Entry model combining high added-value and high productivity

■System requirements

Product configuration

JFX200-2513 EX

USB2.0 / Ethernet Connection

< Provided as standard >
Sophisticated and user-friendly RIP software
RasterLink6 PLUS

PC for RIP

Recommended specifications for PC for RIP
OS: Windows 10* Pro 64bit
CPU: Intel® Core™ i5-4670K (3.4GHz)
Chip set: Intel® Z87 Express
Memory: 8GB
HDD: 500GB
Interface: Ethernet port USB1.1/2/0

Automation of printing processes

I Adaptable to "Mimaki Device Language (MDL)" to realize automation of printing processes

Using MDL commands allows you to automate printer control, job management, and workpiece conveying device operation from an external device

Start/End print / Error/Warning → Printer
Pre-/Post-processing device → Automatic conveying devices
Printer ↔ Ethernet connection ↔ PLC

*When using MDL commands, refer to the separate MDL commands manual included in the SDK.
*Please note that machine failures due to MDL commands may not be covered by our warranty.

■Specifications

Item		JFX200-2513 EX
Head		On-demand Piezo head (Array of 3 staggered print heads)
Print resolution		300dpi, 450dpi, 600dpi, 900dpi, 1,200dpi
Ink	Type/Color*(3)(4)(5)	Rigid UV curable ink LH-100
		Stretchable UV curable ink LUS-120/LUS-150/LUS-350
	Capacity*(1)	1L bottle / 250 ml bottle
	Ink circulation sysytem*(2)	White ink circulation by MCT (Mimaki Circulation Technology)
Maximum printable area (W x D)		2,500 x 1,300 mm (98.4x 51.2")
Media	Size (W x D)	2,500 x 1,300 mm (98.4x 51.2")
	Height	50 mm (2.0 ") or lower
	Weight	50kg/sqm (110.2 lb/sq. ft2) or less (non concentrated load)
Media Suction		Vacuum Suction + Foot Switch
Suction Areas		2 partition (X direction)
UV method		LED-UV
Interface		USB, Ethernet
Applicable standards		VCCI class A, CE mark, CB report, U.S. safety standard UL (UL62368-1), RoHS Directive, FCC Class A, Machinery directive, EAC, RCM
Power		Single-phase AC200 to 240V, 12A or lower
Power consumption		2.88 KVA or less
Operating environment Temperature	Temperature	15-30 degC (59 - 86 degF)
	Humidity	35 - 65%Rh
	Optimal Temperature	20 - 25 degC (68 - 77 degF)
	Temperature Gradient	Less than ± 10 degC/h (± 18F/h)
	Dust	Equivalent to an Office
Installatoin Dimensions(W x D x H)		4,440 x 2,250 x 1,250mm (173.2 x 88.5 x 49.2")
Assembled Dimensions (W x D x H)		4,440 x 2,450 x 1,250mm (173.2 x 96.4 x 49.2")
Weight		650kg (1,433 lb)

■Optional Accessories

Item	Item No.	Remarks
Ionizer kit	OPT-J0342	Static eliminator kit
Vacuum unit (φ3mm × 200mm) (φ 0.1 in. × 7.9 in.)	OPT-J0216	Three-phase, 200 V-240 V, 30 A, 3.4kW
Vacuum unit (φ1mm × 200mm) (φ 0.04 in. × 7.9 in.)	OPT-J0217	Single-phase, 200 V-240 V, 30 A, 1.9kW
Vacuum unit (φ3mm × 400mm) (φ0.1in. × 15.7 in.)	OPT-J0232	Three-phase, 380 V-480 V, 20 A, 3.4kW
Optional blower Connector Kit	OPT-J0348	Necessary kit for connecting an optional vacuum unit
4C+4White ink applying kit	OPT-J0499	Necessary kit for 4C +4White ink set set
Lift-Up Block	OPT-J0513	

*The optional accessories available with JFX200-2513 are also compatible with JFX200-2513 EX.
*OPT-J0393 PR-100/PR-200KIT is not necessary to use JFX200-2513 EX.
However when starting to use PR-200, it is necessary to replace the pump of the initial attachment.

⚠ Inks and substrates:
·As physical properties of ink (adhesion, weather resistance etc.) are different depending on media, please be sure to have a print test in advance.
·Depending on the application, primers, other surface treatment or surface protection such as lamination may be necessary.
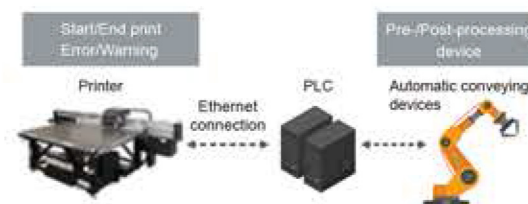
■Supplies

Item	Color	Item No.	Remarks
LH-100	Cyan	LH100-C-BA	
	Magenta	LH100-M-BA	
	Yellow	LH100-Y-BA	
	Black	LH100-K-BA	
	Light Cyan	LH100-LC-BA	
	Light Magenta	LH100-LM-BA	
	White	LH100-W-BA	
	Clear	LH100-CL-BA	
LUS-120	Cyan	LUS12-C-BA	
	Magenta	LUS12-M-BA	
	Yellow	LUS12-Y-BA	
	Black	LUS12-K-BA	
	White	LUS12-W-BA	
	Clear	LUS12-CL-BA	Ink package: 1L bottle/250 ml bottle*(1)
LUS-150	Cyan	LUS15-C-BA	
	Magenta	LUS15-M-BA	
	Yellow	LUS15-Y-BA	
	Black	LUS15-K-BA	
	Light Cyan	LUS15-LC-BA	
	Light Magenta	LUS15-LM-BA	
	White	LUS15-W-BA	
LUS-350 *(3)	Cyan	LUS35-C-BA	
	Magenta	LUS35-M-BA	
	Yellow	LUS35-Y-BA	
	Black	LUS35-K-BA	
	White	LUS35-W-BA	
	Clear	LUS35-CL-BA	
Primare*(4)	PR-200	PR200-Z-BA	

*1: LH-100, LUS-120 and PR-200 come in both 250ml and 1L bottles. *2: MCT works only with white ink.
*3: The LUS-350 will be applied later. *4: The PR-200 is not compatible with LUS-350. *5: The LUS-350 will be applied later.
* Stretchability of flexible ink may vary depending on materials, please have a prior test print.
* LH-100, LUS-120 and LUS-150 are GREENGUARD Gold certification ink.

About Ethernet
*Please use Category 6 (CAT6) network cables. *Cannot be connected through the router.
*When printing from ethernet, place the printer and output PC on the same network.
*When using a switching hub, a 1000BASE-T compatible hub is necessary.
*Although up to 4 printers can be registered with RasterLink6Plus, printing may stop depending on the network environment.

⚠ Safety notice:
This product is equipped with UV irradiation equipment.
Please pay attention to the following notes in order to use safely.
·Do not look directly into the UV light source nor place your hand, or expose your skin directly to the UV light source.
·Depending upon print mode, some VOC emittance from printed parts not yet cured and hardened may occur.
·In addition, please be sure to read and follow the instructions and guidelines of the manual carefully.

Feel the texture!

Semi-stereoscopic 2.5D printing increases utility!

LED UV   **Mimaki** Green Technology   GREENGUARD

JFX200-2513 EX

The JFX200-2513 EX maximizes the productivity and user-friendliness of the JFX200-2513, the industry's best-selling UV-LED curing flatbed inkjet printer, and enables high value-added printing.

1. Semi-stereoscopic 2.5D printing made easy! High value-added printing with "2.5D Texture Print" in "RasterLink6Plus"!

Stereoscopic appeal with 2.5D printing

A newly developed function, "2.5D Texture Print" in Mimaki's original RIP, "RasterLink6Plus" allows you to easily create multi-layered gradation data.

The "Emboss Print", one of Mimaki's printing solutions, "Surface Imaging" makes a surface look bumpy with multi-layered UV ink printing, which requires a manual preparation of step-wise data for each layer to create smoother expression. However, "JFX200-2513EX" allows you to easily create 2.5D print data of different layer with steps, simply by using "RasterLink6Plus" (Standard accessory) and Illustrator/Photoshop.

Expression of elevated surface with layered ink

When stacking layers of the same size
Only one piece of data is needed but smoothness cannot be achieved.

When stacking stepped layers
This enables smooth expression, but data is needed for each layer.

You can create data using Photoshop/Illustrator and RasterLink6 Plus

Simple creation of smooth-stereoscopic 2.5D prints is available with the JFX200-2513 EX to easily show the bumpy surface like woodgrain of interior material, elevated ink of oil-paintings and letters for an impressive look for signage. Not only coloring but also adding smooth print texture can deliver added value.

2. Higher-grade productivity and doubled White + Color simultaneous print speed! The printer allows you to respond to demand for short-term delivery.

JFX200-2513 EX prints two times as fast as JFX200-2513 in White + Color simultaneous printing. The newly added Draft mode (300x300HQ 4P Bi Normal) can deliver print speeds up to 35m2/h (376.7 ft2/h) in 4-color + White simultaneous printing.

4-color + White simultaneous printing speed comparison

The print speed will be doubled while printing at the same resolution. Applying the spot color set will alleviate the concern of the disadvantages of low speed.

JFX200-2513 4C + Spot color (2Layer)

Unit: m²/h (ft²/h)

Mode	Speed
High Speed 300x450HQ,12P,Bi,Nor	12.5 (134.5)
Production 600x600,16P,Bi,Hi	9.0 (96.9)
Standard 600x900,24P,Bi,Hi	6.2 (66.7)
High Quality 1200x1200,32P,Uni,Hi	1.7 (18.3)

JFX200-2513 EX 4C + Spot color (2Layer)

Mode	Speed
Draft 300x300HQ,4P,Bi,Nor	35.0 (376.7)
High Speed 300x450HQ,6P,Bi,Nor	25.0 (269.1)
Production 600x600,8P,Bi,Hi	18.0 (193.8)
Standard 600x900,12P,Bi,Hi	12.5 (134.5)
High Quality 1200x1200,16P,Uni,Hi	3.4 (36.6)

*Time taken for setting materials and the printer's operating time before or after printing are not considered.

You can choose the most suitable ink depending on your material and application.

[6C+Cl+W]
M K C Y Lm Lc Cl W

The color set with Light colors and Clear enables to print high-quality images without graininess.
Supported ink types: LH-100 / LUS-150

[4C+Cl+W]
M K C Y Cl Cl W W

By adding clear ink, gloss finish can be applied on the print surface, and by printing multiple layers of ink, multi-layered finish for stereoscopic effects can be applied.
Supported ink types: LH-100 / LUS-120 / LUS-150 / LUS-350

[4C+Cl+Pr+W]
M K C Y Pr Cl W W

By adding primer ink, the adhesion of inks and materials is improved.
Supported ink types: LH-100 / LUS-120

[4C+4W]
M K C Y W W W W

As all the nozzles of one head are allocated to the White color, MAPS for White is effective from draft mode, which can create more beautiful white printing.
Supported ink types: LH-100 / LUS-150 / LUS-120

Please use OPT-J0499(4C+4Wthie ink applying kit) for [4C+4W] printing.

Type	Hard UV ink	Flexible UV ink		
Product	LH-100	LUS-120	LUS-150	LUS-350
Features	The LH-100 ink has a high scratch/chemical resistance and an accurate color reproducibility. The ink is suitable for rigid materials.	The LUS-120 ink has 170% stretchability after curing. Its ink film is very flexible and will not crack during post print process. This ink is compatible with a wide range of materials and has a low degree of tackiness.	The LUS-150 ink has 150% stretchability after curing and will not crack during post print process. The ink restores its rigidity after being cooled, maintaining its molded shape when heated and high durability.	After curing, the ink can stretch up to 350% when heated to between approx. 120 and 200℃. The ink features its flexibility being cooled.

3. Suitable for large format sign graphics, interior/decoration and fine arts, seeking quality

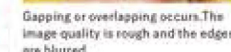Three image control technologies to realize high quality

1. Waveform control

By discharging spherical ink droplets directly, depositing of droplets and overlapping between dots is reduced, achieving a sharp print quality with low grain.

< Non-spherical discharge >
Gapping or overlapping occurs. The image quality is rough and the edges are blurred.

< Discharged in a nearly true spherical state >
High precision landing is possible. Sharp finish with little grain.
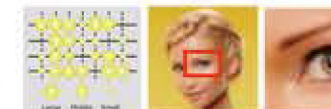
2. Variable dots

Three different ink dot sizes are used in printing to enable high-quality prints with reduced graininess.

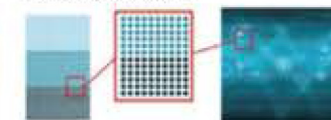< Fixed Dot Image >

< Variable Dot Image >

Dots are combined including the minimum size of 5pl to enable grainless, smooth color printing.
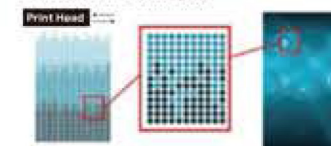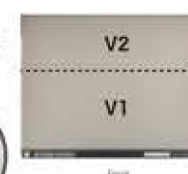
3. MAPS (Mimaki Advanced Pass System)

Banding (horizontal stripes), uneven color, or glossy streak can be reduced to produce smooth prints by printing pass boundaries fading in gradation.

< Without MAPS (Image) >

< With MAPS (Image) >

Based on printing conditions such as media/ink type and resolution, the most suitable gradation pattern is automatically selected and printed.

4. Usability achieved based on Mimaki's long time experience UV flatbed printers

As a pioneer of UV flatbed printers, Mimaki knows everything about ease of use from its long experience. We provide the design that is simple to use and reduces workload, plus a preventive safety function to avoid trouble during printing.

Table size (1,300x2,500mm)

Printing is possible for 4'×8' (1,220mm×2,440mm) panel boards that are commonly used in the marketplace. This table size is ideal for both easy installation and excellent user-friendliness.

4'×8' boards (1,220×2,440mm)
1,300mm
2,500mm

Foot switch for vacuum control

Two separate partitions in the X-direction of the vacuum area can be adjusted depending on the media size you use, and newly added foot switch can be used to turn ON/OFF in addition to the control panel.

V2
V1
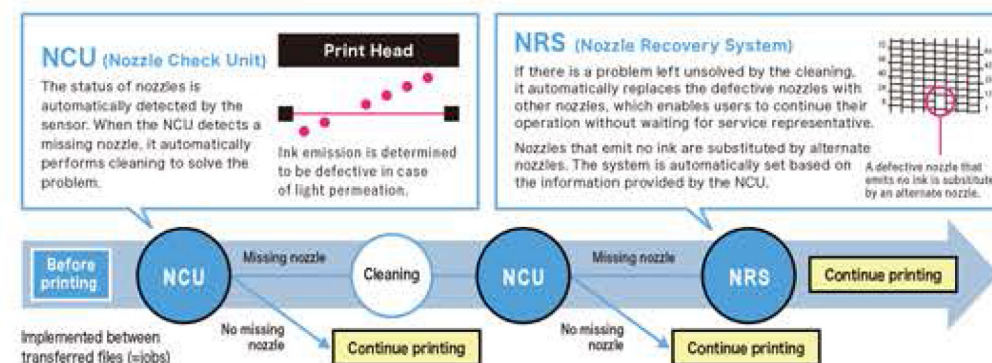Divided into 2 in the X direction
Front

With Ethernet support

In addition to the conventional USB connection, Ethernet connection is now available. Setup is easy; just add cables to the existing office network environment.

Auto maintenance function to shorten downtime
The NCU is newly mounted!

NCU (Nozzle Check Unit)
The status of nozzles is automatically detected by the sensor. When the NCU detects a missing nozzle, it automatically performs cleaning to solve the problem.

Print Head
Ink emission is determined to be defective in case of light permeation.

NRS (Nozzle Recovery System)
If there is a problem left unsolved by the cleaning, it automatically replaces the defective nozzles with other nozzles, which enables users to continue their operation without waiting for service representative.

Nozzles that emit no ink are substituted by alternate nozzles. The system is automatically set based on the information provided by the NCU.

A defective nozzle that emits no ink is substituted by an alternate nozzle.

MCT (Mimaki Circulation Technology)
The JFX200-2513 EX has an ink circulation mechanism in its ink tank and ink path. It circulates white ink periodically to prevent nozzle trouble due to deposited ink pigments and to stabilize printing performance.

Conventional White Ink Line
White ink
Head

Ink Line With MCT
White ink
Circulation
Pump
Tank
Head

Before printing
Implemented between transferred files (=jobs)
NCU — Missing nozzle — Cleaning — NCU — Missing nozzle — NRS — Continue printing
No missing nozzle — Continue printing
No missing nozzle — Continue printing

Links with external stop interface allow users to meet safety standards that are different by factory

Other than the standard emergency stop switch, customers can also have the printer work with safety measures that suit their environment. The product can support various safety standards depending on the customer, including safety light curtain and safety mat.

SAFETY

More environment-friendly business model

Mimaki Green Technology

Mimaki UV inks (LH-100, LUS-120 and LUS-150) obtain certification for GREENGUARD GOLD. The "GREENGUARD Gold certification" ensures that products are acceptable for use even in environments such as schools and medical facilities based on the most strict global standard of chemical substance diffusion. The GREENGUARD Gold-certified inks consider environmental impacts given after printing.

GREENGUARD