

Imagine.

 Roland®

DVE
Digital Value Engineering

PRO4
Print & Cut **SOLJET_{PRO4} XR-640**

CREATIVE FORCE


PRO4 innovation powers your imagination


How far can your imagination take you? With the SOLJET PRO4 XR-640, the answer is simple: No boundaries. The PRO4 XR-640 is Roland's newest flagship inkjet print/cut solution for the SOLJET family of printers. You can build your business – and your reputation – on the XR-640's exceptional image quality, all the while offering the most popular and profitable applications that are simply out of your competition's reach. Across the industry, Roland PRO series inkjets are renowned for quality engineering, reliable performance and unmatched versatility. Offering improved productivity, photorealistic imaging, integrated contour cutting and specialty inks for premium finishes and effects, the XR-640 transforms output into art.




SOLJET PRO4 XR-640

Nine different ink colours (CMYKLCmLkMtWh) provide a variety of printer configurations

 7 Colours CMYKLCm+ Light Black (Lk)

 8 Colours CMYKLCm+ Light Black (Lk) + Metallic Silver (Mt) /

 CMYKLCm+ Light Black (Lk) + White (Wh) /


 CMYKLCm+ Metallic Silver (Mt) + White (Wh)

Photo: XR-640 with optional heater and blower



We need to express ourselves, without limits

Latest dual print heads precisely control each dot

To deliver the outstanding image quality sought by professionals in the sign business, the XR-640 is equipped with the latest dual print heads, which fire droplets of seven different sizes to optimise image quality for the specific media and print resolutions selected. The XR-640's print control technology, high performance print heads and ECO-SOL MAX2 inks draw out every detail for unsurpassed image quality. Ink adhesion has been drastically improved through the fine tuning of our ink chemistry, precise head control and drop placement. This allows for high-density coverage as well as deep, rich colours that can create subtle nuances within the image, for the most discerning customers.



New ECO-SOL MAX2 delivers beautifully sharp image quality

ECO-SOL MAX2 is a new generation of Roland's award-winning eco-solvent ink, featuring outstanding long-term outdoor durability, scratch and chemical resistance, broad media support and a wide gamut – all with no nickel compounds. ECO-SOL MAX2 is engineered for stable, consistent output, and produces even colours with sharp images and text. These enhancements bring out every detail for the highest print quality.



Roland print technology achieves stunning, vibrant colour quality by maximising the performance of new dual print heads and ECO-SOL MAX2 ink



Printed with a conventional model



Printed with the SOLJET PR04 XR-640



We want smooth, accurate colours

New light black ink for seamless gradations

In addition to CMYKLoLm, new light black (Lk) ink has been introduced with ECO-SOL MAX2. Light black makes a significant difference to any printed image, delivering highly accurate colours and seamless gradations. With light black, you will achieve a neutral gray for smooth gray scale gradations and precise photographic images. Light black also enhances colour stability for the reproduction of skin tones and other colours containing natural hues. With light black, you can create the rich subtleties for posters, decorative backlits and wraps that draw consumers in and reflect the image of a high-end brand.

Accurate gray balance and remarkably smooth skin tones



Printed with a conventional model



Printed with the SOLJET PR04 XR-640

We search for new ways to express ourselves

White and metallic silver inks produce profitable new applications

Metallic Silver ECO-SOL MAX2 is designed for premium, brilliant effects, and is packed with new, reformulated pigments that are more reflective than ever. The built-in Roland Metallic Color System Library supports 512 metallic colours, allowing you to choose just the right colour from the Adobe® Illustrator® swatch library. An improved reformulated white ink offers higher opacity for exceptionally bright white text, graphics and floods.



Printed with conventional white ink



Printed with White ECO-SOL MAX2

White ink with improved opacity



We value freedom of expression

Print & Cut technology enables you to cut any shape

**Print
& Cut**

Roland's renowned integrated Print & Cut technology offers the power and versatility your business demands. It prints and then automatically contour cuts images into any shape in one seamless workflow. With the XR-640, you can create a variety of custom applications quickly, easily and profitably, including POP, floor signage, stickers, vehicle decals and apparel heat transfers.



For short-run production of labels and stickers

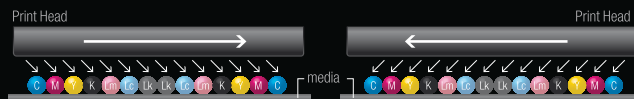


Decorating racing bicycle with decals

We rely on high productivity and outstanding image quality

High-speed performance for volume production, up to 21.6m²/h in production quality

The XR-640 features a dual inline print head configuration that is mirrored through seven colours to ensure consistent imaging with bi-directional printing. This highly advanced system prints up to 21.6m²/h for both banners and vinyl in production quality. Roland's Intelligent Pass Control[®] further enhances image quality by precisely controlling the placement, quantity and density of ink in order to dramatically reduce banding.



For accurate colour reproduction at all print speeds, the CMYK_{LmLcLkLkLcLm}KYMC configuration applies inks in the same order for both passes

RIP & PRINT MANAGEMENT SOFTWARE

Roland VersaWorks[®]

Roland VersaWorks[®] now features a PANTONE[®] library

The XR-640 comes with Roland VersaWorks[®] RIP and print management software. When using the PANTONE[®] library within VersaWorks, the PANTONE[®] spot colour used in the design file is automatically converted to a CMYK value and then closely matched to a colour within the gamut of the ECO-SOL MAX2 ink set. This simplified workflow reduces the amount of time required for colour matching and enables quick output of specific colours when working with a properly profiled media. You can also replace spot colours with any of the colours included in the Roland Colour System, VersaWorks' own library of more than 1,000 standard colours and 512 metallic shades.



PANTONE[®]



Roland Metallic Color System Library

Optional heater and blower

DU-640

The XR-640 features a built-in heating system, as well as an extended heater and blower* which are available as options to further accelerate the ink-drying process. These options also ensure peace of mind when working with white and metallic inks and when using the built-in take-up system during high-speed printing.

*The optional heater/blower units are required when printing with metallic and white inks





Specifications		
Printing/cutting method	Piezo ink-jet method/media-moving method	
Media	Width	315 to 1,625 mm (12.4 to 64 in.)
	Thickness	Maximum 1.0 mm (39 mil) with liner, for printing Maximum 0.4 mm (16 mil) with liner and 0.22 mm (9 mil) without liner, for cutting
	Roll outer diameter	Maximum 210 mm (8.3 in.)
	Roll weight	Max. 40 kg (88 lb.)
	Core diameter	76.2 mm (3 in.) or 50.8 mm (2 in.)
Printing/cutting width ¹	Max. 1,600 mm (63 in.)	
Ink cartridges	Types	440-cc cartridge (cyan, magenta, yellow, black, light cyan, light magenta, light black) 220-cc cartridge (metallic silver, white)
	Colours	Seven colours (cyan, magenta, yellow, black, light cyan, light magenta, light black) or, Eight colours (cyan, magenta, yellow, black, light cyan, light magenta, light black, white) or, Eight colours (cyan, magenta, yellow, black, light cyan, light magenta, light black, metallic silver) or, Eight colours (cyan, magenta, yellow, black, light cyan, light magenta, metallic silver, white)
Printing resolution (dots per inch)	Maximum 1,440 dpi	
Cutting speed	10 to 600 mm/s (Media-feed direction: 10 to 300 mm/s)	
Blade force	30 to 300 gf	
Cutting blade	Type: Roland CAMM-1 series compatible Blade offset: 0.000 to 1,500 mm (0 to 0.059 in.)	
Software resolution (when cutting)	0.025 mm/step	
Distance accuracy (when printing) ^{2,3,4}	Error of less than ±0.3 % of distance traveled, or ±0.3 mm, whichever is greater	
Distance accuracy (when cutting) ²	Error of less than ±0.4 % of distance traveled, or ±0.3 mm, whichever is greater When distance correction has been performed (when the setting for [CUTTING MENU] - [CALIBRATION]) has been made): Error of less than ±0.2% of distance traveled, or ±0.1 mm, whichever is greater	
Repeatability (when cutting) ^{2,3,4}	±0.1 mm or less	
Alignment accuracy for printing and cutting ^{2,3,4}	±0.5 mm or less	
Alignment accuracy for printing and cutting when reloading media ^{2,3,4}	Error of less than ±0.5 % of distance traveled, or ±3 mm, whichever is greater	
Dryer unit	Heating type, setting range for the preset temperature: 30 to 55°C (86 to 130°F)	
Ink-fixing device ²	Print heater / preheater, setting range for the preset temperature: 30 to 50°C (86 to 122°F)	
Connectivity	Ethernet (10BASE-T/100BASE-TX, automatic switching)	
Power-saving function	Automatic sleep feature	
Power requirements	AC 100 to 120 V ±10%, 12 A, 50/60 Hz or AC 220 to 240 V ±10%, 6.5 A, 50/60 Hz	
Power	During operation: Approx. 1,600 W Sleep mode: Approx. 47 W	
Acoustic noise level	During operation: 65 dB (A) or less During standby: 45 dB (A) or less	
Dimensions (with stand)/Weight (with stand)	2,948 (W) x 1,211 (D) x 1,260 (H) mm (116.1 (W) x 47.7 (D) x 49.6 (H) in.) / 205 kg (452 lb.)	
Environmental	Power on	Temperature: 15 to 32°C (59 to 90°F) (20°C [68°F] or more recommended), humidity: 35 to 80%RH (non-condensing)
	Power off	Temperature: 5 to 40°C (41 to 104°F), humidity: 20 to 80%RH (noncondensing)
Accessories	Exclusive stands, power cord, blade, blade holder, media clamps, media holder, replacement blade for separating knife, software RIP, User's Manual, etc.	

Ink		
Model	Description	
ECO-SOL MAX2	ESL4-4CY	Cyan, 440cc
	ESL4-4MG	Magenta, 440cc
	ESL4-4YE	Yellow, 440cc
	ESL4-4BK	Black, 440cc
	ESL4-4LC	Light cyan, 440cc
	ESL4-4LM	Light magenta, 440cc
	ESL4-4LK	Light black, 440cc
	ESL4-MT	Metallic silver, 220cc
	ESL4-WH	White, 220cc
	Cleaning cartridge	ESL4-CL
Blades	ZEC-U5025	For thick, reflective and fluorescent vinyl, as well as sign vinyl in general, 5pcs.
	ZEC-U5022	For sign vinyl in general, 2pcs.
Blade Holders	XD-CH2	Blade holder with blade extension adjuster, made of aluminium
	XD-CH3	Blade holder with blade extension adjuster, made of resin



¹The length of printing or cutting is subject to the limitations of the program. ²Media type: Media specified by Roland DG Corp. • Temperature: 25°C (77°F), humidity: 50% • Roll media must be loaded correctly. • Applicable when all pinch rollers available to the media width are used. • Side margins: 25 mm or more for both the left and right margins • Front margin: 35 mm or more • Excluding expansion/contraction of the media • Not assured when the print heater or dryer is used. • All correction or adjustment function of this machine has been made properly. ³• Print travel: 1 m ⁴• [PREFEED] menu item must be set to "ENABLE." Range for assured repetition accuracy • For media with a width exceeding 610 mm: Length 4,000 mm • For media with a width of 610 mm or less: Length 8,000 mm ⁵• Provided that media length is under 3,000 mm • Excludes the effects of slanted movement and of expansion and contraction of the media. ⁶• Data size: 1,000 mm in the media-feed direction, 1,600 mm in the carriage-movement direction. • No lamination • Automatic detection of crop marks at 4 points when media is reloaded. • During cutting, [PREFEED] menu item must be set to "ENABLE." • Excluding possible shift caused by expansion/contraction of the media and/or by reloading the media. ⁷ • Warm-up is required after power up. This may require 5 to 20 minutes, depending on the operating environment. • Depending on the ambient temperature and media width, the preset temperature may fail to be reached.

Roland VersaWorks System Requirements	
Operating system	Windows® 7 Professional or Ultimate (32/64-bit); Windows Vista® Business/Ultimate (32/64-bit); Windows® XP Professional Service Pack 2 or later (32/64-bit)
CPU	Core™2 Duo, 2.0 GHz or faster recommended
RAM	2 GB or more recommended
Video card and monitor	A resolution of 1,280 x 1,024 or more recommended
Free hard-disk space	40 GB or more recommended
Hard-disk file system	NTFS format
Optical drive	DVD-ROM drive

*Roland VersaWorks® is a 32-bit application, which runs on 64-bit Windows® with WoW64 (Windows 32-bit on Windows 64-bit).

Optional DU-640 heater and blower specifications		
Dryer unit	Heating type (with blower fan), setting range for the preset temperature: 30 to 55°C (86 to 130°F) ¹	
Power requirements ²	AC 100 to 120V ±10%, 5 A, 50/60 Hz or AC 220 to 240 V ±10%, 3 A, 50/60 Hz	
Power consumption	Approx. 650 W	
Weight	26 kg (57 lb.)	
Environmental	Power on	Temperature: 15 to 32°C (59 to 90°F)—(20°C (68°F) or more recommended), humidity: 35 to 80% (no condensation)
	Power off	Temperature: 5 to 40°C (41 to 104°F), humidity: 20 to 80% (no condensation)
Included items	Power cord, arms, bushing, cable clamps, stays, hexagonal wrench, bolts, washers, User's Manual	

¹ Warm-up is required after powerup. This may require 5 to 20 minutes, depending on the operating environment. Depending on the ambient temperature and media width, the preset temperature may fail to be reached. ² Be sure to connect the machine to an unshared electrical circuit. Be sure to verify the amperage of the circuit breaker or fuse used.

About Metallic Silver and White Inks

Due to the nature of white and silver inks, the pigment in these inks will settle in the cartridge and ink flow system, requiring you to shake the cartridge before each use. Outdoor durability is three years for CMYK inks, one year for white ink, and one to three years for metallic silver ink, depending on the media used. Roland strongly recommends lamination for both indoor and outdoor graphics to ensure the quality of metallic inks.

Roland DG products that feature this environmental label meet the company's criteria for environmental consciousness, a set of standards based on ISO 14021 self-declaration type II. For more information, please visit www.rolanddg.com.



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