

Frequently Asked Questions

Q. What is the key sales message for the XC-540MT?

A. The new SOLJET PRO III XC-540MT is the world's first inkjet printer/cutter designed around the new Metallic Silver ECO-SOL MAX ink. The revolutionary XC-540MT combines the robust functionality of the award-winning XC-540 with the visual impact of metallic silver ink. Metallic Silver ECO-SOL MAX ink combines with CMYK to create a stunning palette of metallic hues including silver, gold, bronze and other pearlescent colors. Roland Intelligent Pass Control assures the highest productivity while maintaining smooth gradations and flawless solid colors. With a maximum print speed of 441 sfph in CMYK mode, precise and easy-to-operate Print/Cut abilities, an advanced ink circulation system, and 2 year warranty, the XC-540MT stands alone as the leader in quality production of outdoor durable Print/Cut and banner graphics enhanced by the premium performance of metallic silver ink.

Q. What are some of the key features and benefits of the XC-540MT?

A. The new XC-540MT offers several key enhancements designed to support metallic silver printing, maximize image quality, and increase productivity and versatility for the most demanding print/cut applications.

1. *Metallic Silver ECO-SOL MAX ink.* This new metallic silver eco-solvent ink was developed specifically for the XC-540MT. When configured with CMYK+Metallic Silver+White, the XC-540MT can print stunning brilliant metallic silver accents as a spot color or a broad range of metallic colors by combining CMYK and Metallic Silver. The XC-540MT can alternatively be configured with CMYK+WW at installation if Metallic Silver is not required.
2. *Automatic Ink Circulation System.* This new patent pending automatic ink circulation system prevents the pigments in metallic silver and white inks from settling. The system requires no manual intervention, ensures efficient ink usage and substantially reduces waste for Metallic Silver and White inks – by up to 84% compared to a standard XC-540 with white ink.
3. *Roland Intelligent Pass Control.* This patent pending technology was originally developed by Roland software engineers for the XJ Series. Fully implemented in the XC-540MT, this system controls dot placement to create a masked pattern that ensures accuracy by filling in the smallest gaps between passes. The result is consistently smooth gradations and solid color fills with virtually no signs of banding across a wide range of media even at the highest print speeds.
4. *Roland VersaWorks 3.3 RIP software.* This powerful software-based RIP includes new features such as Metallic Silver ink support and the Roland Metallic Color Library. The Ink Estimator and Print Time Calculator functions provide valuable information for planning print jobs. Standard features include the Roland Color System for spot color matching, Variable Data Printing for customized job output, and the Max Impact preset for richer color contrast, outstanding image quality and maximum productivity.
5. *Great image quality at production speeds.* By using Roland Intelligent Pass Control in all modes, image quality is optimized, even in bi-directional printing.

6. *Fast print speeds across a wide range of coated and uncoated media:*

Banner (CMYK mode)	Resolution	Print Speed
Billboard	360 X 360 (1 pass)	441 sfph (41.0 sq m/hr)
High Speed (1)	540 X 360 (2 pass)	301 sfph (28 sq m/hr)
High Speed (2)	540 X 360 (3 pass)	207 sfph (19.2 sq m/hr)
Standard	360 X 720 (4 pass)	151 sfph (14.0 sq m/hr)
Standard	360 X 720 (5 pass)	126 sfph (11.7 sq m/hr)
High Quality	720 X 720 (8 pass)	75 sfph (7.0 sq m/hr)
High Quality	720 X 720 (9 pass)	70 sfph (6.5 sq m/hr)
Vinyl (CMYK mode)		
High Speed	540 X 360 (3 pass)	209 sfph (19.5 sq m/hr)
Standard	360 X 720 (4 pass)	151 sfph (14.0 sq m/hr)
Standard	360 X 720 (5 pass)	126 sfph (11.7 sq m/hr)
Standard	540 X 720 (6 pass)	100 sfph (9.3 sq m/hr)
Standard	540 X 720 (7 pass)	89 sfph (8.3 sq m/hr)
High Quality	720 X 720 (8 pass)	75 sfph (7.0 sq m/hr)
High Quality	720 X 720 (9 pass)	70 sfph (6.5 sq m/hr)
High Quality	720 X 1440 (9 pass)	58 sfph (5.4 sq m/hr)
Artistic	1440 X 1440 (17 pass)	30 sfph (2.8 sq m/hr)

Speeds may vary based on print mode and media profiles

High Quality mode	Resolution	Printing Speed		
		Color	Metallic	White
Vinyl or Banner				
CMYKMT (v) +PASS	720x1440 (10 pass)	17 sfph (1.6 sq m/hr)		-
Metallic Silver (v) +PASS	720x1440 (10 pass)	-	23 sfph (2.1 sq m/hr)	-
CMYK(v) +PASS	720x1440 (9 pass)	57 sfph (5.3 sq m/hr)	-	-

Speeds may vary based on print mode and media profiles

High Quality mode	Resolution	Printing Speed		
		Color	Metallic	White
Clear PET Film				
CMYKMT (v) +PASS	720x1440 (10 pass)	17 sfph (1.6 sq m/hr)		-
CMYKMT (v) onWhite +PASS	720x1440 (10 pass)	17 sfph (1.6 sq m/hr)		-
CMYKMT (v) underWhite +PASS	720x1440 (10 pass)	17 sfph (1.6 sq m/hr)		-
White->CMYKMT +PASSv2	720x1440 (16 pass)	3.2 sfph (0.3 sq m/hr)		
CMYKMT->White +PASSv2	720x1440 (16 pass)	3.2 sfph (0.3 sq m/hr)		
MetallicSilver (v) +PASS	720x1440 (10 pass)		23 sfph (2.1 sq m/hr)	-
CMYK(v) +PASS	720x1440 (9 pass)	57 sfph (5.3 sq m/hr)	-	-
White(v) W-PASS	720x1440 (9 pass)	-	-	39 sfph (3.6 q m/hr)

Speeds may vary based on print mode and media profiles

7. *Additional Dryer Unit comes standard.* The DU-540 blower/dryer unit improves dry times for high-speed, high-density printing and is especially useful for metallic silver and white ink printing.

8. *Adjustable head height levels.* Two levels are available – High (3.2 mm) and (Low 2.2 mm).
9. *The maximum media weight for the XC-540MT:* 66 lbs.
10. *The maximum media width:* 54” roll, printing/cutting width: 53”.

Release & Pricing:

Q. What is the list price of the new XC-540MT?

A. The list price for the new XC-540MT is \$39,995 including the DU-540 dryer and blower unit. The XC-540MT features ECO-SOL MAX inks and is available in the following ink configurations:

- 6-color CMYK+Mt+W setup with one ink slot for Metallic Silver and one ink slot for White ECO-SOL MAX ink
- 5-color CMYK+WW setup with two ink slots for White ink

Q. When will the new XC-540MT be available?

A. The SOLJET PRO III XC-540MT is being announced worldwide on October 26, 2009. It will begin shipping in November 2009. The XC-540MT is an addition to the SOLJET PRO III family and is not a replacement for the current XC-540 model.

General Information:

Q. What is the ink cost per square foot?

A. The average ink pricing is \$.18 per square foot in CMYK mode based on the ISO N5A Bicycle image.

Q. What is the cost per square foot for Metallic Silver ECO-SOL MAX ink?

A. For full coverage of the Metallic Silver ink, the price per square foot varies greatly depending on the ink limit specified in VersaWorks for the media selected. When printed as a solid silver fill, Metallic Silver ink is about \$1.97 per sqft on Glossy Vinyl and \$1.80 per sqft on Clear PET Film.

Rather than printing an entire image with just Metallic Silver, the best designs incorporate silver as accents. Bold silhouettes, geometric patterns and large text elements enable the Metallic Silver to stand out prominently. Because the amount of the Metallic Silver used varies greatly depending upon the design and application, there is truly no standard average running cost.

Testing different percentages of Metallic Silver as a spot color will help end users determine the best density and brilliance for the application at hand while reducing running costs. The 12 metallic colors in Roland VersaWorks were created by combining CMYK and Metallic Silver and generally use less silver ink than Metallic Silver as a spot color. Roland VersaWorks includes an ink consumption estimator that provides a guide to the total amount of ink used for individual print jobs. By RIPing the job in Roland VersaWorks before printing, the ink estimator can also show the amount of Metallic Silver ink a particular job will use if Metallic Silver print mode is selected in the Quality settings window.

Q. Is there a take-up system available for the XC-540MT?

A. The XC-540MT comes equipped with the TU-2 Take-Up System. The standard TU-2 system increases the XC-540MT's media handling capabilities and optimizes its production footprint for unattended printing.

Q. What are the warranty terms included with the purchase of a Roland XC-540MT printer?

A. As proof of unmatched reliability, the XC-540MT is backed by Roland's Two-Year Trouble-Free Warranty. The Two-Year Trouble-Free Warranty Program consists of two parts:

1. Roland DGA Standard Limited Warranty – 1 year
2. Free additional year of Limited Warranty coverage, provided two conditions are met:
 - End-user customer must register the printer within 60 days of purchase
 - Exclusive use of Roland ECO-SOL MAX inks throughout the entire two-year warranty period.

When any of those two conditions are not met, the printer is only eligible for the 1-year Roland DGA Standard Limited Warranty. Except in cases where non-Roland inks are used, even during the first year of Standard Limited Warranty, repairs made necessary by the use of non-Roland ink are excluded from coverage.

The Roland authorized Reseller responsible for selling the XC-540MT is also responsible for servicing it.

Q. Which version of VersaWorks is needed to run the XC-540MT?

The XC-540MT will ship with VersaWorks 3.3. This latest version supports the XC-540MT and printing with Metallic Silver and White ECO-SOL MAX inks.

Q. Do I need new profiles if I already have an XC-540?

A. Yes. New XC-540MT ICC profiles are required. They are included with Roland VersaWorks 3.3 and via Roland online update. The new profiles control the amount of Metallic Silver ink used across a wide range of media. Roland Intelligent Pass Control technology and VersaWorks 3.3 RIP software work together to enhance the image quality across all print modes.

Q. Do I need any additional heaters for my printer?

A. The XC-540MT is equipped with three heaters (Pre, Print, Post) and the additional DU-540 dryer/blower unit is included standard. In certain instances depending on the media, it is necessary to use the DU-540 dryer/blower unit to ensure proper ink adhesion and to assist with dry times. The DU-540 is also recommended to be ON when printing with the metallic silver and white ink configuration. Certain media may require up to 15 minutes of drying time in order for the metallic silver or white ink to dry fully. This is especially critical in print modes where CMYK is printed on top of white or metallic silver. Testing prior to beginning production is highly recommended.

Q. How many print heads are utilized for Metallic Silver or White ink?

A. The XC-540MT has six print heads. If the unit is configured with CMYK+Mt+W, there is one print head for Metallic Silver and one print head for White. In the CMYKWW configuration, there are two print heads

dedicated to white ink. This configuration allows a total of two cartridges to be assigned to white ink and two cartridges of each color for CMYK.

Q. What types of applications does Metallic Silver support?

A. Metallic inks are often used to achieve decorative effects on labels, brochures, posters and POP displays as well as to enhance the impact of packaging for cosmetics, wines, spirits and other luxury items. The brilliance of silver, gold, and other metallic colors adds a touch of exclusivity to a product and improves the value perception of the brand. CMYK and Metallic Silver together create a broad palette of metallic colors that add dramatic impact and a premium value to printed materials. The SOLJET PRO III XC-540MT featuring Metallic Silver ECO-SOL MAX ink produces an amazing array of metallic colors on vinyl, banner, paper and even canvas, generating new revenue opportunities.

Q. What types of applications does white ink support?

A. White ECO-SOL MAX ink can be used for a wide range of applications typically on clear or transparent substrates. It is ideal for packaging comps, window films, labels, signs, decals and point of purchase displays. However, white ink applications are not limited to transparent media. When using the XC-540MT with White ECO-SOL MAX ink it is possible to print white floods on certain opaque pigmented substrates and create stunning graphics.

Q. Can I change an XC-540MT to a dual White ink configuration once it's been set up with Metallic Silver+White?

A. No. Once an XC-540MT has been configured and set up with the inks installed in six-color mode CMYK+Mt+W, it cannot be converted to a CMYK+WW or CMYKLcLm printer. The same also applies for a unit that has been configured as a 5-color model with white ink. It cannot be switched to a 6-color configuration once the inks are installed.

Q. What type of maintenance does the XC-540MT printer/cutter require?

A. As with all Roland printers and printer/cutters, the XC-540MT is very low maintenance and designed to run continuously as a production machine. However, due to the unique characteristics of metallic silver and white ink, additional care is required. The pigments in Metallic silver and White tend to cause the ink to settle in the cartridges, making it necessary to agitate the metallic silver and white cartridges before installing in the printer and once a day before use.

The XC-540MT includes two firmware-controlled maintenance routines to ensure proper operation. When the printer is ON, the automatic maintenance message [**CIRCULATING INK**] will be displayed on the control panel every 12 hours since the last Ink Circulation. If the printer has been idle for 6 hours or more and receives a Metallic Silver or White print job, then it will perform an ink circulation cycle followed by an ink discharge.

A normal ink circulation cycle will utilize roughly 1.5 ml total of metallic silver and white ink. A normal ink discharge uses approximately 13 ml of metallic silver and white ink combined.

Under normal circumstances when the XC-540MT is printing mostly standard CMYK jobs for several days or weeks in a row, it will not initiate the ink discharge cycles until a Metallic Silver or White ink job is processed. The XC-540MT works as efficiently as possible to control ink costs.

The new XC-540MT incorporates an innovative Intelligent Ink Circulation System that greatly reduces the amount of ink discharged as waste and optimizes ink usage for continuous trouble-free operation.

Q. How does the new Intelligent Ink Circulation System on the XC-540MT work?

A. Consisting of a control system and additional pump for metallic silver and white ink lines, this innovative system circulates the metallic silver and white inks every 12 hours to prevent the settling of pigments in the lines. In addition, this system controls the discharge of metallic silver and white ink and minimizes waste by monitoring the metallic silver and white ink usage and the type of jobs that are printed. A normal ink circulation uses 1.5ml total for Metallic silver and white. A normal ink discharge uses approximately 13 ml of metallic silver and white ink combined.

An ink discharge cycle will not be executed unless all following conditions are met: (1) the printer receives a job with metallic silver or white data, (2) between 6 hours to 72 hours or longer has passed since the last ink discharge.

Elapsed Time	0 to 6 hours	6 to 72 hours	More than 72 hours
Total Ink Consumption	0 ml	13 ml	17ml

As a result, XC-540MT users will typically see a reduction of about 84% in white ink waste when compared with the XC-540W.