricoh Developer Type 30W Black	Developer	888214	Average 50K Copies @A1/D LEF Ricoh 6% chart/1.0kgx2bags (2.0kg)
<b>Lanier LW 324/LW326</b>			
Black Toner for LW324	Toner Black	480-0161	Average 2.2K Copies @A1/D LEF, Ricoh 6% chart/cartridge
Black Developer for LW324	Developer	480-0216	Average 50K Copies @A1/D LEF Ricoh 6% chart/1.0kgx2bags (2.0kg)
<b>Savin 2404WD/2406WD</b>			
Savin Toner Type 4700W Black	Toner Black	9890	Average 2.2K Copies @A1/D LEF, Ricoh 6% chart/cartridge
Savin Developer 2400WD	Developer	9905	Average 50K Copies @A1/D LEF Ricoh 6% chart/1.0kgx2bags (2.0kg)

Supply Yield Condition:

ISO/IEC19752 is used to measure the above toner yield.

The condition is standard temperature and humidity.

This yield number may change depending on the circumstances and printing conditions.

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## Option Compatibility

	Roll Feeder A	Roll Feeder B	Paper Cassette	Table	Original Hanger	Rear Stacker	Printer Op W3600	Scanner Op W3600	PCB I/F board (RATIO)	RW-3600 (RATIO)	RW-3600 Scanner	RW-3600 PS3	RW-3600 CGM	RW3600 DWG	RW-3600 VIC	VM Card	Web Browser Card	FFC	USB Host	1000-Base T	Wireless LAN	DATA Overwrite Security Unit	Folder Option	Manual Feeder (for Folder)	
Roll Feeder A	■	N		N			Y		Y	Y															
Roll Feeder B	N	■		N			Y		Y	Y															
Paper Cassette			■	N																					
Table	N	N	N	■		N																			
Original Hanger					■																				
Rear Stacker				N		■																			
Printer Option Type W3600	Y	Y					■			N						N									
Scanner Option Type W3600								■								N		Y							
PCB I/F board (for RATIO)	Y	Y						■																	
RW-3600 Printer (RATIO)	Y	Y					N			■															
RW-3600 Scanner									Y		■														
RW-3600 PS3									Y			■													
RW-3600 CGM									Y				■												
RW-3600 DWG									Y					■											
RW-3600 VIC									Y						■										
VM card							N	N								■									
Web Browser Card																	■								
FFC								Y										■							
USB Host																			■						
1000 base-T																				■		N			
Wireless LAN																					■				
DATA overwrite Security Unit																						■			
Folder option																							■	Y	
Manual feeder (for folder)																							Y	■	

Y : Must install Together  
N : Cannot install together

1. You cannot install Printer Option Type W3600 and RW-3600(Ratio) together.
2. You can install Scanner Option Type W3600 and RW-3600(Ratio) Scanner Option , but cannot operate together.
3. You cannot install Printer Option Type W3600 and VM Card together.

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## Comparison between B125 and B286/B289

	B125	B286/B289
Operation Panel	LCD	Wide Touch Screen
Original Stacker	No	Yes (holds 1 original sheet)
Original hanger	No	Yes (Option)
<b>Productivity</b>		
Side guides for Roll Feeder	No	Yes
Rear Stacker	No	Yes (Option) Holds up to 20 sheets(A1/D-size LEF)
Upper Stacker Spec	Up to 20 sheets (A1/Dsize LEF)	Up to 50 sheets (A1/Dsize LEF)
Lower Stacker Spec	Up to 20 sheets(A1/Dsize LEF or A0/Esize SEF)	Up to 20 sheets(A1/Dsize LEF or A0/Esize SEF)
<b>Feature</b>		
External Controller (Printer/Scanner)	Yes (RATIO CTL)	Yes (RATIO CTL)
Embedded Controller (Printer/Scanner)	No	Yes (RICOH CTL)
Document Server	No	Yes
"Scan to" solution	No	Yes
Combine	No	Yes
Folder	No	Yes (Option)

# Product Support Guide

## B286/B289/D344

Auto Magnification between A & B size (for mm machine)	No	Yes
Auto Magnification between Engineering & Architecture size (for inch machine)	No	Yes
<b>Specification</b>		
Memory	80M byte + 10G byte HDD(option)	1G byte + 80G byte HDD
Speed	4ppm with 60mm/sec.	4ppm & 6ppm with 80mm/sec.
Repeat Copy	1 – 20	1 - 999

### Branding Info

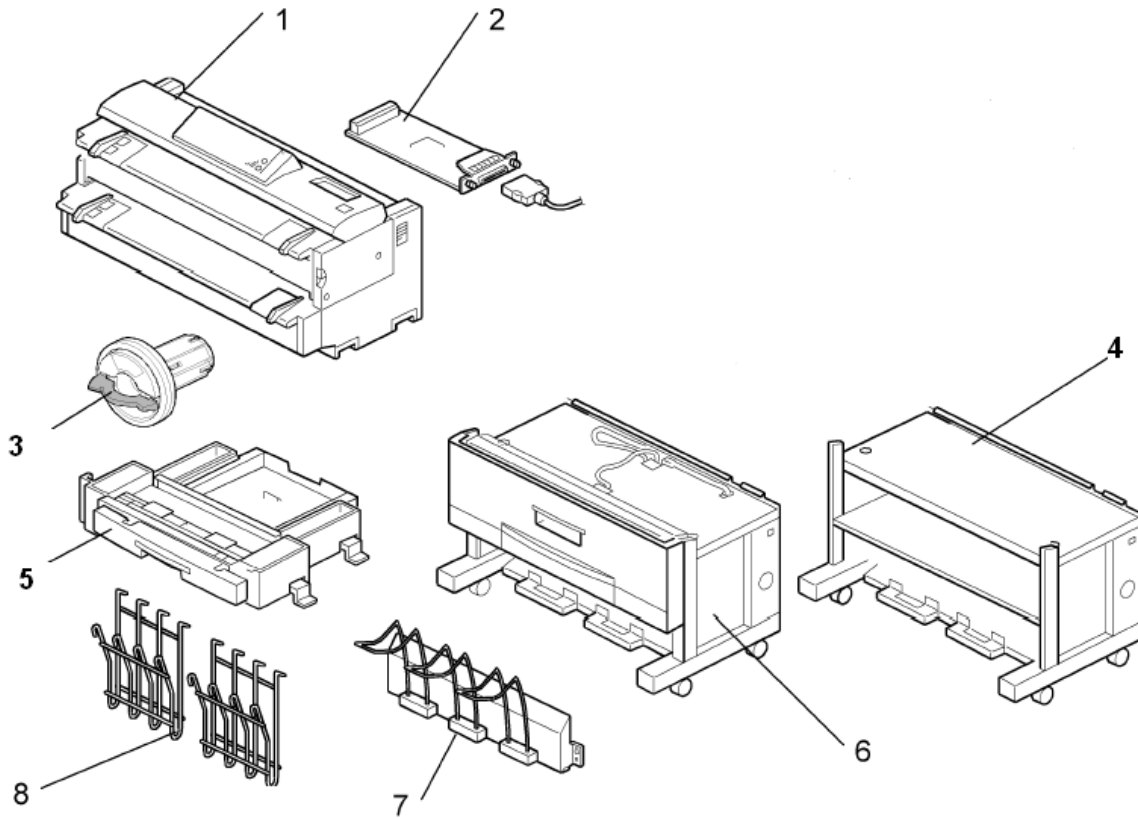
Branding is required as the machines are shipped as a generic version.

**Ricoh version machines:** You must attach the model label (provided) to the front cover.

**Savin/Lanier:** You must attach the model label (provided) to the front cover and set the Plug and Play name with SP 5-907.

# Product Support Guide B286/B289/D344

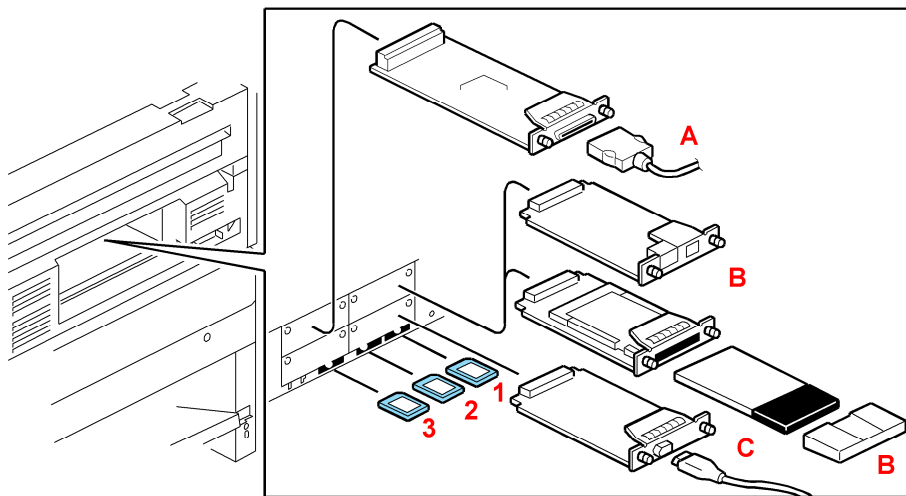
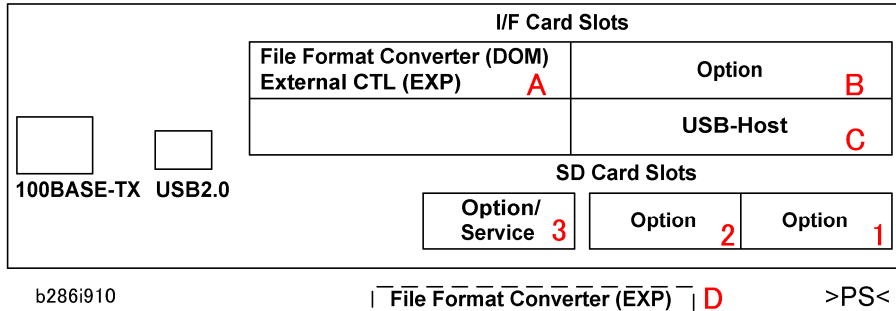
## Configuration



Number	Item	Product Code
1	Main Machine	B286/B289
2	Interface PCB Type W3600	D329
3	Roll Holder Type A	B394
4	Table Type 240	B854
5	Paper Cassette Type 240	B853
6	Roll Feeder Type 240A/B	B851/B852
7	Rear Stacker (Option for copies)	D312
8	Original Hanger (Option for originals)	D311

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## MFP Options



**Note: Do not install File Format Converter in Slot A**

### MFP Option Board Slot/SD Card Assignments

Slot	Option Name	Move
A	Interface PCB Type W3600 (D329)	---
B	Gigabit Ethernet Board Type A (G874-01)	---
	IEEE 802.11b Interface Type H (G813-45)/Type I (G874-39)	---
C	USB Host Interface Unit Type 7300 (G819-01)	---
D	File Format Converter Type C (B609-04)	---
1	Printer Option Type W3600 (D320)	Yes
	Scanner Option Type W3600 (D321)	Yes
	Data Overwrite Security Unit Type D (B735-18)	Yes
2	Printer Option Type W3600 (D320): TIFF/GL Filter	No* <sup>1</sup>
	Browser Unit Type C (B828-03)	No

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Slot	Option Name	Move
	VM Card Type E (D338-01, -02, -03)	No
3	Service <ul style="list-style-type: none"><li>Firmware Update</li><li>NVRAM Data Download/Upload</li><li>Application Move/Undo</li></ul>	
	Browser Unit Type C (B828-03)	No
	VM Card Type E (D338-01, -02, -03)	No

**\*1: Due to copyright restrictions, these options cannot be moved to another SD card**

# Product Support Guide B286/B289/D344

## Installation

### Installation Requirements

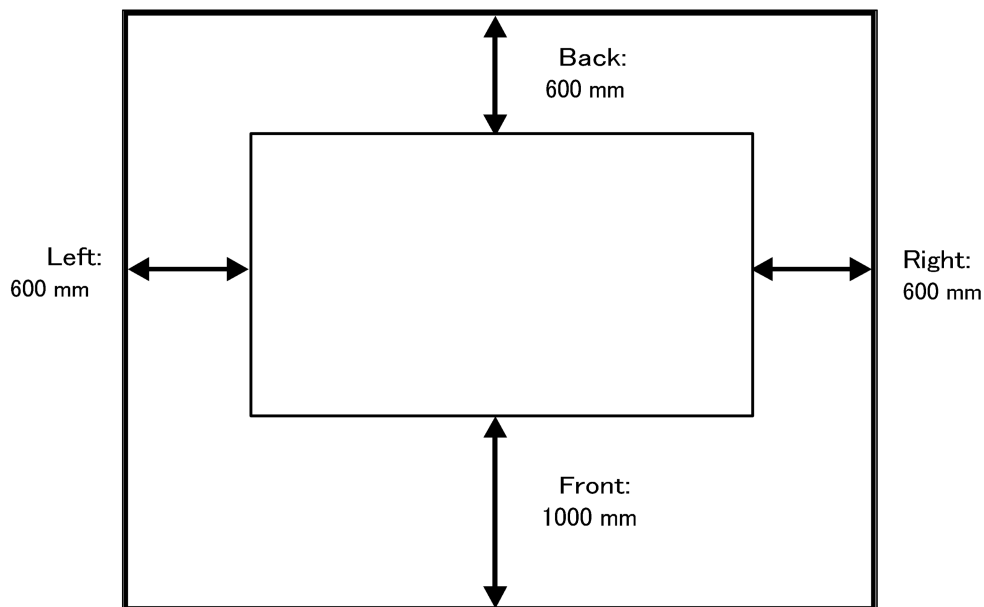
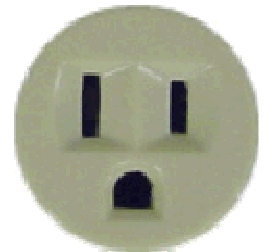
#### Power / Space:

**This machine is provided with a circuit breaker that cuts the power supply to the main machine in case of a current overload or short circuit. The machine must be installed in a building where circuit breakers (and equivalent devices) can operate properly.**

1. Input Voltage Level:
  - 120V, 60 Hz, 15 A or more
  - 220-240V, 50/60 Hz, 10A or more
2. Permissible Voltage Fluctuation:  $\pm 10\%$
3. Do not set objects on the power cord.

**Note**

- Make sure the plug is firmly inserted in the outlet.
- Do not connect the machine to a power source that is shared with other equipment.



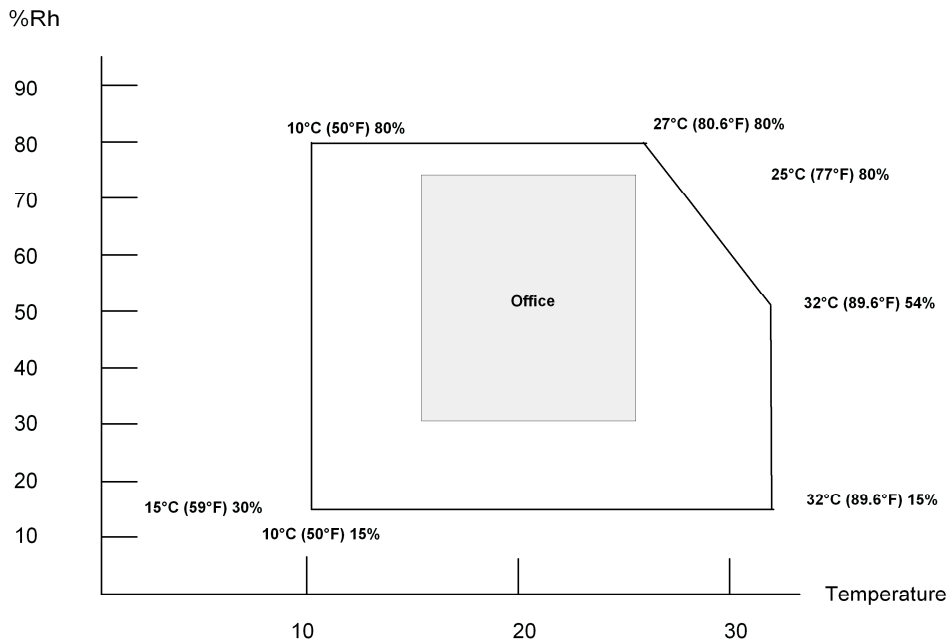
b286i520

1. Front: 1000 mm (40")
2. Back: 600 mm (23")
3. Right: 600 mm (23")
4. Left: 600 mm (23")



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## Environmental:



b286i900

- 1 Temperature Range: 10 °C to 30 °C (50 °F to 86 °F)
- 2 Humidity Range: 15% to 90% RH
- 3 Ambient Illumination: Less than 1,500 Lux (do not expose the machine directly to light from the sun).
- 4 Ventilation: More than 30 m<sup>3</sup>/hr/person in the work area
- 5 Ambient Dust: Less than 0.10 mg/m<sup>3</sup>
- 6 If the installation area has air-conditioners or heaters, put the machine in a location where:
  - There are no sudden temperature changes from low to high, or high to low.
  - The machine will not be directly exposed to cool air from an air conditioner in the summer.
  - The machine will not be directly exposed to reflected heat from a space heater in the winter.
- 7 Do not install the machine in an area filled with gases that can cause corrosion.
- 8 Do not install the machine in areas higher than 2,000 m (6,600 ft) above sea level.
- 9 Put the machine on a strong and level surface.
  - ★ **Important**
    - The floor must be able to support a load of more than 2.94 kPa (300 kgf/m<sup>2</sup>).
- 10 Do not install the machine in an area where there are frequent strong vibrations.

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## Power Consumption / Noise Emission

### Power

Mode	Model		Full System
Copying	B286/B289	NA	1.5 KW
Stand-by	B286	NA	45 Watts
	B289		60 Watts

### Noise

Mode	Model		Full System
Copying	B286/B289	NA	Less than 68db
Stand-by	B286/B289	NA	Less than 43db

## Installation Times

**Mainframe:**            **20 Minutes, 2 people required.**

### Peripherals:

Roll Feeder B851/B852	20 Minutes 2 people required	GW Scanner	3 minutes
Paper Cassette B853	15 Minutes	File Format Converter	7 minutes
Table	5 minutes, 2 people required	Data Overwrite Security Unit	5 minutes
Interface Board D329	3 minutes	Browser Unit	3 minutes
Rear Stacker	5 minutes	VM Card	3 minutes
Original Hanger	1 minute	IEEE 802.11b Interface Unit	3 minutes
GW Printer	3 minutes	External Printer/Scanner	70 minutes

## Storage / Transportation

	Storage	Transportation
Temperature	-30 ~ 50 degrees Celsius	-30 ~ 40 degrees Celsius
Humidity	Less than 80%	Less than 90%
Stacking	Max of 4 cartons stacking	Max of 3 cartons stacking
Maximum Storage Period 1 Month	No more than 1 month at 35~40° Celsius	

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## Parts / Tools / Maintenance

### PM Parts / Yields

#### Main Frame

**NOTE:** Listed PM parts and part numbers are based on the machines produced at the time this document was issued. Please refer to Technical Service Bulletins (TSBs) for the most updated information.

#### Unique/Common

**U:** Unique for this model  
**C:** Common with listed model

#### Mainframe: B286/B289

Part Number	Description	Q'ty/ Unit	PM Interval : Km (feet)	Unique or Common
<b>Around the drum</b>				
AD020089	Charge Corona Wire - G	1	11.0 (36,000)	C (B125)
AD020059	Corona Wire - Main (Transfer)	1	11.0 (36,000)	C (B125)
AD020072	Corona Wire - Separation	1	11.0 (36,000)	C (B125)
B1252061	Cleaner: Charge Corona	1	5.5 (18,000)	C (B125)
<b>Development Unit</b>				
B1259640	Developer (1000g )	2	29.7 (97,450)	C (B125)
<b>Cleaning Unit</b>				
A1653581	Cleaning Blade	1	11.0 (36,000)	C (B125)
<b>Fusing Unit</b>				
AE011085	Hot Roller – MM50	1	27.5 (90,000)	C (B125)
AE031056	Bushing - Fusing (Hot Roller)	2	27.5 (90,000)	C (B125)
AE020148	Pressure Roller: MM55	1	33.0 (108,000)	C (B125)
AE042047	Fusing Cleaning Roller	1	27.5 (90,000)	C (B125)
<b>Other</b>				
AA010119	Exhaust Ozone Filter	1	5.5 (18,000)	C (B125)

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## Options

### Paper Cassette: B853

Part Number	Description	Q'ty /Unit	PM Interval : Km (feet)	Unique or Common
G8003011	Paper Feed Roller	1	16.5 (54,000)	C (B125)
B8532575	Friction Pad Ass'y	1	16.5 (54,000)	C (B125)

**Folder Unit : B889, No PM Parts**

**Controller : D344, No PM Parts**

## Special Tools

Please have the following tools on hand to most effectively service the new model in the field.

Unique or Common  
U: Unique for this model  
C: Common with listed model

Item	Part Number	Description	Q'ty	Unique or Common
1	A0239504	Test Chart OS-A1 (2 sheets/set)	1	C (B125)
2	N8036701	Flash Memory Card – 4MB	1	C (B125)
3	A2579300	Grease Barrierta – S552R	1	C (B125)
4	52039502	Silicon Grease G-501	1	C (B125)
5	B6455010	SD Card	1	C (B070)
6	B6456700	PCMCIA Card Adapter	1	C (B070)
7	B6456800	USB Card Reader/Writer	1	C (B070)

# Product Support Guide

## B286/B289/D344

### Reliability Info

Model	B286	B289
<b>Average Monthly Volume</b>	1180 Feet (360m)	1968 Feet (540m)
<b>Max. Monthly Volume</b>	11800 Feet (3600m)	11800 Feet (3600)
<b>Target MCBC</b>	6124 Feet (1867m)	6124 Feet (1867m)
<b>PM Interval</b>	18,000 Feet (5,500m)	18,000 Feet (5,500m)

# Product Support Guide

## B286/B289/D344

### GW Printer Specifications

		Model B286/B289	
Controller Board		Embedded	
Controller CPU		RM7935-835k	
Print Speed		C1a: 2ppm @A0/E SEF, 4ppm @A1/D SEF C1b: 3ppm @A0/E SEF, 6ppm @A1/D SEF	
Print Resolution		200, 300, 400, 600 dpi	
RAM		1024MB (Shared with other applications such as Copy/Scanner)	
HDD		80GB (Shared with other applications such as Copy/Scanner)	
IC card slot		No	
Interface slot		4 slots	
		Slot	Interface
		Option Slot	IEEE802.11b / 100base-T / Cumin-M
		USB-Host Slot	USB host
		External CTL Slot	Video Link2 for RATIO CTL interface
		File Format Converter	FFC (MLB3)
Supported printer language		PostScript Level3(PDF), RPCS, Emulation: HP-GL, HP-GL/2(HP-RTL), TIFF(CALS),	
Fonts	PS	European 136 fonts	
	RPCS	European 45 fonts	
Interface	Standard	100/10base-TX, USB2.0	
	Option	IEEE802.11b(wireless), 1000base-T(Gigabit Ethernet)	
Network Protocol		TCP/IP(IPv4, IPv6), IPX/SPX, Apple Talk Auto switching available	
MIB	Standard MIB	MIB-II(RFC1213), HostResource(RFC1514), PrinterMib(RFC1759) SNMPv3 (RFC2574)	
	Private MIB	Ricoh private MIB	
Supported Operating Systems		PS driver	Windows95/98/Me/2000/XP/2003server Mac OS (later than Mac OS8.6) Mac OS X (later than Mac OS X10.1)
		RPCS driver	Windows95/98/Me/2000/XP/2003server
Supported CAD version		HDI driver	AutoCAD2000, 2000i, 2002, 2004, 2005, 2006, 2007
Supported Languages		English, French, German, Italian, Dutch, Spanish, Portuguese, Russian, Simplified Chinese	

# Product Support Guide

## B286/B289/D344

### Mac OS

	PostScript3	Printer Utility for MAC
Mac OS 8.6 or later, Mac OS X classic	Yes	Yes
Mac OS X Native : v. 10.1 or later *1	Yes	Yes*2

\*1: Mac OS X v.10.0.X is not supported.

\*2: Mac OS X v.10.2.0 is not supported.

### Printer

The embedded controller has “GL2&TIFF filter”, “PS driver”, and “RPCS driver” as standard printing modules. The table shows the summary of these modules.

	GL2/TIFF filter	PS	RPCS
PDL	---	PostScript level 3, (PDF)	PRCS
Support file format	HPGL, HPGL2(HP-RTL), TIFF(CALS) *uses emulation to interpret these file formats.	PS(PDF)	*application software
Driver	HDI driver	PS driver	RPCS driver
Utility software for printing	Web Printing Tool	---	---

### GL2&TIFF filter

“GL2&TIFF filter” is prepared to provide users a printing capability of HP-GL file, HP-GL2(HP-RTL) file, TIFF file, and CALS file. Users will operate on two different type of printing modules on their client PCs for printing the supported files.

#### 1. HDI driver

HDI driver is a driver for AutoCAD (later than AutoCAD 2000)

#### 2. Web Printing Tool (Web Browser based Utility Software)

The Web Printing Tool offers user the direct-print of HP-GL, HP-GL2(HP-RTL), and TIFF(CALS) files format through web browser. And it also provides a default setting availability either through the Web Printing Tool or through the main frame operation panel.

# Product Support Guide

## B286/B289/D344

Web Printing Tool Main Function	Description of the function
Web Print	Enter the multiple files as a job and Direct-Print through the Web browser. Users can set the setting of a print job, and can set each files individually.
Web Setting	Default Setting of Printing through Web Printing Tool. (The default setting of printing is also available through the mainframe operation panel.)

PC Environment for GL2&TIFF filter module, Operation panel module, and Web server module.

CPU	MIPS architecture
OS	NetBSD kernel based RICOH OS
Memory	32MB for GL2&TIFF filter
Common Memory	8KB for GL2&TIFF filter
HDD	Maximum 5000MB (5GB) for GL2&TIFF filter

Browser Environment for Web Printing Tool.

Java VM	Sun Micro Systems Java(TM)2 Platform Standad Edition version 1.5.0 or later
Supported Web browser	Microsoft Internet Explorer™ version 6.0.28 or later
	Mozilla FireFox™ version 1.5.0 or later
	Safari which was bundled in Mac OS X 10.4 or later

Language support

9 languages	English, French, German, Italian, Dutch, Spanish, Portugues, Russian, Simplified Chinese
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## Scanner Specifications

Optical Resolution:	Scan to email/folder: 150 / 200* / 300 / 400 / 600 dpi, *Default Twain: 150-1,200dpi
Scan Speed:	80mm/sec (600dpi)
Scan detection	Auto Detect, Preset Paper size, Custom size,
Network Interface:	Ethernet 10/100BaseTX: Standard Wireless LAN (802.11b): Option
Protocol:	Network: TCP/IP Sending E-mail: SMTP, POP3 Scan to Folder: SMB, FTP, NCP
Compression Method:	MH,MR,MMR(default) It can be changed in SP mode
Scan Mode:	Drawing mode (Default) Text mode Text/Photo mode Text/Drawing mode Photo mode
Image Density:	Lighter to Darker: 7 Levels
Edit	Erase boarder, Positive/Negative, Mirror Image
Bundled Scanner driver	Network Twain Driver



# Product Support Guide

## B286/B289/D344

### Scan to E-mail Features

Requirement:		SMTP (Mail Server) Gateway and TCP/IP
Authorization function:		SMTP authentication POP before SMTP authentication
Resolution:		150dpi, 200dpi (Default), 300dpi, 400dpi, 600dpi
MAX E-mail address#		150 addresses (Incl. 32 speed dials)
Register Group address:		Standard: 10 groups (100 numbers per 1 group)
Maintain E-mail address:		“Direct input on operation panel”, “Web Image Monitor”, and “SmartDeviceMonitor for Admin” are available.
Address Search	Mainframe Address Book	E-mail address search available Folder address search available
	LDAP	E-mail Address search available
Number of Destination		Please refer to 4.6.1.3
Number of characters can be input for Destination		Max 20 Characters
Number of characters can be input for Address		Max 45 Characters
Attention		To, cc, bcc
Subject:	Manual Input	Max 128 Characters
	Pre-register by user	No
Body Message:	Manual Input	Yes
	Pre-register by user	No
	Preset	Message: “This e-mail included attached file sent from xxxx(machine model name).”
E-mail Size (with restriction):		128 –102,400KB, Default = 2,048KB
File type:		Multi Page TIFF (Default), Multi Page PDF, Single Page TIFF, Single Page PDF
PDF Security Setting		Yes
Program User Setting:		Yes
Divide and send e-mail:		Number of pages divided: 2 – 500 (default: 5)

**\*1: If the sent file size exceeded the maximum E-mail size, it would be divided to multiple sending. In addition, the sent files might not be accepted by the receiving side due to the limitation in the receiving capacity at the receiver SMTP server or E-mail software setting.**

# Product Support Guide

## B286/B289/D344

### Scan to Folder

Protocol Support:	SMB (Server Message Block), FTP (File Transfer Protocol), NCP
Security:	Client folder log-in (log-in name and password) Encryption of log-in name and password during transmission
Resolution:	150dpi, 200dpi (Default), 300dpi, 400dpi, 600dpi
Register client folder address:	Max. 150 folders
Maintain client folder address:	Direct input on operation panel, WebImageMonitor, SmartDeviceMonitor for Admin
Destination client folder address input via operation panel:	Yes SMB: Network path -> Client folder -> Password FTB: Server -> Network path -> User account -> Password
Search client folder:	SMB: Browsing directly to the designated folders FTP: By client folder name
Max. client folder numbers per send:	Max. 32 client folders / PCs per send
Destination Combination:	Please refer to 4.4.9.3
Group address:	Max. 132 destinations (To Folder: 32, To E-mail: 100) (*1) e.g. 100 destinations 32 folders included >>>OK 100 destinations 33 folders included>>>Failure
Input Subject:	No
Scan File Size:	Up to 2000MB
File Size when combined Scan to Folder & Scan to E-mail:	128 – 45,389KB, Default = 2,048KB (With restriction) (Scan to E-mail file size applied).
File type:	Multi Page TIFF (Default), Multi Page PDF, Single Page TIFF, Single Page PDF
PDF Security Setting	Yes
Program User Setting:	Yes
Resend:	No

(\*1) User can send to Max. 132 destinations in the same group. But the number of folders has to be less than 32, since Max. folder destinations are 32. If there are more than 32 folder destinations registered in the Group address, a message pops up.

### Max. address numbers per sending (combination between E-mail and Folder)

	Input via	Condition 1: Max.address can select or input	Condition 2: Max. address allow in single operation	Condition 3: Combination of addresses: Max.
Scan to E-mail	Address book	500	500	550
	Manual input (incl. LDAP search)	100		
Scan to Folder	Address book	50	50	
	Manual input	50		

# Product Support Guide

## B286/B289/D344

### Network TWAIN Driver

Resolution	150 – 1200dpi by 1dpi step
Scan size	Please see mainframe spec
Scan speed	80mm/sec at 600dpi
OS	Windows 95/98/ME/2000/XP, Windows NT4.0, Windows2003server
Memory	Minimum required memory for OS + 8MB
CPU	Pentium 150MHz or more, or minimum required CPU for OS
HDD	More than 100MB of disk space is required.
Network	Protocol: TCP/IP, UDP/IP, ICMP/IP

# Product Support Guide

## B286/B289/D344

### RW 3600 External Controller Specifications

	Type RW-3600	Remarks
<b>Controller type</b>	Server PC type soft RIP controller	
<b>&lt;PC&gt; Interface slot</b>	PCI2.0 or higher – 3.3V or 5V auto adaptive, maximum load 5A.	
<b>Maximum continuous print speed</b>	4 ppm @A1/D size (LEF) 2 ppm @A0/E size(SEF)	80mm per second
	6 ppm @A1/D size (LEF) 3 ppm @A0/E size (SEF)	
<b>Maximum print size</b>	914mm x 2,000mm(From Bypass) 3,600mm(std) 6,000mm(SP settings) 15,000mm(49.2ft)	Length up to 6,000mm or 15,000mm available when setting up on engine by SP mode.
<b>Paper capacity</b>	Please refer to the Model N-C2 mainframe specification.	
<b>Output capacity</b>	Please refer to the Model N-C2 mainframe specification.	
<b>&lt;PC&gt; CPU</b>	Pentium4, Pentium3, Celeron with minimum 2GHz, or AMD Athlon (min. Athlon XP) in server PC.	
<b>&lt;PC&gt; RAM</b>	Recommended maximum scan and plot length 256MB 3000mm/ 9.84ft 512MB 6000mm/19.68ft 768MB 8000mm/26.2ft 1024MB 10000mm/32.8ft 1536MB 15000mm/49.2ft 1536MB+ 15000mm/49.2ft	
<b>&lt;PC&gt; HDD</b>	Minimum memory required in server PC: least 20GB free memory. Features using HDD are, <ul style="list-style-type: none"> <li>● Collation sets</li> <li>● Click charge management</li> <li>● Data maintenance (Job history)</li> <li>● Spooling, cache for print</li> <li>● Sample print, Locked print</li> </ul>	
<b>&lt;PC&gt; Network protocol</b>	TCP/IP, IPX/SPX lpr/lpq, HTML, SMB(as of Windows2000)	
<b>Resolution</b>	600dpi	
<b>Gray scale</b>	2 levels	
<b>Output file format</b>	<Standard> HP-GL, HP-GL2, HP-RTL, TIFF Calcomp906/907, WMF, BMP, CAL5(1&2), T6X, CIT, PCX, RLC, DWG(only with installation of AutoCAD application)	*DWG/DXF file formats DIRECT PRINT is available when AutoCAD software is installed.  *DWG/DXF/DWF file formats DIRECT PRINT is available when

# Product Support Guide

## B286/B289/D344

	<Option> PostScript3 (PDF), *see description below. CGM, DWG/DXF/DWF, VIC *new: (see description next page)	the "DWG/DXF/DWF option" is activated.
<b>Unix support</b>	Redhat Linux 6.x-7.1 HP-UX 10.x/11.x Sun Solaris 2.6/7.x/8.x SCO OpenServer 5.x (up to 5.06)	
<b>Certification</b>	Microsoft / Bentley	
<b>Help</b>	Available except for 9x WINPRINT Help function	For detail, please refer to 3.5.6 Help style by Software.
<b>Custom paper size</b>	Available for WINPRINT	
<b>Online Folder</b>	Available	

### \*PostScript3

- We have adopted new CPSI engine from Adobe Systems.
- Adapted font and rasterization configuration to CPSI requirements. The changes compared to version 3.6 are:
  - Plotbase 3.7 will be compatible with the method from Adobe Systems. To add a new font with Plotbase version 3.7, use the methods recommended by Adobe.
  - The tabs for PS or PDF halftoning will be available in Plotbase version 3.7. Users can change the setting.

### The PS3 functional difference from version 3.6 to 3.7

Plotbase Version	Preview in PLOTCLIENT/WIN	Preview in PLOTBASE	Printing in PLOTBASE
<b>3.6</b>	Protected PDF document is shown in the preview if PS/PDF is enabled.	Protected PDF document is shown in the preview if PS/PDF is enabled.	Protected PDF document is printed if PS/PDF is enabled.
<b>3.7</b>	Protected PDF document is not shown. An error message will be shown when the user adds such a document in the set.	Protected PDF document is not shown. An error message will be shown when the user adds such a document in the set.	Protected PDF can not be printed. An error message will be shown when users try to print.

### PDF Direct print support matrix.

	PDF 1.4	PDF 1.5 JPEG compression	PDF 1.5 JPEG compression 2000	PDF 1.6
Version 3.3	OK	OK	NG *1	NG
Version 3.6	OK	OK	OK	OK
Version 3.7	OK	OK	OK	OK

\*1) It can be printed through the winprint 300dpi driver. (600dpi winprint driver cannot print larger than A2/D size.)

# Product Support Guide

## B286/B289/D344

### VIC option:

VIC file format is used by REPRODESK. This option is a read only file format, and can be viewed and printed, but not “saved as”. You can modify the pen setting as same way as used for HPGL. The pen-setting file format is \*.HCF (for VIC)

- Pen with
- Pen color
- Color representation by gray values

### Scanner features

Feature	Description
<b>Contrast setting</b>	Auto, Level up to 7
<b>Reading area setting</b>	Auto, Fixed form, User define
<b>Continuous Input</b>	Batch filing Method Save to file with auto filename increment Save multiple document to one file (PDF, TIFF)
<b>Mirror</b>	Mirror in X axis.
<b>Invert</b>	Black <-> White invert
<b>Rotation</b>	0, 90, 180, 270 degrees
<b>Scan modes</b>	<p><b><u>Single copy mode</u></b> Scans one original into memory.</p> <p><b><u>Set copy mode</u></b> Scans one original into the memory and waits for next original until operator hits the stop button. Controller automatically generates a set of scan data.</p> <p><b><u>Batch scanning mode</u></b> Scans one original into the memory and waits for next original until operator hits the stop button. Controller automatically generates the file name and saves all data to the disk.</p> <p><b><u>Scan to archive mode</u></b> Same as Batch scanning mode, except that after every scan, controller asks the operator to fill in file name.</p>
<b>Integrated editor</b>	<ul style="list-style-type: none"> <li>● Zoom in and out</li> <li>● Crop image to user defined extent</li> <li>● Crop data to predefined format</li> <li>● Cut and paste between Windows applications</li> <li>● Merge data with other image data</li> <li>● Erase rectangle</li> <li>● Fill rectangle</li> <li>● Draw line</li> <li>● Enter text in four orientations</li> <li>● Erase data by eraser utility</li> </ul>
<b>Scan to folder</b>	<ul style="list-style-type: none"> <li>● Scan to SMB</li> <li>● Scan to FTP</li> <li>● Scan to NCP</li> </ul>
<b>Scan to E-mail</b>	Yes
<b>Wait for START button</b>	“wait for START button” has been added in the scanner setting window. When it is checked, the scanning will not be started until the user presses the green “START” button on the mainframe operation panel.

# Product Support Guide

## B286/B289/D344

### Controller Installation:

PC should be dedicated as a printer server. Server PC is purchased separately.

System spec requirements for version 3.7

- OS: Windows 2000 Professional SP4
- Windows XP Professional SP2
  - Internet explorer 5.0 or higher
  - Internet explorer 6.0 SP1 when using DWG/DWF/DWF Option
- CPU: Pentium 4, Pentium III, Celeron with minimum 2GHz, AMD Athlon(minimum Athlon XP)
  - Recommended: Intel Pentium 4 with 2GHx or more
- HDD: The hard disk should have at least 20GB free memory.
- RAM: Recommended maximum scan and plot length
  - 256MB 3000mm
  - 512MB 6000mm
  - 768MB 8000mm
  - 1024MB 10000mm
  - 1536MB 15000mm
  - 1536MB+ 15000mm
- PCI bus system must meet up-to-date standards (PCI 2.0 or higher – 3.3V or 5V autoadaptive, maximum load 5A). If the computer does not fulfill this standard, it would cause to the printer controller not be identified.

Display Controller: 1024 x 768 pixels resolution. Avoid computers with shared video memory.

### Plotbase Controller Swap Procedure

Dealer receives a board defect claim from a customer. Trained Wide Format Controller technician verifies likelihood of defective controller with Technical Support Hotline (1-800-53-RICOH) and opens up a hotline call describing failure.

Dealer requests a spare board by calling NRC at 1-973-808-0450. A hotline call ID number **must** be provided when contacting NRC. The spare board will be either free of charge or charged, depending on warranty condition with local Ricoh subsidiaries.

NRC requests <http://www.rspfiles.com/> temporary RSP file(s) for the spare board, and receives temporary RSP files within 24 hours. The temporary RSP files shall provide a 90-day limited software license for the spare controller board.

Temporary license is made permanent once defective board is returned to NRC, found to be defective, and sent by NRC to the factory.

# Product Support Guide B286/B289/D344

## Supported OS - summaries

	PLOTBASE/ SCANTOOL	Client PC/WIN	Client WINPRINT	Client PC/HDI	Client PC/WEB	Client PC/MAC
Win95	-	-	-	-	NA	-
Win98	-	-	-	-	NA	-
WinME	-	-	-	-	NA	-
NT4	-	YES	YES	-	NA	-
2000	YES	YES	YES	YES	NA	-
XP SP2 x32	YES	YES	YES	YES	NA	-
XP SP2 x64	-	<b>NEW</b>	<b>NEW</b>	-	NA	-
Vista x32	<b>NEW</b>	<b>NEW</b>	<b>NEW</b>	<b>NEW</b>	NA	-
Vista x 64	-	<b>NEW</b>	<b>NEW</b>	<b>NEW</b>	NA	-
2003 x 32	-	YES	<b>NEW</b>	-	NA	-
2003 x 64	-	<b>NEW</b>	<b>NEW</b>	-	NA	-
MAC OS 8.6 – 9x	-	-	-	-	NA	YES
MAC OS 10.2	-	-	-	-	NA	YES
MAC OS 10.3	-	-	-	-	NA	YES
MAC OS 10.4	-	-	-	-	NA	YES

\*NEW : support with version 3.7

\*YES : support since version 3.6

\*NA : Not applicable. Support depends on availability of correct HTML browser.

\* - : Not supported

\*Vista : Vista Business, Vista Enterprise or Vista Ultimate



# Product Support Guide B286/B289/D344

## Comparison of the GW Controller and Ratio

	Function	Ratio	Measurement	GW	Remarks
1	Type	External		Embedded	
2	Server PC	PC		Without PC	
3	Print File Format	<b>Standard:</b> HP-GL, HP-GL2, HP-RTL, TIFF, Calcomp 906/907, WMF, BMP, CALS, T6X, CIT, PCX <b>Option:</b> PS3, DWG, DXf, DWF, CGM, VIC		RPCS, PS3/PDF, HPGL, HPGL-2, TIFF, CALS	
4	Network Protocol	TCP/IP, IPX/SPX, lpr/lpq, HTML, SMB (as of Windows 2000)		TCP/IP, IPX/SPX, Appletalk	
5	Driver	<b>WINP:</b> Windows 95/98/ME Windows NT 4.0 Windows 2000 <b>RINT:</b> Windows 2000 Windows XP Professional Windows 2003 Server Windows Vista		<b>RPCS:</b> Windows 95/98/ME Windows NT 4.0 Windows 2000 Windows XP Windows 2003 Server <b>PS3:</b> Windows 95/98/ME Windows NT4.0 Windows 2000 Windows XP Windows 2003 Server Mac OS 6 or later Mac OS 6 x 10.1 or later	
6	Scan Resolution	150-1200dpi (1 dpi step)		150-600dpi	
7	Scan File Format	<b>Standard:</b> TIFF (uncomp/G3/G4), T6X, BMP, RLC, HP-RTL, PCX, CALS 1&2 <b>Option:</b> PDF-G4, PDF-LZW, PDF-Packbits, DWF, DWG		Single Page TIFF Multi Page TIFF Single Page JPEG Single Page PDF Multi Page PDF Secure PDF	

# Product Support Guide

## B286/B289/D344

### Functional Specifications

Comparison:

< > Indicates controller with more functionality

= is comparable

	Function	Ratio		Compared	GW		Remarks
		Available	Name		Available	Name	
1	Test Print	Yes	Trial Print	=	Yes	Sample Print	
2	Locked Print	Yes	Security Print	=	Yes	Locked Print	
3	Sort	Yes	Sort Output	=	Yes	Sort	Automatically collates copy sets
4	Choose Output Tray	Yes	Bin Specified Output	=	Yes	Output Tray	
5	Choose Paper Tray	Yes	Media Type of Tray Specified	=	Yes	Input Tray	
6	Job Spool	Yes	Job Spool	>	Yes	Print job Spool	Jobs are printed in order of priority and acceptance
7	Choose Reproduction Ratio	Yes	Magnification by standard size, percent value, specified size	=	Yes	Reduce/Enlarge, Auto Reduce/Enlarge, Magnification Ratio	
8	Mirror	Yes	X and Y direction	>	Yes	Y direction only	
9	Rotate	Yes	Rotation	>	No		
10	Inverted Print	Yes	Invert	=	Yes	Positive/Negative	
11	Store output to Document Box	Yes	Document Box	=	Yes	Store to Document Server	
12	Change Margin	Yes	Clipping	=	Yes	Hard Clip	
13	Transparency Mode	No		<	Yes	Transparency Mode	
14	Transparency Source	No		<	Yes	Transparency Source	
15	Set X-axis offset for origin of drawing area	No		<	Yes	Adjust X axis	
16	Set Y axis offset for origin of drawing area	No		<	Yes	Adjust Y axis	
17	Adjust brightness	Yes	File Pens	>	Yes	Manage pen list	Ratio: 255 GW: 6
18	Adjust Pen Width	Yes	Pen scaling	>	Yes	Pen width	Ratio: by 0.1mm GW: by

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## B286/B289/D344

							.25mm
19	Adjust Pen Density	Yes	FileColors	>	Yes	Pen density	
20	Auto Tray Switching	Yes	Auto media source	=	Yes	Auto tray switching	
21	Folder Option	Yes	Fold	=	Yes	Paper folding	

### Options:

#### Roll Feeder (Common with B125)

No. of Roll paper	1 or 2 rolls ( 1 roll option cannot be upgraded to 2 rolls)
Roll Paper Size	Maximum Metric: 914mm x 15,000mm Inch: 36" x 49.2" Minimum Metric: 210mm x 210mm Inch : 8.3" x 8.3"
Roll Paper Diameter	175mm
Dimensions (W x H x D)	1080mm x 720mm x 700mm
Weight	70 kg(1 Roll), 72 kg(2 Roll)

#### Paper Cassette (Common with B125)

Paper Size	Maximum Metric : A3 (297mm x 420mm) Inch : 12" x 18" Minimum Metric : A4 (210mm x 297mm) Inch : 8.5" x 11"
Paper Weight	Metric : 64 – 105g/m2, (55 –99kg) Inch : 17 – 28lbs
Paper Capacity	250 sheets (with the paper spec of 64 – 81g/m2, or 17 – 20lbs.)
Dimensions (W x H x D)	620mm x 130mm x 570mm
Weight	Less than 60kg

#### Table Option (Common with B125)

This is a common option with the B125, and is for users who only need the Copy function with the bypass feeder. The roll feeder option must be installed other than the table option, when users request to have printer/scanner function.

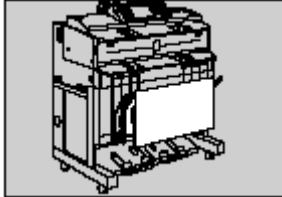
Dimensions (W x H x D)	1080mm x 720mm x 700mm
Weight	34 kg

# Product Support Guide

## B286/B289/D344

### Originals Hanger Option (New)

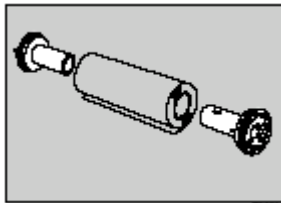
This is a new option that makes copy operation easier than before. This is a hanger for original documents before making copy.



### Roll Holder Unit type A (common with B125, B010, B188)

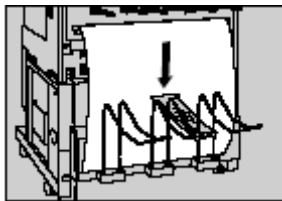
This is an extra option (which comes with 2 pieces/set) to be put on the both sides of the roll paper. This is called flange.

When users change the roll paper, they only need to move the roll paper with the roll holders. This makes customers very easy operation.



### Rear Stacker

Users can select either this rear stacker (option) as a lower tray. It holds maximum of 20 sheets of A1/D LEF.



[Important]

When the rear stacker option is installed, the standard lower stacker will not be available

# Product Support Guide

## B286/B289/D344

### USB host board

Allows you to connect a variety of external devices.

Interface Connector	USB 1.1 host interface A type
Data Transmission Speed	12 Mbps(Full speed)
Distance Between Devices	2.5m

### IEEE 802.11b wireless LAN board

Allows you to install a wireless LAN interface

.Transmission spec	Based on IEEE 802.11b (wireless LAN)
Protocol	TCP/IP, IPX/SPX, AppleTalk
Data transfer speed	Auto select from the following speed 1 Mbps, 2 Mbps, 5.5 Mbps, 11 Mbps
Frequency range	Inch version: 2412 – 2462 MHz(1-11 channels) Metric version: 2412 – 2472 MHz(1-13 channels)
Transmittable distance	1 Mbps: 400m 2 Mbps: 270m 5.5 Mbps: 200m 11 Mbps: 140m
Transmission mode	Ad hoc, and infrastructure mode

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### Gigabit Ethernet (1000BASE-TX)

Allows you to communicate with 1000BASE-TX.

Interface Connector	Ethernet (10Base-T, 100Base-TX, 1000Base-T) USB 2.0(It requires a USB computer port and cable that support USB 2.0.)
Data Transmission Speed	Ethernet: 1000 Mbps, 100 Mbps, 10 Mbps USB: 480 Mbps (High speed:USB 2.0), 12 Mbps(Full speed)
Protocol	TCP/IP, IPX/SPX, AppleTalk
Distance Between Devices	Ethernet: 100m USB: 5m

### File Format Converter

Allows you to download stored documents scanned in copier, document server, or printer mode. Allows you to change size of stored file in document server.

#### <Important>

The File Format Converter is mandatory with GW scanner option. When downloading a document stored with the copy feature, you must install the File Format Converter.

### DataOverWriteSecurity Unit

Allows you to erase data on the hard disk.

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## Utilities

### Web Image Monitor

The screenshot shows a Microsoft Internet Explorer browser window displaying the Ricoh Web Image Monitor for a RICOH imagio MP W2400 printer. The browser's address bar shows the URL: `http://133.139.49.217/web/guest/en/websys/webArch/mainFrame.cgi`. The page title is "RICOH imagio MP W2400 Web Image Monitor".

The interface includes a left-hand navigation menu with the following items: Home, Document Server, Printer: Print Jobs, Job, and Configuration. The main content area is titled "Home" and features a language dropdown set to "English" and a "Refresh" button. Below the title, there are tabs for "Status", "Device Info", "Counter", and "Inquiry".

The "Status" tab is active, displaying the following information:

- Device Name : RICOH imagio MP W2400
- Location :
- Comment : testtest123ABDC
- Host Name : RNPA62FD

A NetRICOH logo and a printer image are also present. Below this, a "Status" section provides a summary of printer components:

Component	Status	Action
Printer	Alert	>>>
Copier	Alert	>>>
Scanner	Ready	>>>

To the right of this table, a "Printer:" section indicates: "No Paper: Tray 1(Paper Roll 1)" and "No Paper: Tray 2(Paper Roll 2)".

The "Toner" section shows "Black" with a "Status OK" icon. The "Input Tray" section lists:

- Tray 1(Paper Roll 1): A0 Width (841 mm)
- Tray 2(Paper Roll 2): Eng. 34 inch Width
- Cut Paper Tray: A4
- Paper Bypass: 11 x 17

The "Output Tray" section shows "Upper Paper Exit" and "Lower Paper Exit" with downward-pointing arrows.

The browser's taskbar at the bottom shows the "Local intranet" icon.

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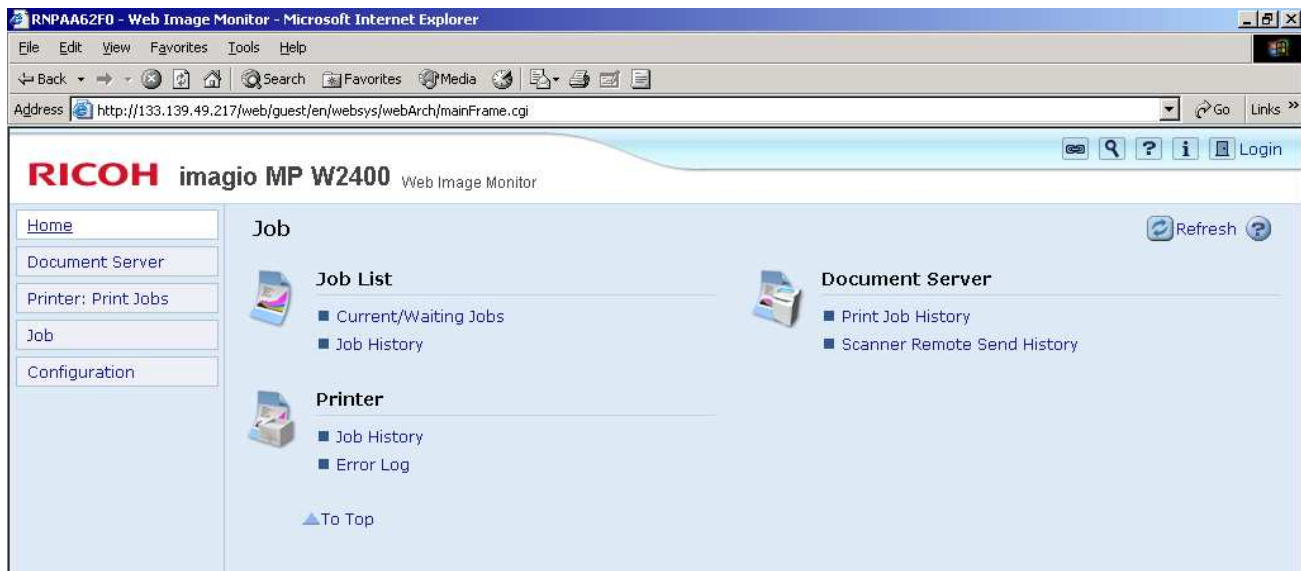
In the B286/B289, the following operations will be available through Job List function.

- view details of jobs.
- delete / suspend jobs.
- change order of waiting jobs.

Note:

- Applicable jobs are copying and printing jobs. Scanner jobs are not applicable.
- When suspending a job, all the subsequent jobs will be suspended as well.

## User interface for Job List operation










# Product Support Guide

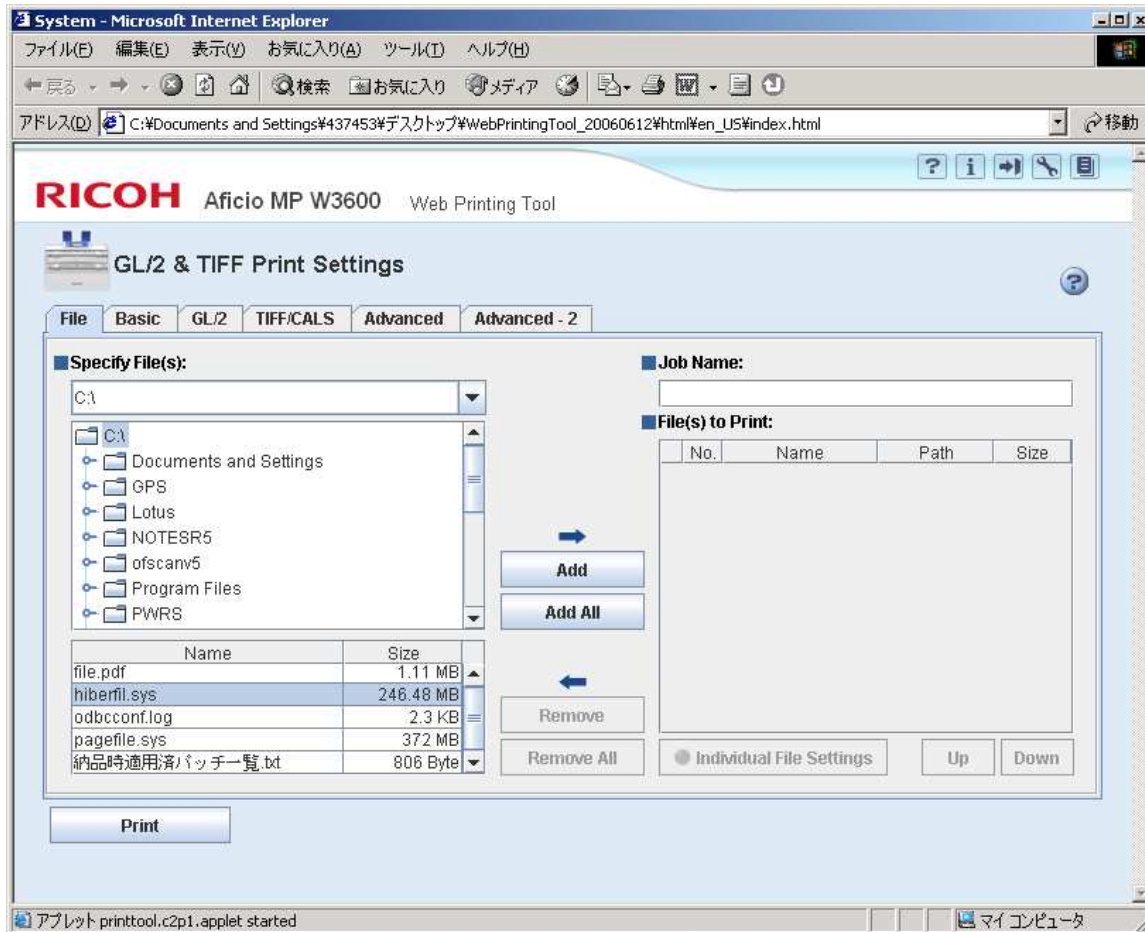
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### Web Printing User Interface

 Help	The Web Print Tool Help
 Version Information	Provides the version of the software.
 GL2/Tiff print setting	Print settings for users.
 Initial Configuration	Specifies the Initial Configuration when the first time this application is launched. These values must be defined preliminarily and can be changed whenever needed.
 System Log	Downloads system log which contains information about job processing and control panel operations, and is very useful for troubleshooting. When problems arise, collect this log data from this screen and send it to service staff in order to save problem solving time.

**[File Tab] Specify files and print them. The file format which can be printed with this Web tool, is HP-GL, HP-GL/2, HP-RTL and CALS.**

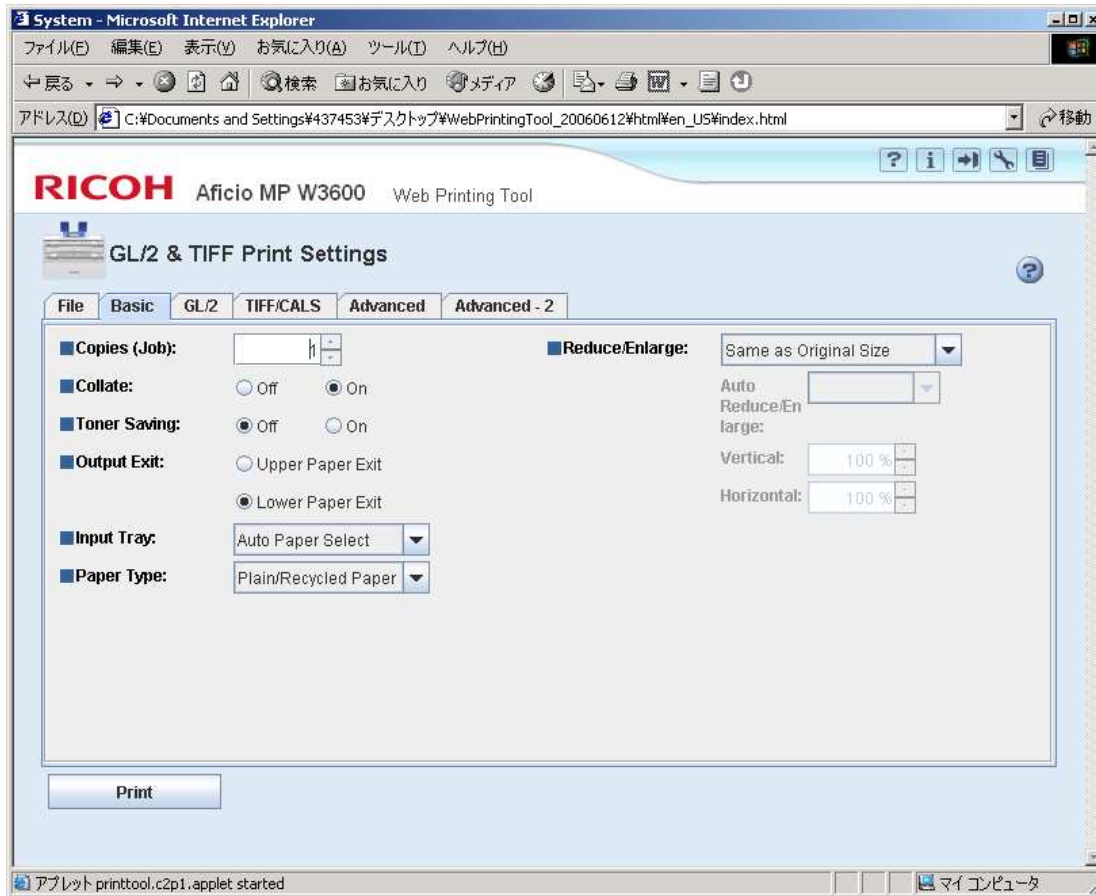
# Product Support Guide B286/B289/D344



You can select the files through the “Specify Files” on the left side, and then enter the files into the “File(s) to Print” area as a job by pushing “Add” button.

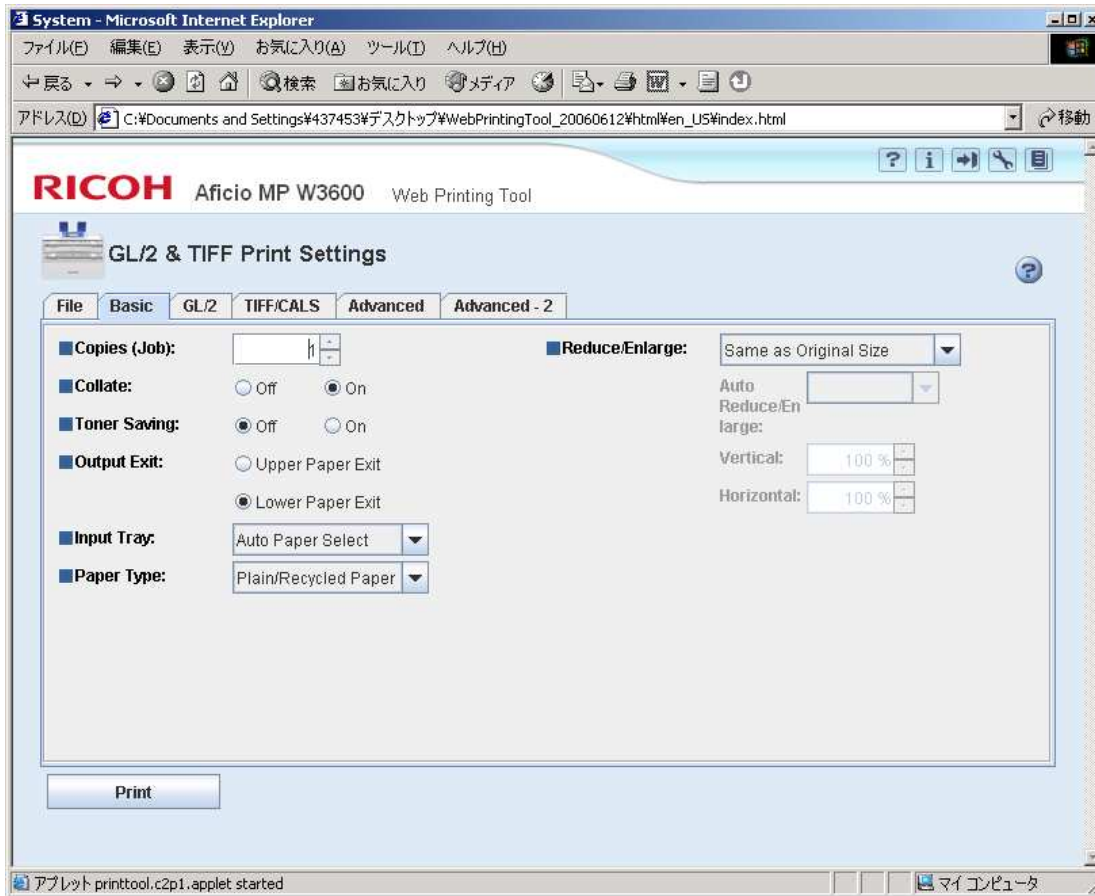
**[Basic Tab] Specify the basic print settings.**

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# Product Support Guide

## B286/B289/D344

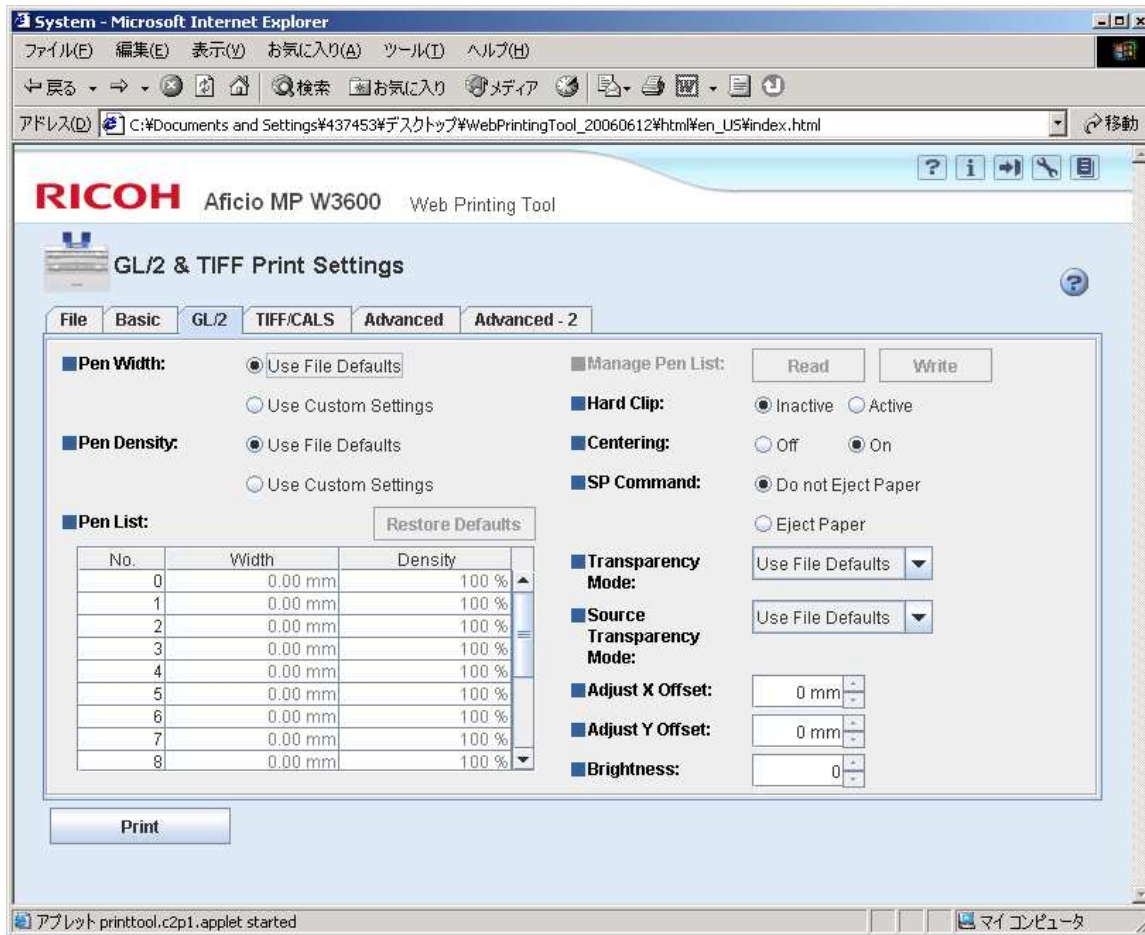


Copies(Job):	Specify the number of copies for this job in the range of 1 to 999.
Collate:	Prints out multiple sets of copies in individual and separate sets.
Toner Saving:	Prints with less toner. This mode would probably produce white stripes or faint images, and is appropriate for sample print.
Output Exit:	Specify the output tray for printed paper.
Input Tray:	Select which input tray to use for printing from drop-down menu. "Auto Paper Select" option automatically selects input tray based on the size and type of paper.
Paper Type:	Select the type of paper from drop-down menu.
Reduce/Enlarge:	Specify the scaling mode to reduce/enlarge the print size of documents.
Auto Reduce/Enlarge	Select the paper size when "Auto Reduce/Enlarge (mm/inch)" is selected by "Reduce/Enlarge" menu. Enlarges or reduces the document size depending on the paper size.
Vertical: and Horizontal:	Specify directional magnification when "Directional Magnification %" is selected in "Reduce/Enlarge" menu. The valid range of input is 10-400% in 1% increments.

# Product Support Guide

## B286/B289/D344

[GL/2 Tab] Specify print settings of HP-GL and HP-GL/2 data.

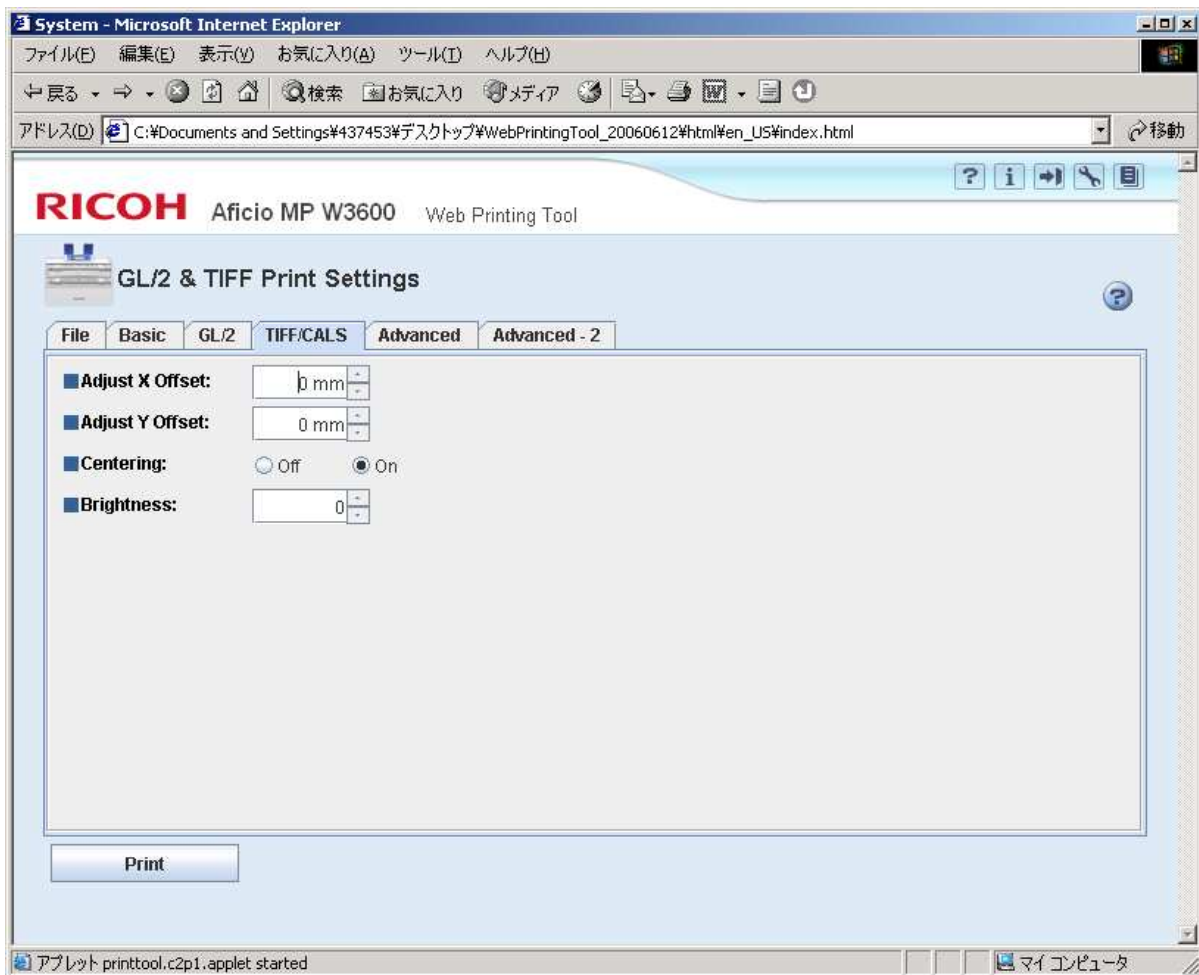


Pen Width:	Select whether to use file defaults settings, or to specify width for each pen.
Pen Density:	Select whether to use file defaults settings, or to specify density for each pen.
Pen List:	Specify width and/or density for each pen when the "Use File Defaults" option is selected. Pen width can be selected from the list of 0.00-12.00mm in 0.01mm increments, however actual width of printed image could be slightly different from the specified width because lines are printed in dots. Pen density can be specified in 10% increments within the range between 0 and 100%.
Manage Pen List:	Click the "Read" button to apply saved data from files, or click the "Write" button to save the "Pen List:" data to files.
Hard Clip:	Enables and disables output hard clip limits given by PS commands. If "Inactive" is selected, the actual drawing area will be the printed area.
Centering:	Print images at the center of the hard clip area.
SP Command	Specify whether to eject paper at receipt of "SP;" and "SP0;" command.
Transparency Mode	Specify the transparent processing mode by MC command and TR command.
Always Active	Always activates MC/TR commands in HP-GL2 data come into effect.
Use File Defaults	Follows MC/TR commands in HP-GL2 data.
Always Inactive	Ignores MC/TR commands in HP-GL2 data forcibly.
Source Transparency Mode:	Specify the transparent processing method by "Source Transparency Mode (ESC*v#N)". *Always Active: Always activates ESC*v#N commands in RTL data come into

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	effect. * <b>Use File Defaults:</b> Follows ESC*v#N commands in RTL data. * <b>Always Inactive:</b> Ignores ESC*v#N commands in RTL data forcibly
Adjust X Offset:	Specify X-axis offset for origin of the drawing area in 1mm increments within the range between -199 and 199mm.
Adjust Y Offset:	Specify Y-axis offset for origin of the drawing area in 1mm increments within the range between -199 and 199mm.
Brightness:	Adjust brightness for RGB-color and grayscale image data. Higher brightness value lightens the entire image while lower brightness value darkens the image.

**[TIFF/CALS Tab] Specify print settings of TIFF and CALS data.**



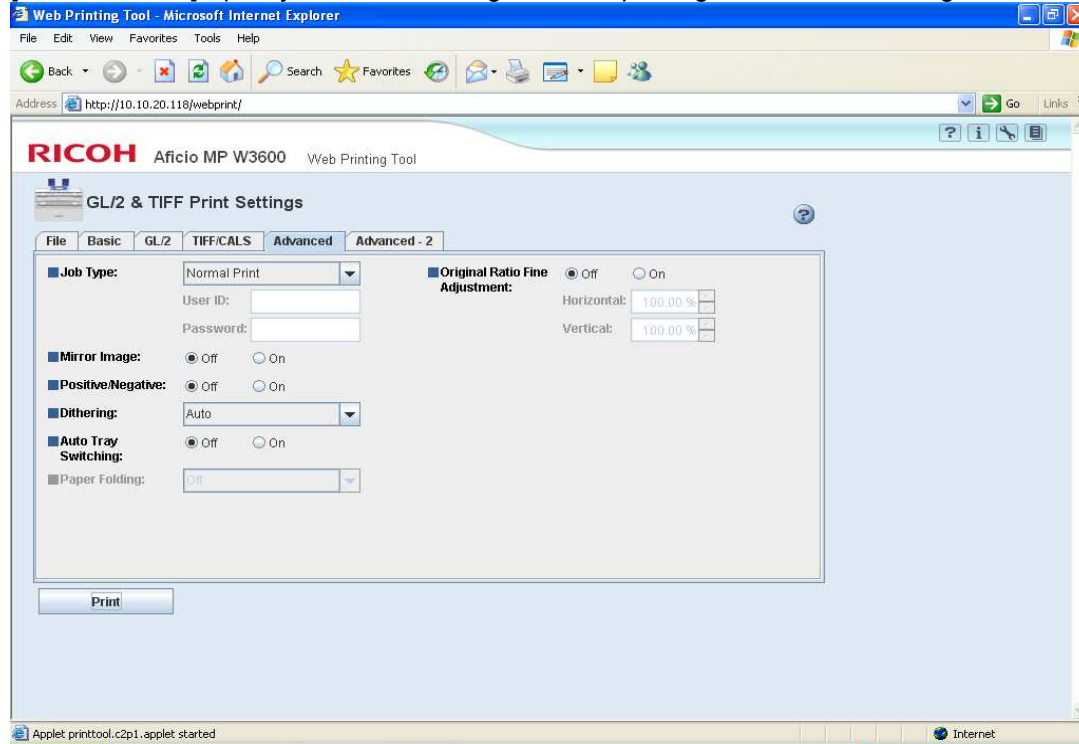
Adjust X Offset:	Specifys X-axis offset for origin of the drawing area in 1mm increments within the range between -199 and 199mm.
Adjust Y Offset:	Specifys Y-axis offset for origin of the drawing area in 1mm increments within the range between -199 and 199mm.
Centering:	Print drawing area at the center of the paper.
Brightness:	Adjust brightness for RGB-color and grayscale image data. Higher

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brightness value lightens the entire image while lower brightness value darkens the image.

[Advanced Tab] Specify advanced settings such as printing method, mirror image and others.

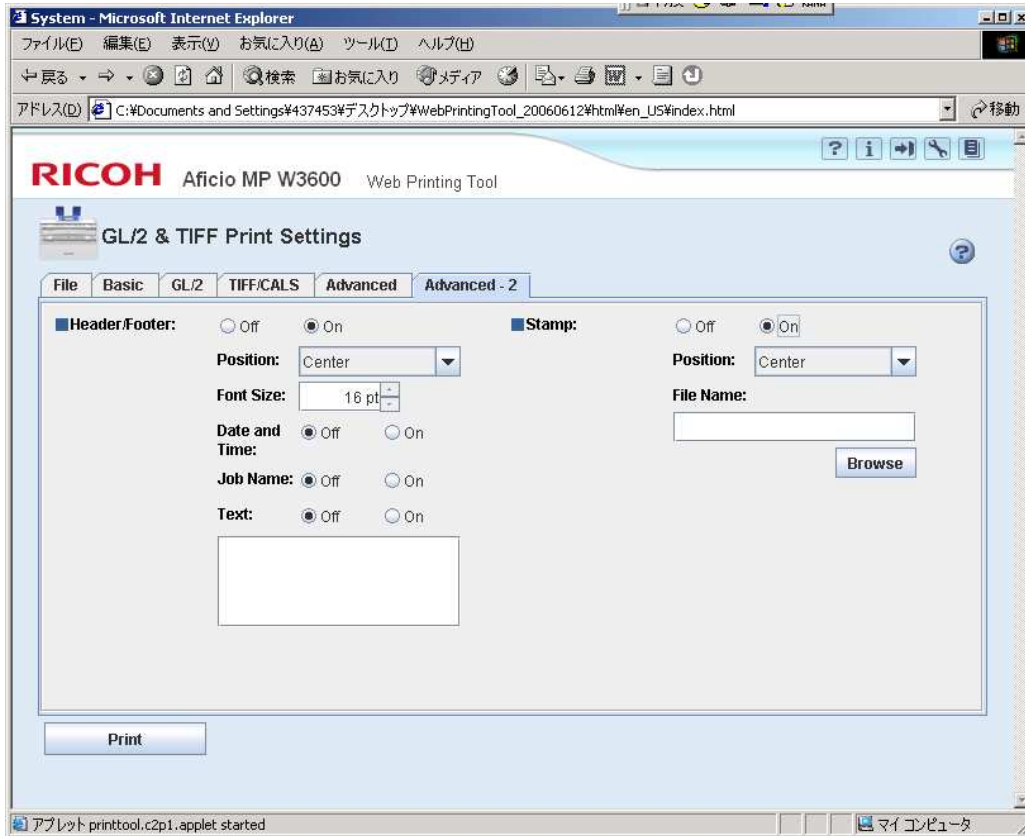


Job Type:	<p>Select a job type from the drop-down menu.</p> <p><b>*Normal Print:</b> With this selected printing begins as soon as you send the job to the printer.</p> <p><b>*Sample Print:</b> Allows the first copy of a multiple copy print job to be printed so user can check the appearance before printing the remaining copies. The remaining copies are saved on the printer and can be printed or cancelled from the printer's operation panel.</p> <p><b>*Locked Print:</b> This function provides a secure method of printing for confidential documents and drawings. Locked print job is not printed immediately but stored on the hard disk until the user access the copier directly through the control panel and enter the associated user ID and the password of 4 to 8 alphanumeric</p> <p><b>*Send to Document Server:</b> Electronically stores originals for on-demand reprinting. Allows users to merge, edit, and print stored files, scanned images and output documents as desired. To use the document box, specify user ID (required) and password (arbitrary) in 4 to 8 alphanumeric for each.</p>
Mirror Image:	Prints images with left and right reversed.
Positive/Negative:	Prints images with black and white inverted.
Dithering:	Select dither pattern appropriate for the print image from the drop-down menu.
Auto Tray Switching:	Enables copier to automatically switch from a depleted paper tray to another tray holding the same size, orientation, and type of paper in the midst of a job.
Paper Folding:	Select paper folding method from the drop-down menu when paper folding unit is

# Product Support Guide B286/B289/D344

	attached to copier.
Original Ratio Fine Adjustment:	Adjusts the size difference between original data and printed image for scaled drawings which must be accurately printed. The range of ratio is 99.0-101.0% in 0.01% increments.

[Advanced-2 Tab] Specify Header/Footer and Stamp settings.



Header/Footer:	<p>Specifies whether to print header/footer.</p> <p><b>Position:</b> Selects the position of the header/footer from the drop-down menu.</p> <p><b>Font Size:</b> Specify the header/footer font size in points.</p> <p><b>Date and Time:</b> Specify whether to print the date and time stamp of transmission of the job.</p> <p><b>Job Name:</b> Specify whether to print job name.</p> <p><b>Text:</b> Specify whether to print user definable text of up to 256 1-byte alphanumeric characters.</p>
Stamp:	<p>Specify whether to print stamp image of BMP format.</p> <p><b>Position:</b> Select the position of the stamp image from the drop-down menu.</p> <p><b>File Name:</b></p>



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	Specify stamp image file. Enter the directory and name of the file, or click the "Browse" button to find it on your computer.
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# Product Support Guide

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### Utility Software

#### DeskTopBinder Lite Ver.5 / Professional Ver.5

DeskTopBinder Lite Ver.5/ Professional Ver.5 is a client software that enables users to easily distribute, manage, and retrieve documents from Ricoh's MFPs, LPs, scanners, faxes, digital cameras, and document management servers. Furthermore, users can combine documents created by different applications and print them out as a single document. SmartDeviceMonitor for Client, an independent software up until the previous version, will become one function of DeskTopBinder from this version. Thus, functions such as monitoring the status of devices, parallel printing, and print notification can all be performed with DeskTopBinder.

The Lite version is bundled with some of Ricoh's devices, while the Professional version is separately available.

Functions such as converting documents into PDF or converting scanned documents into searchable text files are available only with the Professional version.

<Combine document from different applications and print as one>

#### PS driver

PS driver is installed in client PCs, and it is the software(driver) that sends print data with PostScript command/printing language to a printer device.

#### RPCS driver

RPCS driver is installed in client PCs, and it is the software(driver) that sends print data with RPCS command/printing language to a printer device.

RPCS stands for Ricoh Printing Command Stream, and is RICOH's unique printer language for Windows environment.

#### Main Features:

Various Printing Features -ID Folder, Front Cover print, Back Cover print, Chaptering Function and User Defined Pages, PDF Direct Print, Bonjour, Windows Active Directory Support, DDNS, Versatile network connectivity

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### Counters

#### Total Counter Access

- User Tools / Counter → Counter → Print Counter List → Start \*1
- User Tools / Counter → System Settings → Administrator Tools → Display / Print Counter → Print Counter List → Start . \*2
- User Tools / Counter → Printer Features → List/Test Print → Config. Page. This is a Total Only.

\*1 information shown depends on setting chosen in SP 5045

#### Counter Information

\*1 – Total counter

\*2 – Total, Copier, Printer.

#### Counter Specifications

Maximum 7 digits

### Paper

#### Recommended Paper sizes and types

##### Metric version

Tray Type	Recommended paper type	Recommended paper size	Remarks
Paper Roll	Plain paper 51 – 110g/m2 (13.9 – 29.3 lb)	Max. Roll paper diameter: 175 mm Max. Core diameter: 76.4+-0.25 mm Width: 210,297,420, 594, 841,914, 707, 625, 620mm(with spacers on 625mm) Roll length: Less than 150 m	
	Translucent paper 76-110g/m2		
	Vellum 61-110g/m2		
Bypass Tray	Plain paper 51– 110g/m2 (13.9 – 29.3 lb)	A0(SEF), A1/A2/A3 (SEF/LEF),A4(SEF)  Paper width: 257-914mm Paper length: 210- 2000mm	1 sheet can be set from bypass.
	Translucent paper 76-110g/m		
	Vellum 61-110g/m2		

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**Inch version**

Tray Type	Recommended paper type	Recommended paper size	Remarks
Paper Roll	Plain paper 51 – 110g/m2 (13.9 – 29.3 lb)	Max. Roll paper diameter: 6.9" Max. Core diameter: 3"+-0.0098" Width: 8-1/2", 11", 17", 22", 30", 34" or 9", 12", 18", 24", 30", 36"  Roll length: 49.2ft	
	Translucent paper 76-110g/m2		
	Velum 61-110g/m2		
Bypass Tray	Plain paper 51 – 110g/m2 (13.9 – 29.3 lb)	<b>Engineering</b> E(34"x44"):SEF D(22"x34"):SEF/LEF C(17"x22") :SEF/LEF B(11"x17") :SEF/LEF A(8 1/2"x 11") :SEF <b>Architecture</b> E(36"x48"):SEF D(24"x36"):SEF/LEF C(18"x24") :SEF/LEF B(12"x18") :SEF/LEF A(9"x 12") :SEF  Paper width : 11"x36" Paper length: 8 1/2 x 78"	1 sheet can be set from bypass.
	Translucent paper 76-110g/m2		
	Vellum 61-110g/m2		

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**Special Paper**

Not Applicable.

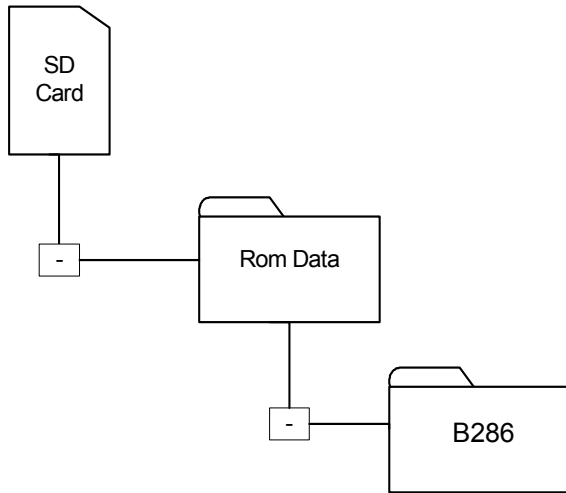
### Firmware Information

#### Firmware

Firmware SD Card	Firmware Type
Animation	Animation
Engine	Engine
Language	Language
Network Support	NIB
Op Panel	LCDC
Printer	Printer
Scanner	Scanner
System/Copy	System/Copy
Web Support	Web Support
Web Uapl	Web Uapl

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## SD Card Arrangement



## Documentation

Description	MIU Code	RFG E-Source Number
Service Manual	003165	Rfg028325
Part Catalog	003166	Rfg028358
Point-to-Point	003167	Rfg028357
B286/B289 Service Documentation Update Package	003164	Rfg028364

# Product Support Guide

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### Contact Information

Name	Contact
Technical Services Call Center (Hotline)	Ricoh: (800) 537-4264 Savin: (800) 291-6044 Lanier: (800) 333-3147
Application Help Desk (Software Issues)	Ricoh Phone Card: 2 Call - 000781MIU, 5 Call - 000900MIU Savin Phone Card: 2 Call - 12992, 5 Call - 12993 Gestetner Phone Card: 2 Call - 12994, 5 Call - 12995
National Reclamation Center	(800) 557-4264 <a href="http://www.nrc-usa.com">http://www.nrc-usa.com</a>
Technology Solutions Center Web Site	<a href="http://www.tscweb.net">http://www.tscweb.net</a>
Configurator	<a href="http://www.connectivity-cafe.com">http://www.connectivity-cafe.com</a>
Ricoh Web Site	<a href="http://www.ricoh-usa.com/">http://www.ricoh-usa.com/</a>
Savin iLINC Web Site	<a href="http://w3.savin.com">http://w3.savin.com</a>
Headquarter Web Sites	Ricoh Corporation: <a href="http://www.ricoh-usa.com">http://www.ricoh-usa.com</a> Savin Corporation: <a href="http://www.savin.com">http://www.savin.com</a> Lanier Corporation: <a href="http://www.lanier.com">http://www.lanier.com</a>
Material Safety Data Sheets	(800) 336-MSDS (6737)
Eastern Training Center	(973) 808-7646 <a href="http://www.ricohuniversity.com">http://www.ricohuniversity.com</a>
Western Training Center	(714) 566-3692 <a href="http://www.ricohuniversity.com">http://www.ricohuniversity.com</a>
Lanier Education Center	(678)-824-3000

# Product Support Guide

## B286/B289/D344

### Training Information

#### **B286/B289 Digital Wide Format Update for all B125 and B188 Certified Product Service Personnel**

**Ricoh is pleased to announce the release of the B286/B289 Wide Format Copier.**

The model names for the B286 and B289 are as follows:

<b>Product Code</b>	<b>Lanier</b>	<b>Ricoh</b>	<b>Savin</b>
<b>B286</b>	<b>LW324</b>	<b>MPW2400</b>	<b>2404WD</b>
<b>B289</b>	<b>LW336</b>	<b>MPW3600</b>	<b>2406WD</b>

The B286/B289 Digital Wide Format Product is an easy to use, low-volume digital wide format copier that offers superb copy images. The B286/B289 replaces the B125 product and offers increased speed, reliability, and image quality.

The B286/B289 offers a variety of document solutions functions such as scan to e-mail, scan to folder, and scan to document server. It offers two printer controller options, a Ricoh embedded controller and a Ratio external controller.

In order to ensure service professionals are proficient on all service aspects of the new B286/B289, a self-pace update training program will be provided for all B125 or B188 certified service professionals, who wish to become certified on the B286/B289. A 25 question final exam will be administered after the completion of the self-pace training program. A minimum passing grade of 75% will be required to achieve certification.

If you have questions about this or any other training program, please visit the Ricoh University home page at <http://www.ricohuniversity.com>, or contact the Service Education & Development Division at 973-882-2200.



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### Revisions:

- 1.0 Original
- 1.1 Revision to Maximum Monthly Volume 7/9/2007
- 1.2 Revision to Option Correlation Chart 2/19/2008