

*JFX500-2131*



**Ultra-high speed UV LED printer...**



SIGN &  
GRAPHICS



INDUSTRIAL  
PRODUCTS



eco

**Mimaki**

The world imagines... Mimaki delivers





# Ultra-high speed, high precision flatbed UV LED printer

Setting new standards in Grand Format UV Flatbed printing... The new JFX 500-2131 establishes new performance benchmarks in the sector in terms of speed, flexibility and environmental sustainability. With speeds of up to 60 m<sup>2</sup>/h the new machine is 2.5 times faster than previous JFX printers from Mimaki and will revolutionise the world of sign and graphics and wide format display with the outstanding capability to print down to 2 point text with stunning clarity.

## ENGINEERING EXCELLENCE AND CREATIVE INNOVATION

Founded in Japan in 1975, Mimaki Engineering has steadily grown by reputation and influence into a global company with large operational bases in Asia and the Pacific, United States and Europe.

Renowned for award-winning performance, peerless build quality and innovative technology, Mimaki has established itself as a leading manufacturer of wide-format inkjet printers and cutting machines for the sign and graphics, textile and apparel and industrial markets. In addition, Mimaki also provides a comprehensive range of supporting products; hardware, software and associated consumable items, such as inks and cutting blades.

From outdoor signage and billboards to interior decoration and furnishing, from packaging and labels to promotional gifts and apparel, Mimaki is committed to developing technology that sets new industry standards, producing machines and products that turn the imagination of our customers into breath-taking reality.

## ... Mimaki delivers

## JFX 500-2131 delivers ...

- Amazing print speeds up to 60 m<sup>2</sup>/h with CMYK and 45 m<sup>2</sup>/h with white ink printing
- Maximum print size of 2.1 x 3.1 m
- Intelligent Microstepping System (IMS) for accurate prints, even 2 pt characters can be legibly printed
- Variable dot printing with a minimum size of 4 picolitre
- Mimaki Advance Pass System reduces bandings
- Mimaki Circulation Technology prevents pigment sedimentation of white ink
- Reliable nozzle recovery function
- Vacuum unit and high performance Rasterlink RIP software included as standard

**UV LED CURABLE**

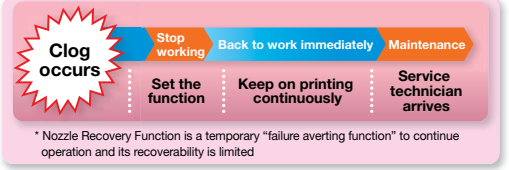
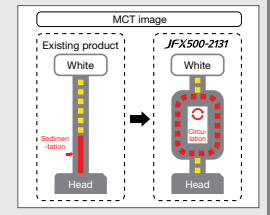
- 60 m<sup>2</sup>/h MAX. PRINT SPEED
- 2100 mm x 3100 mm MAX. PRINT AREA
- 1200dpi MAX. RESOLUTION
- 50 mm MAX. MEDIA THICKNESS
- FLEXIBLE/HARD INK OPTIONS
- 4 COLOURS + WHITE + CLEAR + PRIMER

## JFX500-2131



### Easy Maintenance

- **Mimaki Circulation Technology;** prevents pigment sedimentation of white ink and provides stable ink-jetting. Thus, it also contributes to reduction of ink waste, supporting environmentally friendly applications.
- **Nozzle recovery function;** even when nozzle washing has no effect on troubled nozzle, the print image quality can be recovered temporarily. \*Nozzle Recovery Function is a temporary failure averting function and its recoverability is limited.



**Create ...** Large format signage & graphics where the highest quality image definition is the main priority, including exhibition graphics, interior decor panels, creative displays and much more...

## KEY TECHNICAL FEATURES ...

### High Speed Print

Equipped with the new developed print head (6 print heads with 3 staggered configuration), the JFX500-2131 achieves print speed up to 60 sqm/h.

Resolution	Color	Print Speed (m <sup>2</sup> /h)
600x600dpi, 4p, Bi/Hi	C, M, Y, K + W	60m <sup>2</sup> /h
600x600dpi, 8p, Bi/Hi	C, M, Y, K + W	45m <sup>2</sup> /h
600x600dpi, 8p, Bi/Hi	C, M, Y, K + W	35m <sup>2</sup> /h
600x600dpi, 8p, Bi/Hi	C, M, Y, K + W	25m <sup>2</sup> /h
600x900dpi, 12p, Bi/Hi	C, M, Y, K + W	24m <sup>2</sup> /h
600x900dpi, 12p, Bi/Hi	C, M, Y, K + W	17m <sup>2</sup> /h

Print speed may vary depending on the substrate.

### Multiple ink options

The newly formulated LUS-150 ink offers improved curing times resulting in a less tactile sticky feeling and it is flexible up to 150%. The JFX500-2131 also operates with Mimaki's LH-100 inks.

Type	4-colour High Speed Ink LUS-150 (NEW)	4-colour Vivid Ink LH-100
Color	C, M, Y, K + W	C, M, Y, K + W
Features	Newly developed UV ink offers a 150% flexibility while providing a lower operational costs during high-speed UV printing.	Hard UV ink with higher scratch and chemical resistance as well as colour reproduction.
Flexibility	Good	None

\*1 LUS = LED UV Stretchable Ink  
\*2 Ink flexibility of LUS-150 may vary according to the substrate, please test your substrate in advance.  
\*3 JFX500-2131 may not take full advantage of its print speed with LH-100.

### Mimaki Advanced Pass Systems (MAPS)

This facility applies a gradational mask pattern to the printing process ensuring that UV curing is performed more gradually, thereby reducing 'banding' \*when using MAPS - print speed is reduced by approx. 10%

Normal pattern

MAPS

### Easy operations

#### Layout pins eliminate alignment problems

The machine is equipped with pins and a scale to ensure accurate substrate alignment on the flatbed. By fixing the substrate to the pins, checking the placement against the scale and then editing the design data or printer setting accordingly, all alignment problems are eliminated.

Without layout pins

Outcome is spoiled due to inclination

With layout pins

Fix with pins to eliminate inclination

Direct printing without misalignment

# Sophisticated RIP software maximizes the performance of JFX 500-2131



## Additional useful functions

### User friendly RIP key features

- Easy to follow icons enable intuitive and user-friendly operation
- Related settings feature in one window to simplify RIP operations, with 'Register as Favourite' option available for regularly used layouts
- Printing progress can be monitored on the main screen

#### 1. Three ink layers in one pass print function

A three-layer print of colour, white and colour can be performed at one time. Printing a base layer 'underlay' of white ink allows perfect reproduction of beautiful natural colours when printing on transparent media. Window graphics can be printed with high precision and no multi-pass colour registration shift.

#### 2. Layout function

Three ink layers or copied images are freely laid out if print conditions remain the same. This function reduces the media waste by efficient layout.

#### 3. Multi-profile, simultaneous printing function

Several profiles that match conditions can be simultaneously printed. This is particularly useful for test output when the profile for a target image quality or colour requires multiple 'profile' test prints.

\*To be supported by RasterLink6 program update.

**Supports Web update function.** Supports the Web update function that has been well-received in RasterLinkPro5. Program update and profile download can be easily performed via internet.

## Specifications

Item	JFX500-2131	
Head	On-demand Piezo head (6 printheads with 3 staggered configuration)	
Print resolution	600 X 600 dpi, 600 X 900 dpi, 900 X 1,200 dpi, 1,200 X 1,200 dpi	
Ink	Type	UV curable ink : LUS-150 (C, M, Y, K, W) (NEW) UV curable ink : LH-100 (C, M, Y, K, W)
	Supply system	Supplied by 2L Ink Station
	Ink combination	2 x 4-colour, 4-colour + White / Clear / Inkjet Primer
	Ink circulation (*1)	White ink circulation by MCT (Mimaki Circulation Technology)
	Ink degassing module	Equipped with MDM (Mimaki Degassing Module)
Maximum print size (W X D)		2,100 X 3,100 mm (82.7 X 122.0")
Media	Size (W X D)	2,100 X 3,100 mm (82.7 X 122.0")
	Height	Max. 50 mm (2.0")
	Weight	Less than 50 kg (110.2 lbs.) / m <sup>2</sup>
Media table	Air suction by vacuum	
Print accuracy	Absolute accuracy	± 0.3 mm (0.01") or ± 0.3% from specified print distance
	Repeatability	± 0.2 mm (0.01") or ± 0.1% from specified print distance
UV unit	Equipped with UV LED (Light Emitting Diodes)	
Interface		USB2.0
	Applicable standard	VCCI class A, CE Marking, CB Report, UL, RoHS Directive
Power specifications	AC 200 - 240 V, 50/60 Hz	
Power consumption	Less than 2.4 kVA	
Operational environment	Temperature	15 - 30 °C (59 - 86 °F)
	Humidity	35 - 65 %Rh
	Temperature accuracy	18 - 25 °C (64.4 - 77 °F)
	Temperature gradient	Less than ± 10 °C/h (18 °F)
	Dust	Equivalent to normal office level
Dimensions (W X D X H) (*3)	4,200 X 4,710 X 1,510 mm (165.4 X 185.4 X 59.4")	
Weight (*3)	1,400 kg (3,086.4 lbs.)	

\*1 MCT works only with white ink.

\*2 Reference value. There is no guarantee as to the lifetime.

\*3 Ink Station is not included in the dimensions and the weight.

\*4 RasterLink6 and the standard vacuum unit are bundled with the JFX500-2131.

### ⚠ Inks and substrates:

- Please note that properties and adhesion, weather resistance etc. of ink and substrates can vary. Therefore please test materials before printing.
- Some substrates require primer before printing. Please test materials beforehand or ask your sales representative.

### ⚠ Safety notice:

You are dealing with UV light sources that may harm your health.

Please follow below guidelines strictly:

- 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, there might occur some VOC emittance from printed parts not yet cured and hardened
- In addition, please read the instructions and guidelines of the manual carefully and follow those.

• Some of the samples in this folder are artificial renderings • Specifications, design and dimensions stated in this folder may be subject to change without notice (for technical improvements, etc.)  
• The corporate and merchandise names written on this folder are the trademark of the respective corporations • Inkjet printers print using extreme fine dots, so colours may vary after replacement of the printing heads, also note that if using multiple printer units, colours could vary slightly from one unit to other unit due to slight individual differences • Compositor's errors reserved

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## Supplies

Item	Colour	Item No.	Remarks
LUS-150 (NEW)	Cyan	TBD	Ink bottle
	Magenta		
	Yellow		
	Black		
LH-100	White	TBD	
	Cyan		
	Magenta		
	Yellow		
	Black		
	White		

- Every UV ink is sold by the liter. Please put it into the Ink Station.
- As ink flexibility of LUS-150 may vary according to the substrate, please test your substrate in advance.
- JFX500-2131 may not take full advantage of its print speed with LH-100.

## Options

Item	Item No.	Remarks
Ionizer kit	TBD	For electrostatic removal
Vacuum unit (3 φ . 200)	OPT-J0216	3-phase : 200 . 240 V, 30 A, 3.4 kW
Vacuum unit (1 φ . 200)	OPT-J0217	1-phase : 200 . 240 V, 30 A, 1.9 kW
Vacuum unit (3 φ . 400)	OPT-J0232	3-phase : 380 . 480 V, 20 A, 3.4 kW
IF unit for external vacuum	OPT-J0202	

- Additional power source is required in order to use the vacuum unit.
- Each vacuum unit includes IF units for external vacuum (OPT-J0202).