

 Roland

Hi-Fi JET PRO

HIGH FIDELITY 8 COLOR INKJET PRINTER

Model
FJ-600/500/400



A new era in wide-format printing

The Future: Dual-Head Architecture

The Roland Hi-Fi JET PRO represents dramatic progress over the earlier, award-winning Hi-Fi JET in both print quality and speed. The Hi-Fi JET PRO utilizes Roland's new dual-head, variable droplet technology to deliver breathtaking fine art reproductions with 8-color printing, or very high-speed output with double CMYK printing. With the Hi-Fi JET PRO, Roland once again leads the way to a new era of superb wide-format inkjet printing.

HI-FI JET PRO

HIGH FIDELITY 8 COLOR INKJET PRINTER

Elevating the Level of Fine-Art Reproduction

8-Color Printing^{*1}

Now there is no need to choose between rich colors and wider gamut or smooth, natural gradations and skin tones. 8-color printing with variable droplets on the Hi-Fi JET PRO accomplishes both simultaneously—never before possible with 4 or even 6-color printing.

Variable Droplet Control Technology

By varying the size of individual ink droplets, Roland's new technology provides a far greater number of dot sizes, providing a new standard for silky-smooth, grain-free print quality. Inkjet output finally rivals true continuous tone.

1440 x 1440 dpi Resolution^{*2}

A milestone in high-resolution color printing, 1440 x 1440 dpi renders the subtlest details and textures with total realism and natural beauty.

Precise Color Matching

Built into the Roland ColorChoice RIP are ICC color profiles to ensure accurate, consistent, repeatable color matching—precise enough for digital proofing.

Ultrahigh-Speed Productivity

Double 4-Color Printing^{*1}

Delivers A0-size 4-color prints in as little as five minutes at 540 x 360 dpi (127 sqft/h).

Wider Print Head with 96 Nozzles per Color

The revolutionary new print head, with 96 nozzles per color, covers a wider printing area in each pass, greatly enhancing throughput.

2X's Faster Head Speed^{*3}

Print heads have been engineered to operate at up to twice the speed of earlier Hi-Fi JETs for a new dimension in production performance.

Side-by-Side Pigmented and Dye-Based Inks^{*1}

The option of installing both pigmented and dye-based CMYK inks on a single printer saves space and greatly boosts operating efficiency.

^{*1} Printing in 8-colors and double 4-colors, or pigmented and dye-based inks working separately.

^{*2} True 1440 dpi resolution in vertical direction and apparent 1440 dpi resolution in horizontal direction.

^{*3} Compared with previous Hi-Fi JET models.



Model FJ-600

Maximum media acceptance : 1625 mm (64")
Maximum printing width : 1615 mm (63-9/16")

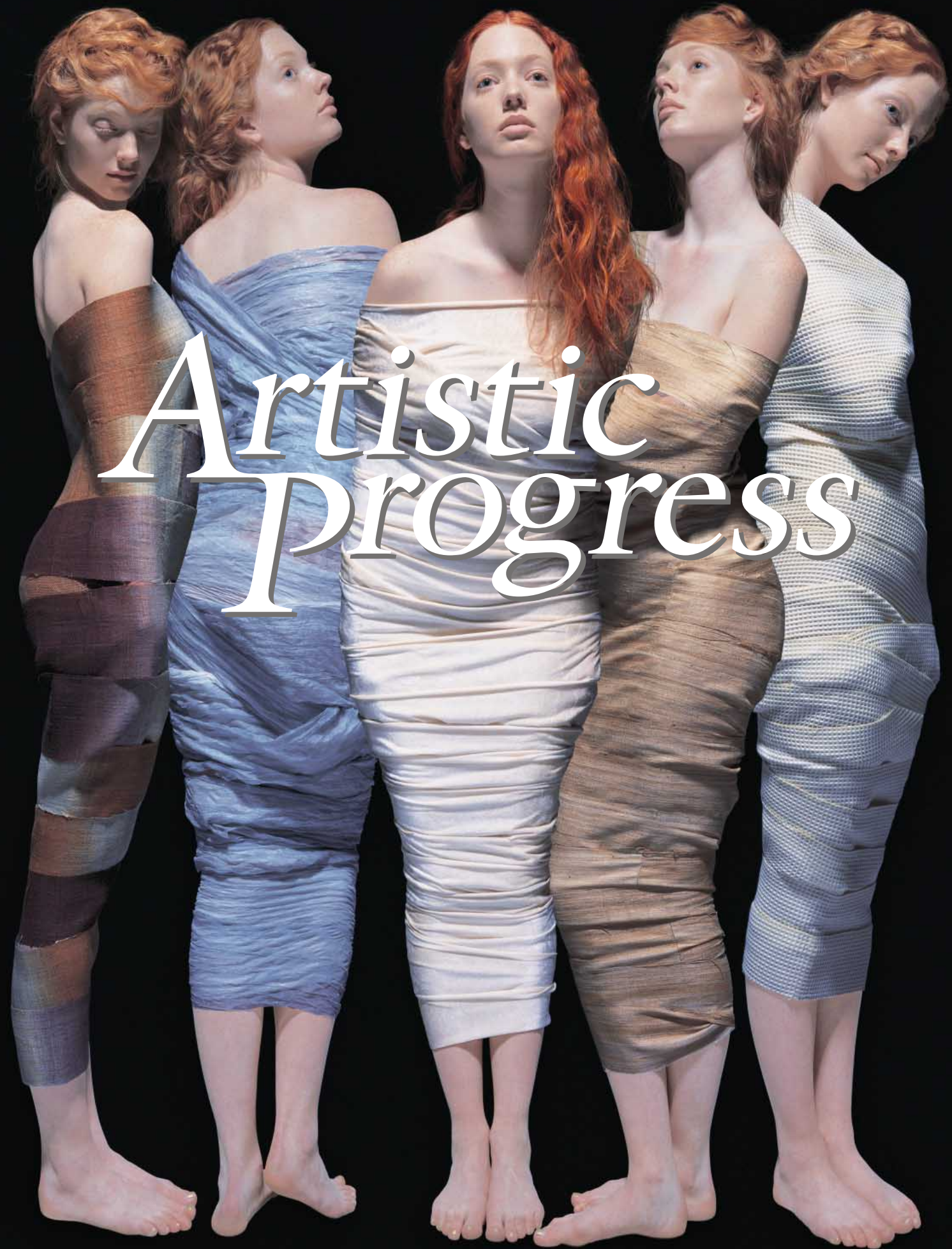
Model FJ-500

Maximum media acceptance : 1371 mm (54")
Maximum printing width : 1361 mm (53-9/16")

Model FJ-400

Maximum media acceptance : 1117 mm (44")
Maximum printing width : 1107 mm (43-9/16")

Photo: FJ-600



Artistic Progress

Advancing the State of the Art

8-Color Printing—An Unprecedented Range of Color Tones

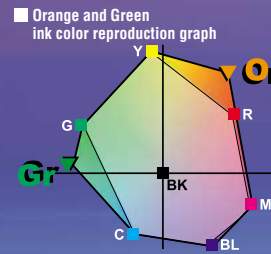
The 8-color printing process in the Hi-Fi JET PRO uses dual print heads and variable droplet technology to reproduce a stunningly broad and realistic spectrum of color—brilliant apple reds, the near-infinite greens of a forest, rich natural skin tones, or a metallic sheen so luxuriously smooth that you want to reach out and touch it. By adding orange (Or), green (Gr), light cyan (Lc) and light magenta (Lm) simultaneously to conventional CMYK colors, the Hi-Fi JET PRO delivers a new standard of photo realism, transcending the limits of conventional 4 and even 6-color printing to satisfy even the most demanding artist or photographer.



■ Hi-Fi JET PRO 1440 dpi 8-color printing



*Identical source data. Images simulated in printing.



Pantone Calibrated for PANTONE® Hexachrome®

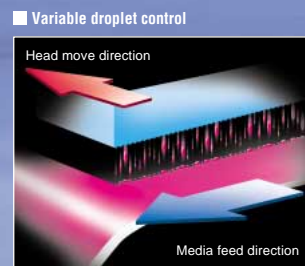
The Roland Hi-Fi JET series is currently the world's first and only 1440 dpi wide-format inkjet printer capable of outputting PANTONE® Hexachrome®. PANTONE® Hexachrome® is Pantone, Inc.'s patented 6-color printing process which simulates over 97%* of solid PANTONE PMS Colors—an enormous benefit to printers and designers for proofing and accurate color matching.



*Requires Roland FPG-series pigment inks in CMYK, Orange and Green, printed at the specified resolution on Roland's signature Hi-Gloss White Film and using Roland ColorChoice® software and QuarkXPress™.

Variable Droplet Control: Unbelievably Smooth and Natural Reproduction

The unique variable droplet technology of Hi-Fi JET PRO produces ultra-precise ink droplets of varying sizes to deliver beautifully smooth and dot-free tones. This state-of-the-art technology is truly breathtaking, either in 8-color or conventional CMYK output.



Variable Dot

1440 x 1440 dpi* Resolution: Astounding Photo Realistic Images

This level of photographic quality reproduces even the downy soft hairs on human skin. The crisp detail and fine-line fidelity of the Hi-Fi JET PRO's 1440 x 1440 dpi resolution makes it ideal for enlargements of fine art, photography, or mural-size graphics, with results rivaling the convincing realism of photographic prints.

*True 1440 dpi in vertical direction and apparent 1440 dpi in horizontal direction.



Piezo Print Heads Produce Precise Droplets under Stable Control

The shape of the ink dots has a major effect on the overall quality of inkjet printing. This is one of the reasons why the Hi-Fi JET PRO uses Piezo inkjet heads—since they consistently produce a more perfectly rounded ink droplet. You can clearly see the difference in the razor-sharp edges of text and photo images, and in the naturally smooth gradations. The minute size of the Piezo ink droplets also enables a more economical use of ink—a cost savings you're sure to appreciate over time.



Two Types of Inks to Match Your Needs

For fade-resistant gallery quality output or for more economical, vivid-color output, the Hi-Fi JET PRO offers you two kinds of inks—pigmented and dye-based. Hi-Fi JET pigmented inks ensure that your posters and signs maintain their beauty longer, even under outdoor conditions* and feature an enhanced color gamut rivaling that of dye-based inks. You get the best of both worlds: rich, vivid colors plus excellent resistance to fading. Hi-Fi JET dye-based inks are the logical choice for indoor posters or proofing. Their lush, intense colors produce beautiful output, while their budget-friendly price helps to keep operating costs down.

*Lamination is required for outdoor use.



A New Dimension in High-Speed Performance

High-Speed Output with Double 4-Color Printing

The Hi-Fi JET PRO delivers major increases in output speeds across the board. Printing at 540 x 360 dpi with two sets of CMYK, the Hi-Fi JET PRO can print one square meter in only 5 minutes (127 sqft/h). Print quality is outstanding and, compared with most conventional wide-format printers, the difference in speed is dramatic.



Output speed comparison

Double 4-color bi-directional printing		
Print mode	Resolution(dpi)	Printing time
DRAFT	540 x 360	5 min/sqm(127 sqft/h)
NORMAL	720 x 720	9 min/sqm(75 sqft/h)
SUPER	1080 x 1080	18 min/sqm(36 sqft/h)
Variable PHOTO	1440 x 1440*	39 min/sqm(16 sqft/h)

8-color bi-directional printing		
Print mode	Resolution(dpi)	Printing time
DRAFT	540 x 360	8 min/sqm(79 sqft/h)
NORMAL	720 x 720	15 min/sqm(42 sqft/h)
Variable NORMAL	540 x 1080*	22 min/sqm(30 sqft/h)
SUPER	1080 x 1080	32 min/sqm(20 sqft/h)
Variable SUPER	720 x 1440*	38 min/sqm(17 sqft/h)
Variable PHOTO	1440 x 1440*	113 min/sqm(6 sqft/h)

Resolution: Media feed direction x Head move direction
*Apparent Resolution

Wider Heads Create Improved Print Speed

The Hi-Fi JET PRO's new print heads utilize 96 nozzles per color which is 1.5 times wider than earlier Hi-Fi JETs to translate into shorter output times even in 8-color printing. When working with 4-color x 2 head printing, 192 nozzles are allocated for each color and 768 nozzles work in total, which results very high-speed output.

Faster Head Speed with Stunning Image Quality

By speed-tuning the print heads, we have been able to nearly double* the maximum speed at which the heads can operate. At the same time, the addition of extremely rigid, high-performance rails and other parts that support head movement ensure that these higher speeds have no adverse effect on image quality. Painstaking Roland engineering keeps ink tubes and cables from transmitting vibrations to the print heads, resulting in smoother, more stable head movement. These features ensure that the Hi-Fi JET PRO maintains higher levels of both output speed and printing fidelity.

*Compared with the Roland FJ-50/40.

Dual Functionality in a Single Printer

The four-color, dual-head configuration of the Hi-Fi JET PRO means that you can use pigmented CMYK inks for one head and dye-based CMYK inks for the other. As a result, you can be ready to respond immediately to your customers'

requests. This ability to deliver multiple printing functions from a single printer gives you substantial time and space savings, along with higher overall business efficiency.

Versatile ink combination



*Pigmented ink and Dye-based ink can be used exclusively.



Print Quality and Speed You Never Imagined Possible

Greater RIP Capabilities for More Power

RCC: High-Speed, High-Performance RIP for Roland Technology

To extend printing capabilities even further, the Hi-Fi JET PRO comes with Roland ColorChoice® (RCC) 4, the only multi-platform RIP designed for variable droplet control and for both 8-color printing or double 4-color printing, while offering functions that lend powerful support to all aspects of Hi-Fi JET PRO output. Compatible with Windows® 95/98/Me and Windows NT® 4.0/2000/XP and Mac® OS 8.1 to 9.x. (Mac OS X is not currently compatible.) RCC adapts smoothly and seamlessly into your existing workflow.



Easy RIP-ing, Faster Print Output

For faster workflow, RCC doesn't need to wait for RIP operations to finish before it starts printing. Full RIP and Print capabilities allow parallel operation, for speedier color and data checking.

*This function works on Windows only.

True Adobe® PostScript® 3™ Compatibility

Adobe® PostScript® 3™ ensures that the images you create in your graphic design applications will print with perfect fidelity—a feature with obvious benefits for both design and proofing tasks. In addition to PostScript applications, you can also directly output TIFF, JPEG, EPS, PDF, PS and PLT (PRT) files. Simply drag-and-drop the file into RCC for speedy output.



*Restrictions may apply to output of some EPS, PDF and PS files.

Reliably Accurate Digital Proofing

A wide range of ICC-compatible input and output profiles are built in to ensure consistently accurate digital proofing. You get optimal color matching for whichever Roland media and Print Mode you choose.

Versatile Output Options with RCC-Based Enlargement and Reduction

RCC offers a wide range of useful functions, including powerful RIP-level output support. Suppose you need to output an A4 file at a larger size, or print out large-format data at a reduced size for test purposes. There's no need to alter the data file within the graphics application; simply adjust the size as you like, even mirror or rotate images, with RCC.

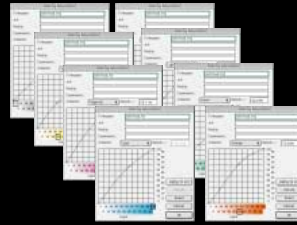
When outputting multiple copies of a file, an automatic function selects the most economical layout for the paper size selected, minimizing media waste. The output position can also be selected freely, to suit the desired arrangement. All these functions are available in the RCC job-properties setting individual for each data file, and files with different settings can be spooled for continuous output. RCC also gives

you control over the Print Mode and the number of copies, so you don't need to output data again from the original application.



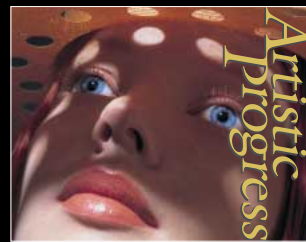
Post-Process Precise Color Adjustment

Sometimes you want to make slight changes to the color balance and tone after an initial test print. In these situations, you can fine-tune the tone curve of all 8 colors individually to achieve the perfect color match. You can easily achieve even greater precision by adjusting colors via this method than by adjusting the original data, plus the extra freedom of adjustment lets you reproduce colors that are simply not possible on other inkjet printers.



Color Management of Photo Images, Independent from Lettering and Line Drawings

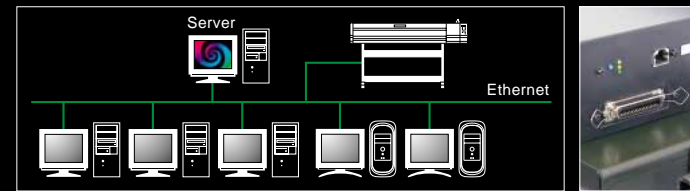
RCC lets you handle color adjustments for image and spot color data separately, avoiding problems with having photo colors affect lettering or line drawings, and vice versa. Photos stay natural, while illustrations and lettering print in the exact colors you designate.



Supporting High-Speed Networks

100 BASE-TX/10 BASE-T Networking

Equipped with a standard 100 BASE-TX/10 BASE-T interface, the Hi-Fi JET PRO connects seamlessly to office networks for high-speed workgroup operation with a data transmission rate of 1.1 Mb/sec. This makes it easy to configure a highly efficient printing environment with efficient sharing between multiple PCs and/or Macs®.



Easy Access to Ethernet Interface Settings from Your Web Browser

Simply access the Hi-Fi JET PRO interface from a web browser and you can quickly view the settings or change them to your desired settings on your display.



Full Support for ECP Parallel Interface

The Hi-Fi JET PRO comes with an ECP parallel interface. This enables data transfer at 750 KB/sec., twice the transfer speed of earlier Hi-Fi JETs.

Offering You a Wider Choice of Print Media

Digital Proofing and Other Media

Media availability largely determines the usefulness of any printer. With this in mind, the Hi-Fi JET PRO accepts a wide range of Roland-certified media. The lineup includes PET film for photographic prints, as well as vinyl, cloth, paper (including Fine Art papers), and film positives for silkscreen printers.

Screen Printing Positives

As with all Roland inkjet devices, the Hi-Fi JET PRO offers the ability to print film positives for screen printing, using either Adobe Photoshop 5.5 or Adobe Illustrator 8.0 with Acrobat Distiller 4.0. No additional equipment or expense is required. You can choose from 14 different half-tone dot shapes with screen frequency and angle control. Roland provides clear film (CPF-66-42) for use with our standard pigmented black ink (FPG-BK).

Adding a Host of New Supporting Features

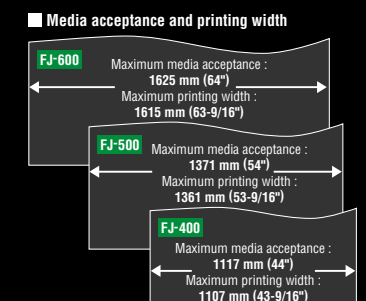
- Backlit LCD for easy panel operation
- Adjustable head height for a wide variety of media from artists' canvas to film
- Media cover guards against dust
- Media damper maintains smooth media feeding
- Easy-to-replace, clean-handling ink cartridges
- Automatic sheet cutter for after printing



Select from Three Models to Match Your Application Needs

Covering a Wide Range of Output

The Hi-Fi JET PRO is available in three sizes: the FJ-600 with a maximum print width of 1615 mm (63-9/16 inches), the FJ-500 with a maximum of 1361 mm (53-9/16 inches) and the FJ-400 with a maximum of 1107 mm (43-9/16 inches). All models will print on media as small as 210 mm (8-5/16 inches), enabling a highly flexible range of output applications.



RIP-ing, Networking, and Media: Comprehensive Professional Performance

Specifications

		FJ-600	FJ-500	FJ-400
Printing method		Piezo ink-jet method		
Printing width		210 to 1615 mm (8-5/16 to 63-9/16 in.)	210 to 1361 mm (8-5/16 to 53-9/16 in.)	210 to 1107 mm (8-5/16 to 43-9/16 in.)
Acceptable material widths		210 to 1625 mm (8-5/16 to 64 in.)	210 to 1371 mm (8-5/16 to 54 in.)	210 to 1117 mm (8-5/16 to 44 in.)
Width of material that can be cut off		210 to 1625 mm (8-5/16 to 64 in.)	210 to 1371 mm (8-5/16 to 54 in.)	210 to 1117 mm (8-5/16 to 44 in.)
Conditions for usable materials		Maximum material thickness: 1.0 mm (0.039 in.) (When head is raised) Maximum diameter for roll material: 180 mm (7-1/16 in.) Core inner diameter for roll material: 50.8 mm (2 in.) or 76.2 mm (3 in.) Maximum weight for roll material: 20 kg (44.1 lb.)		
Ink cartridges	Pigmented ink	Use only pigmented ink cartridge exclusively for use with the Hi-Fi JET		
	Capacity	220 cc ±5 cc		
	Color	The four colors black, cyan, magenta, and yellow or the eight colors black, cyan, magenta, yellow, orange, green, light cyan, and light magenta		
	Dye-based ink	Use only dye ink cartridge exclusively for use with the Hi-Fi JET		
	Capacity	220 cc ±5 cc		
	Color	Cyan, magenta, yellow, and black		
Apparent colors		16.7 million colors		
Printing resolution (Printing dot resolution)		1440 dpi x 1440* dpi / 720 dpi x 1440* dpi / 540 dpi x 1080* dpi / 1080 dpi x 1080 dpi / 720 dpi x 720 dpi / 540 dpi x 360 dpi		
Distance accuracy		Error of less than ±0.3% of distance traveled, or 0.3 mm, whichever is greater (at Roland PET-film, print travel: 1 m (39-3/8 in.))		
Printing heads cleaning		Automatic cleaning and manual cleaning		
Interface		Bidirectional parallel interface (compliant with IEEE 1284: ECP mode) and Ethernet 10Base-T or 100Base-TX		
Instruction system		RD-RTL, RD-PJL		
Power-saving function		Auto-sleep		
Power consumption	Printing mode	Maximum: 1.3A/100V to 240V ±10% 50/60 Hz		
	Standby mode	Maximum: 0.5A/100V to 240V ±10% 50/60 Hz		
Acoustic noise level	Printing mode	60dB (A) or less		
	Standby mode	40dB (A) or less (According to ISO7779)		
Dimensions(With stand)		2500 mm [W] x 740 mm [D] x 1241 mm [H] (98-7/16 in. [W] x 29-3/16 in. [D] x 48-7/8 in. [H])	2246 mm [W] x 740 mm [D] x 1241 mm [H] (88-7/16 in. [W] x 29-3/16 in. [D] x 48-7/8 in. [H])	1992 mm [W] x 740 mm [D] x 1241 mm [H] (78-7/16 in. [W] x 29-3/16 in. [D] x 48-7/8 in. [H])
Weight(With stand)		124 kg (273.4 lb.)	117 kg (257.9 lb.)	108 kg (238.1 lb.)
Environment	Power on	Temperature: 15 to 32°C (59 to 89.6°F), Humidity: 35 to 80% (non-condensing)		
	Power off	Temperature: 5 to 40°C (41 to 104°F), Humidity: 20 to 80% (non-condensing)		
Included items		FJ-600/500/400 main unit: 1, stand leg: 1, caster flats: 2, media guide: 1, media cover: 1, stays: 2 (for place the media guide), bolts (large): 14, bolts (small): 4, hexagonal wrench (M6): 1, pipe: 1, media flanges: 2, flange retaining pins: 2, washers: 6, drain bottle: 1, replacement blade for separating knife: 1, media clamps: 2, cleaning kit: 1 (cleaning sticks: 10, tweezers: 1 pair, and sponges: 10), power cord: 1, Roland-PrintServer CD-ROM: 1, Roland-PrintServer for Macintosh users: 1, Roland ColorChoice : 1, user's manual: 1, and unpacking, assembly, and installation guide: 1		

* Apparent resolution by using variable droplet control.

Options

Pigmented ink	FPG-MG	Magenta, 220 ml
	FPG-YE	Yellow, 220 ml
	FPG-CY	Cyan, 220 ml
	FPG-BK	Black, 220 ml
	FPG-LC	Light cyan, 220 ml
	FPG-LM	Light magenta, 220 ml
	FPG-OR	Orange, 220 ml
	FPG-GR	Green, 220 ml
	Dye-based ink	FDY-MG
FDY-YE		Yellow, 220 ml
FDY-CY		Cyan, 220 ml
FDY-BK		Black, 220 ml
Cleaning cartridge	CJ-CL	Cleaning cartridge for changing ink types
USB to Parallel adaptor for Macintosh	RCC-UP3A	3m (Power Mac with USB port, iMac)

Media Take-up Roller

The take-up roller automatically re-rolls the printed media for unattended and continuous printing. The media take-up option can be added at any time.

Take-up Roller

TU-650

For FJ-600

TU-550

For FJ-500 and FJ-400



FJ-600+TU-650



TU-650

Roland reserves the right to make changes in specifications, materials or accessories without notice. Your actual output may vary. For optimum output quality, periodic maintenance to critical components may be required. Please contact your Roland dealer for details. No guarantee or warranty is implied other than expressly stated. Roland shall not be liable for any incidental or consequential damages, whether foreseeable or not, caused by defects in such products.

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