Product Guide

JFX500-2131

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Features

- **High productivity**
  - New print head technology and high speed curable UV-LED inks
  - Printing speeds:
    - CMYK configuration: max. 60m^2/h
    - CMYK+W configuration: max. 45m^2/h

- **High image quality**
  - Industrial print head and advanced LED-UV curing technology to produce exceptionally high image quality
  - Less lamp heat eliminates media deformation
  - High image quality control, including MAPS2 and variable dot technology
  - Beautiful clear finish productions with less dust attachments
  - Able to print 2pt font sizes

- **Eco-friendly production**
  - Long life LED-UV curing system
  - Low power consumption

Features

- **User friendly and stable printing**
  - Equipped with several new functions
    - Layout pins
    - Degassing system
    - White ink circulation system
- **Multiple ink types**
  - LH-100, hard ink type
  - LUS-120, flexible ink type
  - LUS-150, flexible ink type
  - LUS-200, flexible ink type
- **Ink supply system**
  - Large volume 2 liter ink tanks

Configuration

Standard configuration

JFX500-2131

Including vacuum unit

&

RasterLink6

Output / Status

USB 2.0, 5m (15ft) cable is recommended

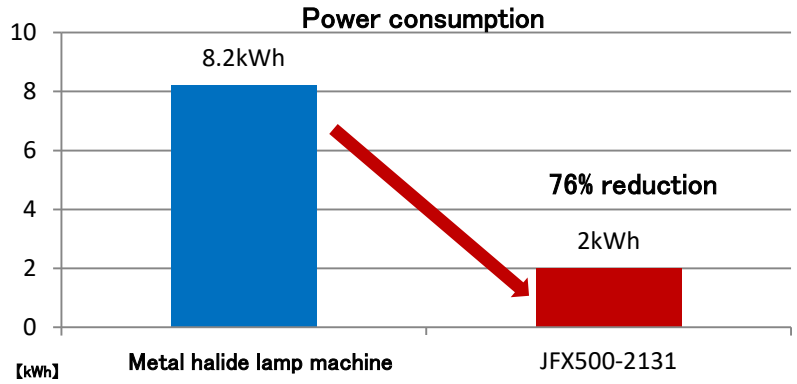
Minimum recommended PC configuration

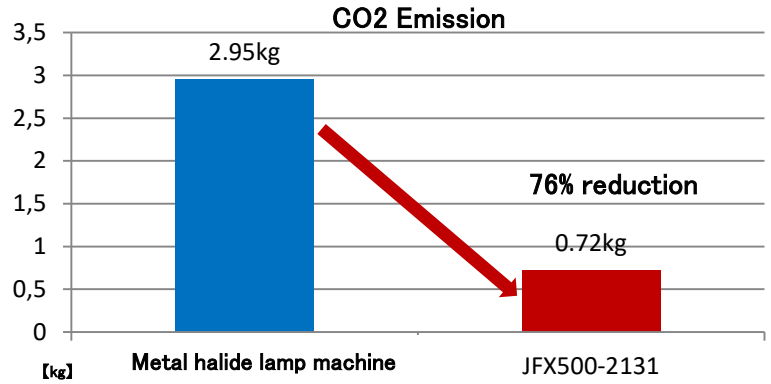
CPU:	Intel® Core™ i5-4670K (3.4GHz)
Memory:	8GB
HDD:	500GB
I/F :	USB2.0, 4 ports or more
ODD:	DVD-ROM
Compatible OS :	Windows Vista(32/64bit)
	Windows 7(32/64bit)
	Windows 8(32/64bit)
	Windows 10(32/64bit)
Monitor:	1366x768

Works with: PS,EPS,TIFF,BMP,JPEG, etc.

Eco-Friendly

Reduction of power consumption and CO2 emission





e.g. The power consumption and CO2 emission when printing on 20 boards (the size of 1,220mm x 2,440mm).
* The data above is the comparison with Mimaki's conventional printers. The figures may differ depending on the compared machine.

Reduction of heat impact

- With high temperature metal halide lamps, the media can reach temperatures of 70°C, this can cause media deformation and head crashes
- With low temperature LED-UV lamps, the temperature reaches up to only 30°C, this enables it to print on cheaper and heat sensitive media

Less Down-time

- Long-life LED-UV lamps need less maintenance
  - The lifetime of LED-UV is more than 5000 hours
  - The lifetime of metal halide lamp is approx. 700-1000 hours

Eco-Friendly

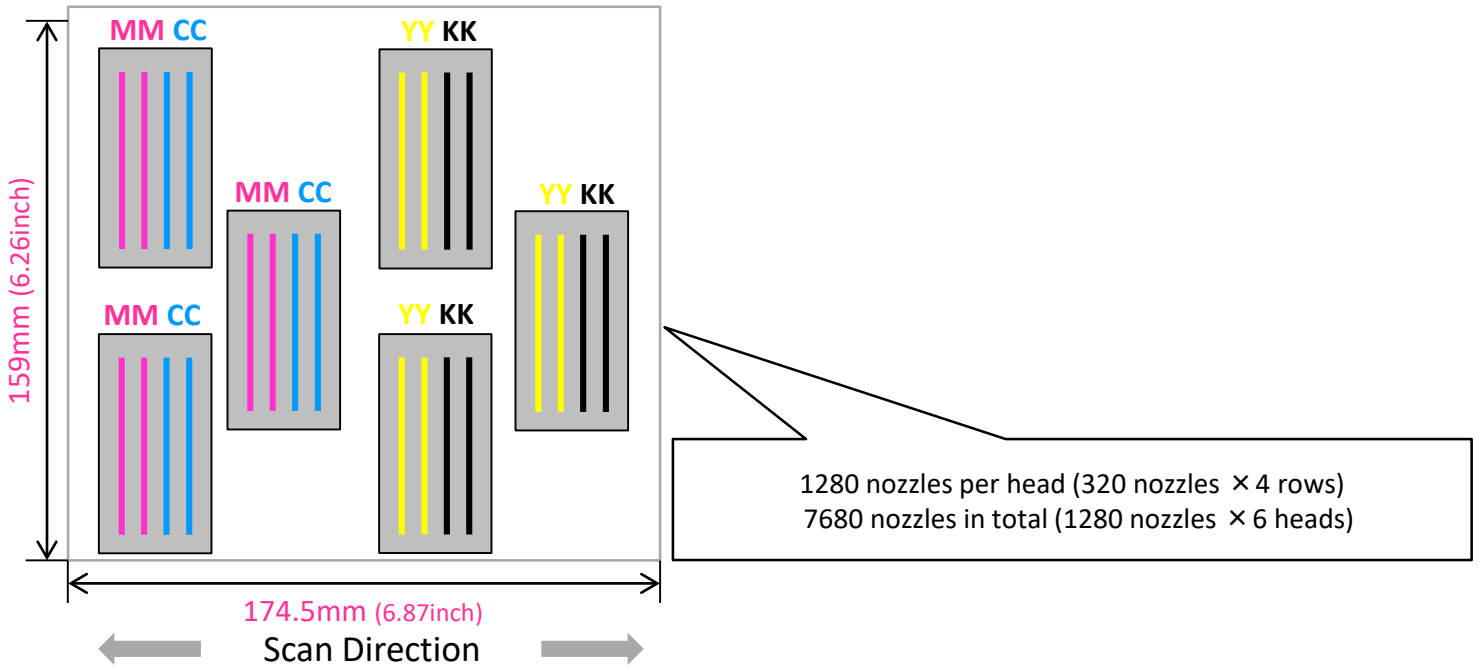
Comparison LED-UV vs metal halide lamp

	LED-UV lamp		Metal halide lamp
Uptime/Downtime	Immediately	⟷	Uptime / Downtime +/- 5 minutes
Temperature	Room temperature	⟷	Maximum temperature 70°C
Life time	More than 5,000 hours	⟷	About 700 hours
Electric power	2kWh	⟷	8,2kWh
	The power consumption when printing on 20 boards, the size of 1220mm x 2440 (4" x 8")		
CO2 emission	0,72kg	⟷	2,95kg
Ozone	None	⟷	Generates
			Controlled air is required to cool down

High Speed Printing

JFX500-2131

- Newly developed print heads
- 6 print heads in a 3-row staggered configuration
- Maximum 60m²/h (LUS150, CMYK)
  Maximum 45m²/h (LUS150, CMYK+W)



*The print speed using solid LH-100 is different from flexible inks because the curing property is different.

Available Ink Sets

Ink type	Ink set								Remarks			
									Clear	Primer		
										PR-100	PR-200	Remarks
LH-100 LUS-150	M	M	C	C	Y	Y	K	K				
	M	M	C	C	Y	K	W	W				
	M	M	C	C	Y	K	W	Cl	LH-100			
	M	M	C	C	Y	K	W	Pr		●	●	*Requires PR-100/200KIT
	M	M	C	C	Y	K	Cl	Pr	LH-100	●	●	*Requires PR-100/200KIT
LUS-120	M	M	C	C	Y	Y	K	K				
	M	M	C	C	Y	K	W	W				
	M	M	C	C	Y	K	W	Cl	LUS-120			
LUS-200	M	K	C	Y	M	C	W	W				

Printing Speed - 1

4C(1 Layer) M C Y K

Print mode	Resolution	Print speed (m²/h)	Production per hour (1200 x 2400mm)
Draft	300 × 450 HQ/3P/Uni/Nor	60	20 Boards
High Speed	300 × 450 HQ/6P/Bi/Nor	47,1	15 Boards
Production	600 × 600 8P/Bi/Hi	37,1	12 Boards
Standard *1	600 × 900 12P/Bi/Hi	26	8 boards
Quality *1	1200 × 1200 16P/Uni/Nor	10,5	3 Boards

*1 Recommended condition for LH100

4C(1Layer) M C Y K W / M C Y K W Cl / M C Y K Cl Pr / M C Y K W Pr

Print mode	Resolution	Print speed (m²/h)	Production per hour (1200 x 2400mm)
Draft	300 × 450 HQ/3P/Uni/Nor	45	15 Boards
High Speed	300 × 450 HQ/6P/Bi/Nor	33,8	11 Boards
Production	600 × 600 8P/Bi/Hi	26,2	8 Boards
Standard *1	600 × 900 12P/Bi/Hi	18,1	6 Boards
Quality *1	1200 × 1200 16P/Uni/Nor	7,1	2 Boards

*1 Recommended condition for LH100

Printing Speed - 2

4C+Cl(2Layer)

Print mode	Resolution	Print speed（m²/h）	Production per hour (1200 x 2400mm)
High Speed	600 × 600 8P/Bi/Hi	13,1	4 Boards
Production* 1	600 × 900 12P/Bi/Hi	9	3 Boards
Standard* 1	600 × 900 24P/Bi/Hi	4,7	1 Board
Quality* 1	1200 × 1200 16P/Uni/Nor	3,5	1 Board
High Quality* 1	1200 × 1200 32P/Bi/Nor	2,9	0,9 Board

*1 **Recommended condition for LH100**

Printing Speed - 3

4C+Pr/4C+W(2Layer),
Special color only(1Layer)

Print mode	Resolution	Print speed（m²/h）	Production per hour (1200 x 2400mm)
High Speed	600 × 600 8P/Bi/Hi	26,2	8 Boards
Production* 1	600 × 900 12P/Bi/Hi	18,1	6 Boards
Standard* 1	600 × 900 24P/Bi/Hi	9,4	3 Boards
Quality* 1	1200 × 1200 16P/Uni/Nor	7,1	2 Boards
High Quality* 1	1200 × 1200 32P/Bi/Nor	5,9	1 Board

*1 **Recommended condition for LH100**

UV Modes

- **Changing profile set value**
  - By selecting “Profile Setting” on the UV mode screen, the machine prints in the recommended UV irradiation.
  - The UV irradiation set value is adjustable between 70% and 130%.

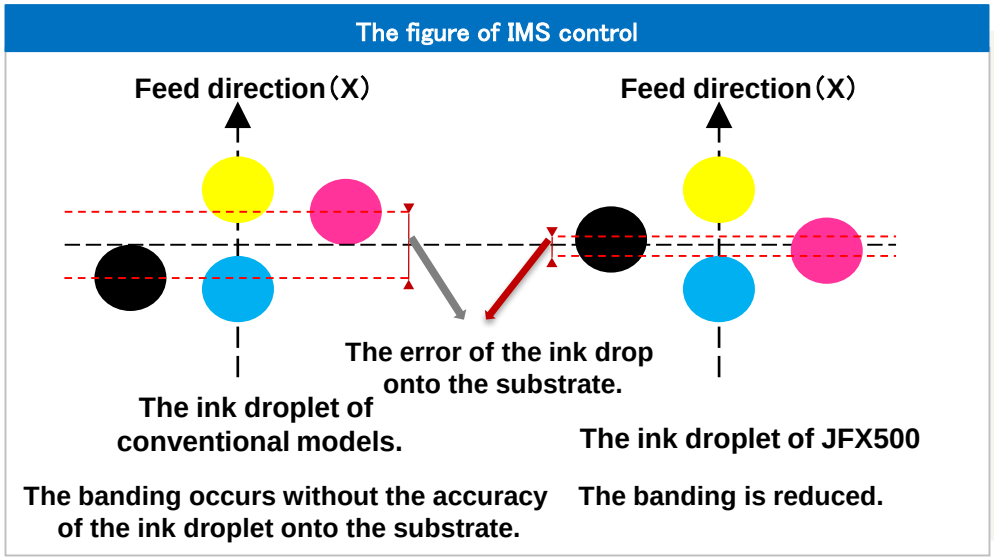
- **By setting the value higher**
  - UV irradiation becomes stronger
  - This may lead to cure ink too much which could cause ink cracks when bending the media

- **By setting the value lower**
  - The UV irradiation becomes weaker and the ink may not be cured enough

- **Warning is displayed**
  - A warning message appears when adjusting UV irradiation or changing conditions such as Pass, Print direction, Scan speed and Overprint

High Quality Printing

- **IMS Control** (Intelligent Micro stepping System)
  - Significant improvement of the drop placement on the substrate
  - Using two highly accurate linear scales along the feed direction
  - The minimum drop size of 7pl enables a readable font size of 2pt



The picture of a printed 2pt font size

High Quality Printing

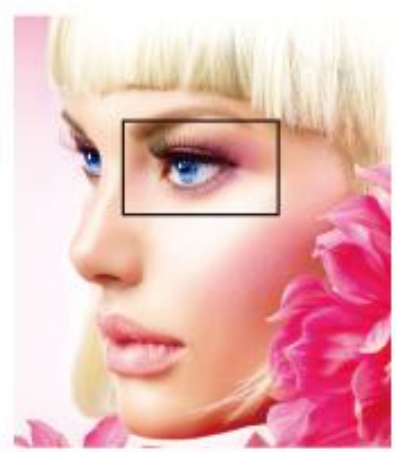
- **MAPS 2 (Mimaki Advanced Pass System)**
  - MAPS 2 eliminates banding by dispersing ink drops between the passes
  - This technology improves the print quality, when printing in high productivity modes, and uneven print density at solid color areas are reduced
  - By printing in auto-mode of MAPS2, the condition of MAPS2 is automatically selected for each print mode
  - Recommended setting of MAPS2 is AUTO, but manual adjustment is also possible
  - The optimum setting condition varies depending on print data or media. Please test the image quality beforehand

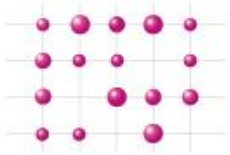
MAPS2: AUTO

MAPS2: OFF

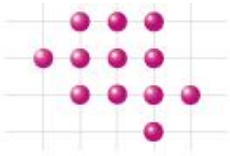
High Quality Printing

- **Variable ink drop technology**
  - Printing in 3 different dot sizes: small, medium and large
  - High image quality printing with smooth gradations
  - Small, sharp characters without grainy appearance





Variable dot

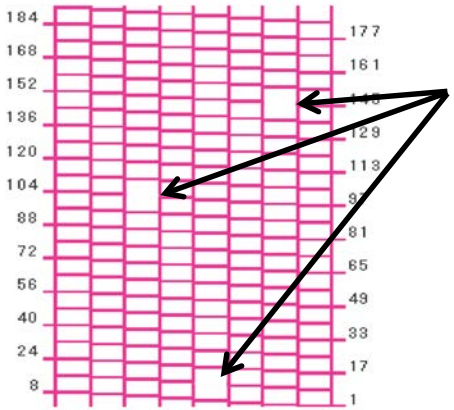


Normal dot

High Quality Printing

- NRS (Nozzle Recovery System)

Nozzle check pattern



Register the number of missing nozzles

The system replaces the clogged nozzles by other working nozzles

- 10 nozzles can be registered per 1 nozzle line
- NRS does not change the print speed
- NRS does not work when:
  - Printing in low pass modes
  - Printing in some modes with MAPS
  - Registration of the nozzle number is not correct

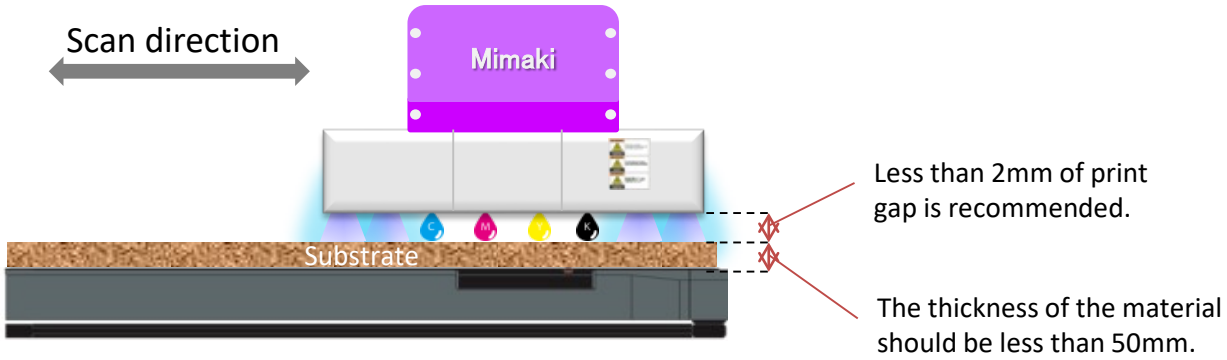
High Quality Printing

- **NRS (Nozzle Recovery System)**
  - Increases the up-time
  - Replaces missing nozzles by working nozzles in other passes
  - No need for direct service intervention
  - Makes printing with the same quality possible, even if nozzles are missing

Continuous printing by NRS

Substrate, Head Gap

- **Printable on substrates up to 50mm**
- **The maximum loadable substrate weight is 50kg/m2**

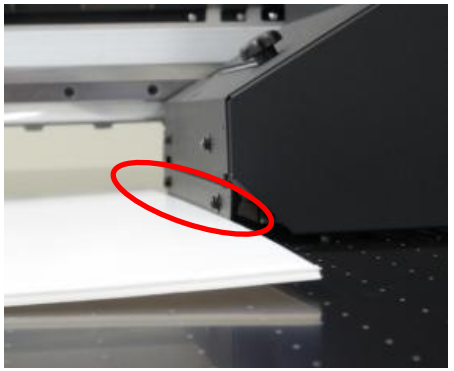


- **The gap between the head and the substrate should be less than 2mm**
- **If the gap is set wider than 2mm:**
  - The ink drop tends to become mist before it reaches the substrate
  - If the gap is too wide, the reflected light from the UV curing lamp increases.
  - The reflected light may increase the ink mist viscosity which can lead to clogged nozzles

Reliable Production

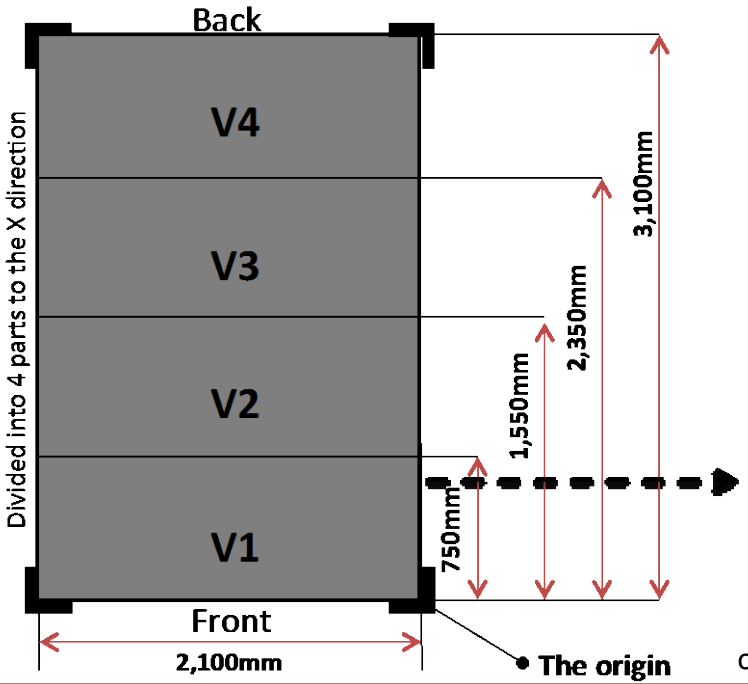
- **Automatic measurement of the media thickness**
  - No need to measure the thickness by hand
  - The gap pin on the left side of the carriage measures the media thickness automatically
  - The head gap can also be set manually in steps of 0.1mm

- **Media jam sensor**
  - When the media is deformed or the head height is set incorrectly, the sensor hits the media and the carriage stops to protect the print heads



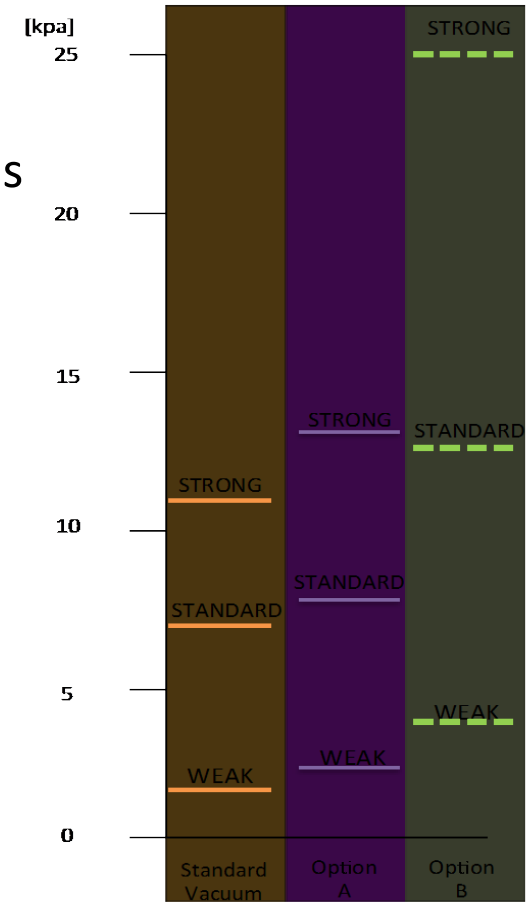
User Friendly

- **Including vacuum unit**
  - The vacuum table is divided into 4 different segments in the X direction
  - The suction power is adjustable in 3 different levels
  - Optional stronger vacuum unit is available



Select the vacuum area by opening or closing the valves

Static pressure in all-closed status



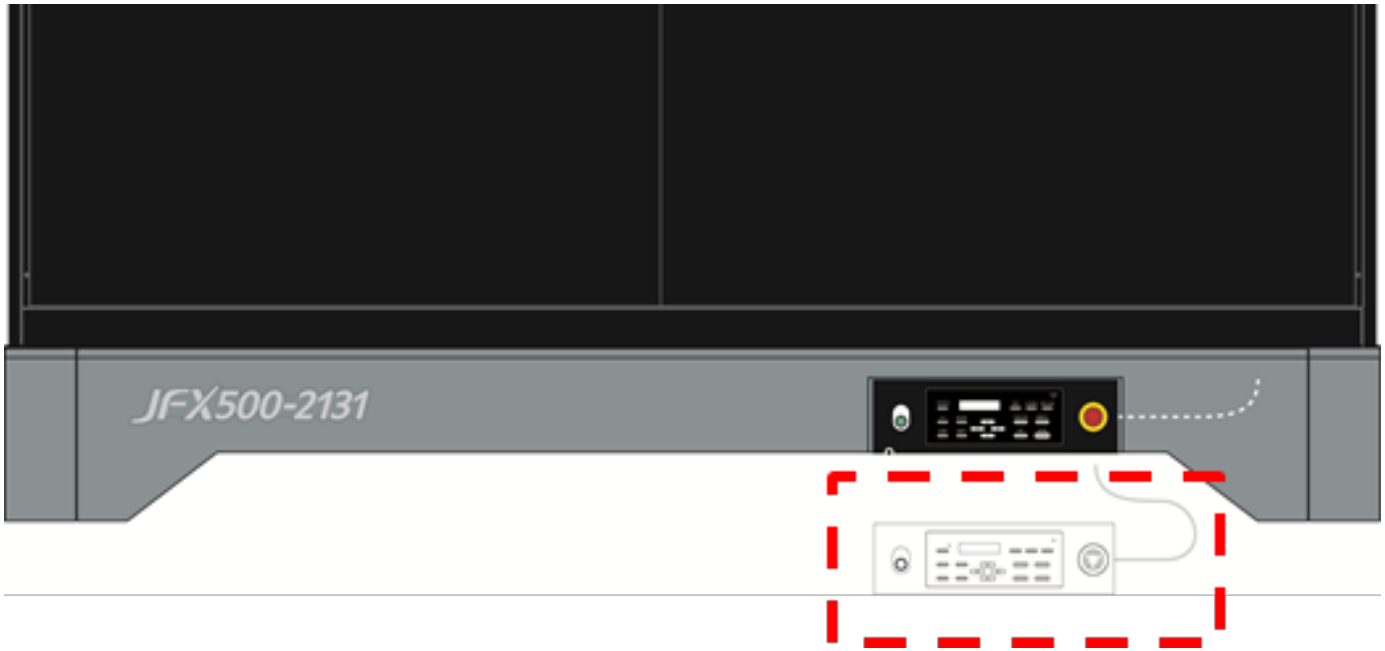
More info on slide 40

User Friendly

- **Layout Pins**
  - The holes for the layout pins are placed at the front side and two on the side in the table
  - Easy to position the substrate on the origin point
  - Can only be used with media thicker than 4 mm
  - 10 layout pins are included

User Friendly

- **Operation panel has a 4m extension cable and is detachable from the machine.**

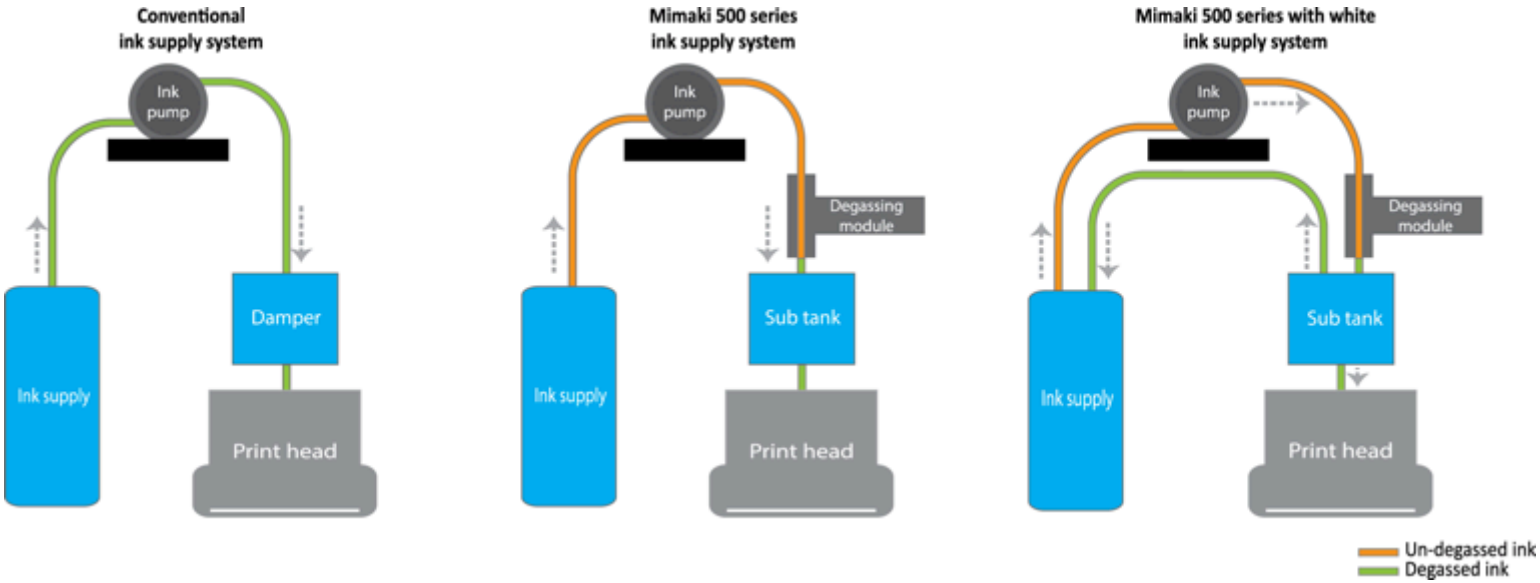


User Friendly

- **MCT (Mimaki Circulation Technology)**
  - White ink circulation
  - Prevents settlement of white ink pigments
  - Ensures a constant optimal ink supply
  - Reduces the amount of waste ink
  - MCT works only when the white ink set is installed
  - MCT does not work in 4 color

User Friendly

- **MDM (Mimaki Degassing Module)**
  - Allows low cost ink provision of un-degassed ink
  - Reducing nozzle clogging caused by air bubbles
  - Improving the nozzle performance



LED-UV Ink

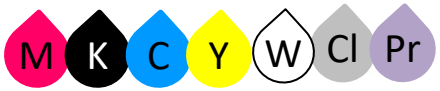
JFX500-2131

- **2 liter large-volume ink bottle system**
  - The 2 liter ink bottle reduces downtime
  - Allowing continuous operation for mass production
  - Contributes to reduce the amount of the industrial waste
  - For the ink replacement procedure, the way to replenish ink to the 2L bottle is adopted
  - UISS is available when using 4 colors
  - The ink is provided in 1 liter bottles

LED-UV ink

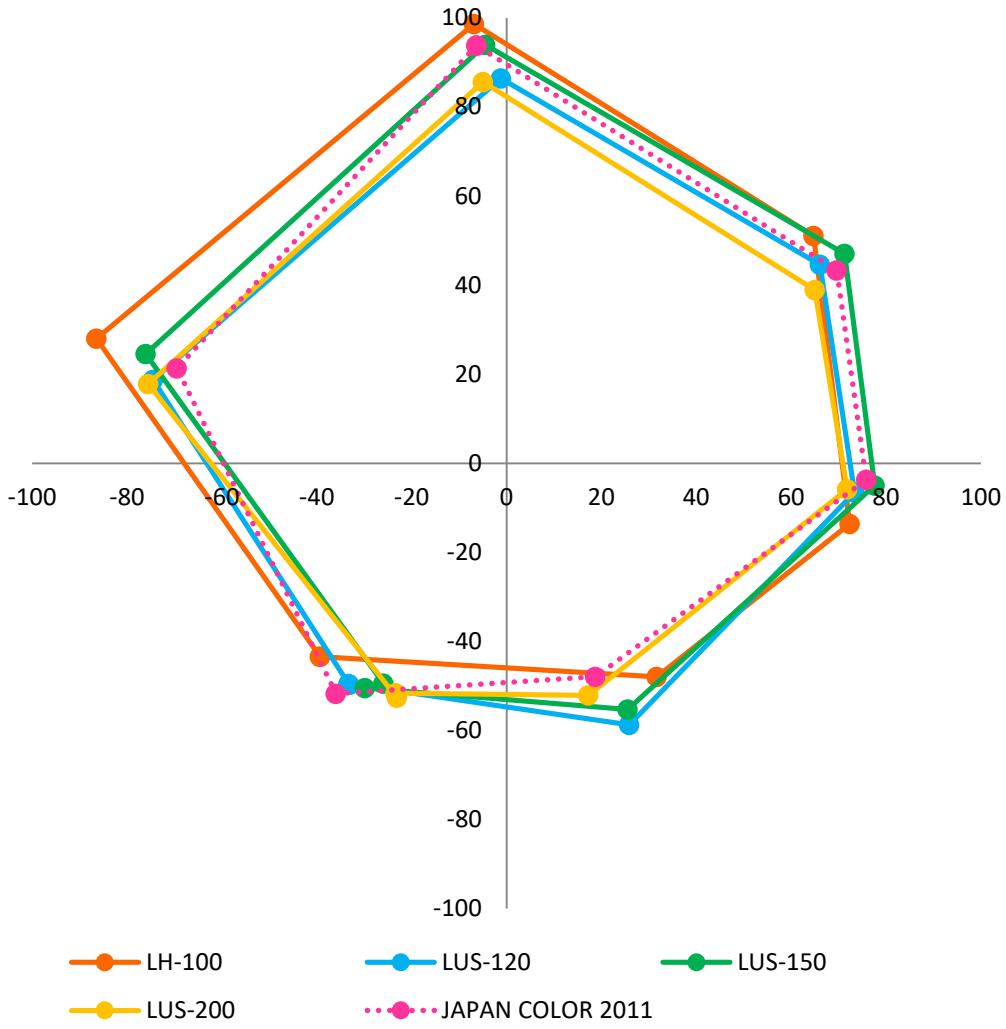
HARD UV INK | FLEXIBLE UV INK | WHITE INK

- **A wide variety of LED-UV inks**
  - LUS-120, LUS-150 and LUS-200 flexible ink types
  - LH-100 hard ink type

	LH-100	LUS-150	LUS-120	LUS-200
Colors	 *Clear is LH-100. *Primer is PR-100 or PR200			
Features	• Ink film is hard • Hard to get scratched • High solvent resistance • Less tackiness	• Flexible enough to fold • The media is less likely to deform after printing • Good media compatibility • Higher outdoor durability	• Up-to 170% Stretch ability • Good folding capability with no cracks	• High outdoor resistance • Ink film is less likely to crack during post processing
Applications	• Indoor sign board, novelty decoration, name plate, etc.	• Sign board, Printing on soft material Printing on the material which requires post processing such as cutting or heating.	• Outdoor signage • Banner materials • Pet windows film, etc.	• Sign board, Printing on soft material • Printing on materials which requires post processing e.g. cutting or heating

*The optional primer kit is needed to use primer

Color Gamut



The color gamut of LED-UV inks are wider than Japan Color 2011

- Colorimetric machine: Spectrolino (Gretag Macbeth)
- Condition: D50, 2°
- Media: PET

LED-UV Ink

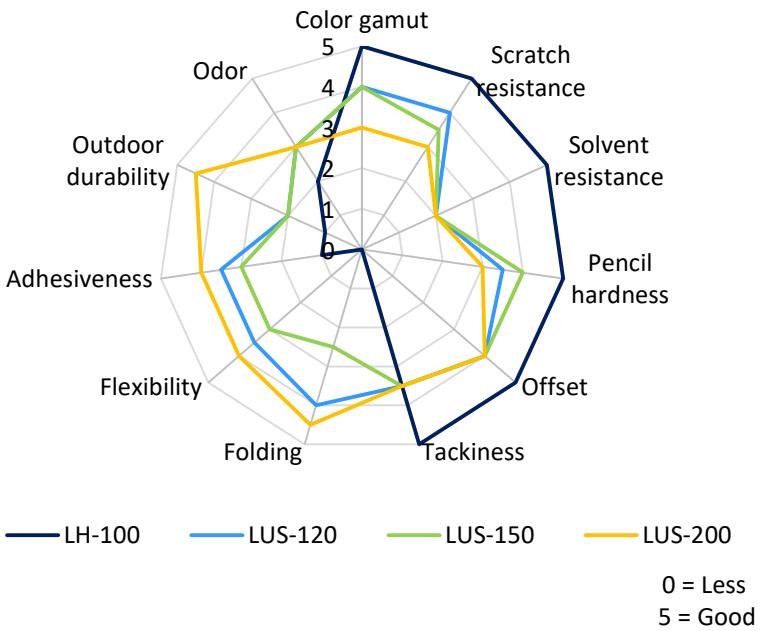
- **LH-100 LED-UV Ink**
  - Hard LED-UV ink
  - Suitable for printing on resins, plastic, etc.
  - Widely accepted in the market
  - High chemical resistance
  - High scratch resistance
  - Large color gamut

LED-UV Ink

- **LUS-120, LUS-150 and LUS-200 LED-UV inks**
  - “LUS” stands for LED-UV Stretchable
  - Suitable for high speed printing
  - Stretch ability
    - LUS-150 up to 150%
    - LUS-120 up to 170%
    - LUS-200 up to 200%

LED-UV Ink

Comparing ink properties



	The strength	The weakness
LH-100	• Good scratch and solvent resistance • Less tackiness. Ink does not set off	• The ink film tends to be cracking when folding or cutting • Often primer needed for good adhesion
LUS-120	• Ink film is less likely to crack by folding or cutting. Flexibility, about 170% • Outdoor durability and adhesion are better than LH-100 and LUS-150	• Outdoor durability is inferior to LUS-200 • Adhesion to acrylic and non-treated PET is weak
LUS-150	• Less to no cracking when folding or cutting • Adhesiveness is better than LH-100 • Better outdoor durability than LH-100	• Scratch and solvent resistance are inferior to LH-100 • Outdoor durability and adhesiveness are less than LUS-200
LUS-200	• Ink film is less likely to crack by folding or cutting. Flexibility, about 200% • Outdoor durability and adhesiveness are better than LH-100 and LUS-150	• Scratch and solvent resistance are inferior to LH-100 and LUS-150 • Narrower color gamut than LH-100 and LUS-150

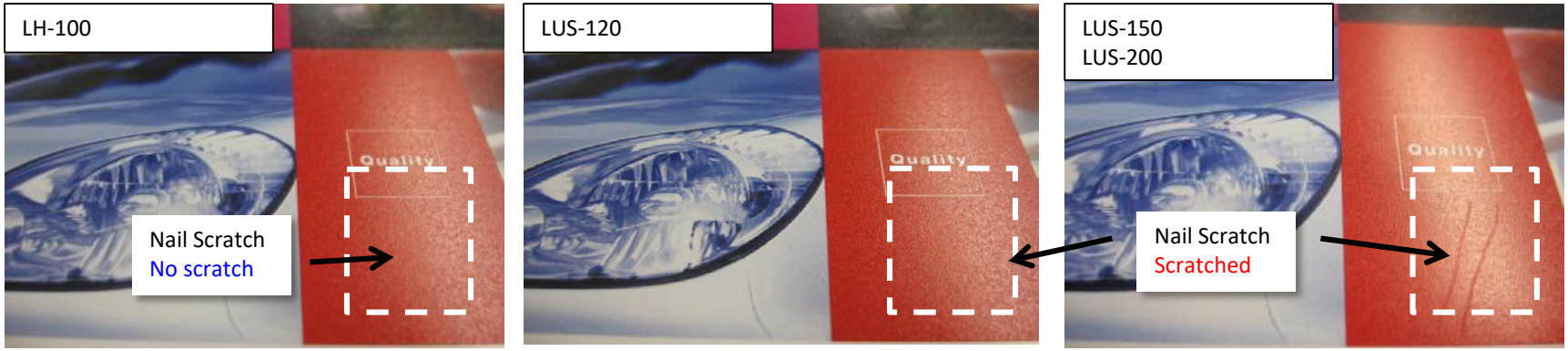
LED-UV Ink

Comparing the ink types

	Hard type	Flexible type
Strength	・High scratch resistance. ・High solvent resistance. ・Less tackiness print surface	・Flexible ink film allows bending or folding. ・Post process without cracking. ・No curl after printing. ・Prints on a broad range of materials.
Weakness	・Unsuitable for the outdoor use. ・Printable media is limited. ・Liable to curl after printing.	・Tackiness on the surface remains. ・Dust is likely to adhere. ・Tends to be scratched easily. ・Lower solvent resistance
Application	・Indoor panel, small decoration (novelty), nameplate, etc.	・Signage, decoration on soft material, printing on substrates which need post processes.

LED-UV Ink

Scratch resistance & flexibility



	LH-100			LUS-120	LUS-150			LUS-200
	Color only	PR-100*1	PR-200*1	Color only	Color only	PR-100*1	PR-200*1	Color only
Pencil hardness	5H	3H	2H	2H～H	3H～H	H	3H	H～HB
Flexibility	100% (Not flexible)			170% (Stretches 1.7 times)	150% (Stretches 1.5 times)	(Not flexible)		200% (Stretches twice)

Scratch resistance tends to depend on the hardness of the ink film.
The pencil hardness is an index of the stretch resistance. The hardness of nail is around “H”, therefore, the use of the ink which is harder than “H” is recommended, except in the situation when the adhesiveness is poor.

*1 PR100/200 KIT is required when installing PR-100 or PR-200 ink.

LED-UV Ink

Solvent resistance & Rubbing Test

	LH-100	LUS-120		LUS-150	LUS-200
		Color	White		
Water	○	○	○	○	○
Ethanol	○ (Density:100%)	△*1 (Density:30%)	△*1 (Density:10%)	△*1 (Density:30%)	△*1 (Density:30%)
IPA (100%)	○	×	×	○	×
Xylene (100%)	○	×	×	○	×

*1: Density in which the trace of the rubbing remains.

Evaluation standards:

○ : Attached
△ : Peels off with low density
× : Peels off easily

Evaluation method:

Evaluate holistically by the test results of primary color, secondary color, and tertiary color

LED-UV Ink

Solvent resistance & Dipping test

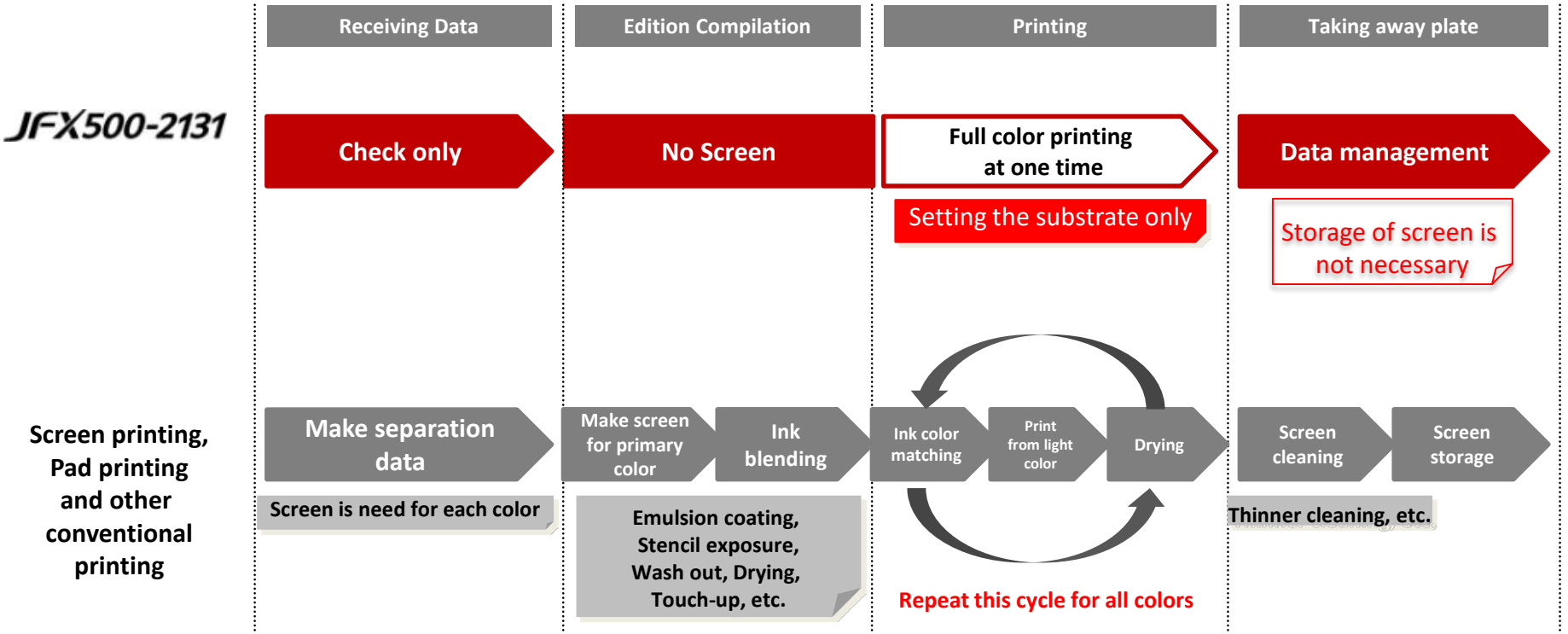
- When printing on less adhesive media, UV ink tends to peel off by the penetration of water or solvent from the print edge.

	LH-100			LUS-120	LUS-150			LUS-200
	Color only	PR-100*4	PR-200*4	Color Only	Color only	PR-100*4	PR-200*4	Color only
Water	×	△	△	○	○	○	○	○
Hot water (60°C)	×	×	×	△*3	△*1	○	△	△*3
Ethanol (100%)	○	○	○	××*2	××*2	××*2	××*2	××*2

*1: Air bubbles get in
*2: Ink film is attacked
*3: Ink film become hard
*4: PR100KIT is required when installing PR-100 or PR-200 ink.

Evaluation standards : ○: Attached, △: Peels off partly, ×: Takes some time to peel off, ××: Peels off immediately after dipping.
(It takes 3 minutes to peel off when dipping in ethanol and xylene.)

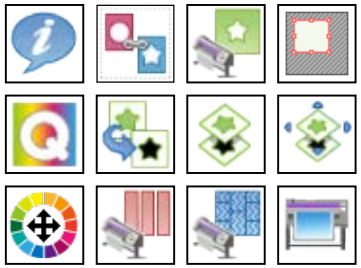
Digital Workflow



- Shorten the procedures from receiving data to printing significantly
- A quick response to the market trends
- Printing smaller runs
- Personalization
- No restrictions on the number of colors

Intuitive Operation

The main information is in one Screen. The status of printer, the progress of ripping, the status of JOB can be checked at a glance. Nesting or composition of JOB are displayed visually.



The visual icons on the right side of the screen allows for the easy and quick setting of the print condition.

Frequently used settings can be registered as “My favorite”.
Up to 30 settings can be registered.

Convenient functions

- **Batch printing**
  Batch printing prints several profiles at one time.
  This eliminates time to find the best profile when trying to print on media which has never been used.

- **Jig layout**
  Placement of the print material is registered by each jig.
  When the print material is set inaccurately, the angle can be corrected on RL6.

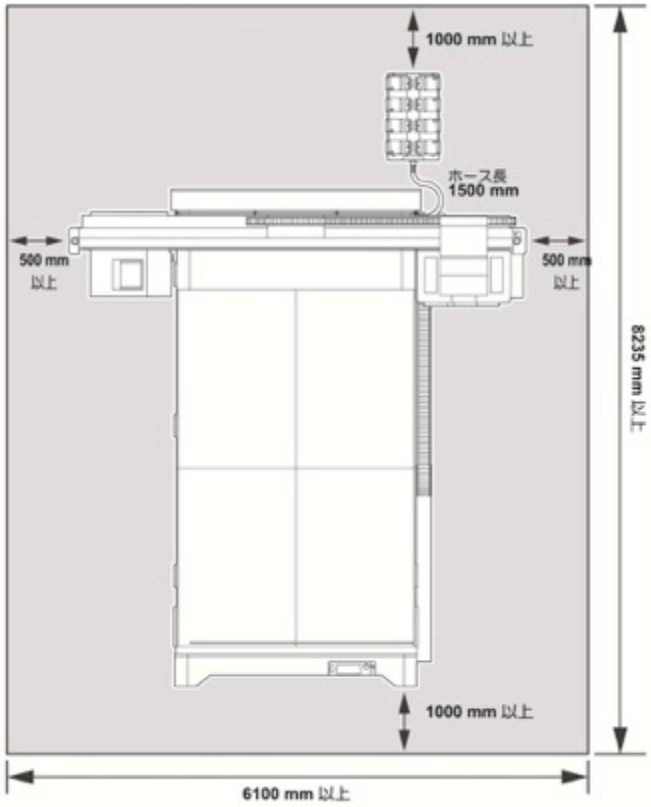
- **Auto execution**
  Jobs will be accumulated until any one of the conditions below is complied with, then the jobs will be arranged and printed with minimum area

Web update

The web update is available.
The program update and the profile download can be done through the web.

Installation Requirements

Machine	width	Depth	Height	Weight
JFX500-2131	4100mm	4462mm	1490mm	1353kg
The ink supply unit MKII	775mm	490mm	900mm	40kg



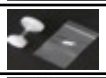
- **Precaution for installation space**
  - Do not install on weak surface floor
  - Environmental temperature should be 15 to 30˚C
  - Do not install on carpets etc.
  - Ink odor is generated.
    Use this machine in a well-ventilated environment
  - Installation space for a PC is required separately

Foot base (Accompanying items)
100mm x 100mm t = 20mm

Available Options 1

- **Ionizer kit,** OPT-J0322
  - The ionizer kit is a recommended option. It neutralizes static electricity of the media surface and improves the printing quality

Supply item List for Ionizer

Part#	Name	Purpose/Advantage	Specification	Image
SPA-0208	Tungsten replacement needle for ionizer	Spare parts for replacement of electrode needle	Replacement electrode needle(4pcs)	
SPA-0237	Electrode Needle cleaning KIT	Cleaning parts for cleaning Electrode Needle KIT	Cleaning KIT for electrode needle	
SPA-0238	Replacement Filter for Electrode Needle cleaning KIT		Replacement Cleaning KIT for electrode needle	
SPA-0239	Inside electrode wall cleaning KIT		Cleaning KIT for Inside electrode wall	
SPA-0240	Replacement Filter for Inside electrode wall cleaning KIT		Replacement Cleaning filter for Inside electrode wall	

Available Options 2

- Optional vacuum units are available when a stronger vacuum device is needed
- The blower connecting kit is needed when connecting an optional vacuum unit

#	PN	Name	Purpose / Advantage	Specifications	Max level
A	OPT-J0217	Vacuum unit (Single phase)	You can use the same power supply as the printer without any additional electrical construction.	Single phase・200-240V,30A,1.9kw	13.9kpa
B	OPT-J0232	Vacuum unit (Three phase)	It has strongest adsorption power in the above all option blowers. Please choose as to regional environment because electric spec are different. 380-480V,20A,3.4kw	Three phase・380-480V,20A,3.4kw	24.8kpa
C	OPT-J0202	External vacuum I/F（Interface）unit	It is used to connect the printer to the blower when you choose to use a non-Mimaki vacuum unit. This Interface unit is enable to control the switch(ON/OFF) on the printer panel.	Single phase/Three phase200-400V,30A	
D	OPT-J0330	Option blower connecting kit	Attachment unit for vacuum (necessary to connect the blowers above)	Option for JFX500-2131 only	

D: connection kit

Select one type from the lineup

A

80kg

B

90kg

C**

15kg

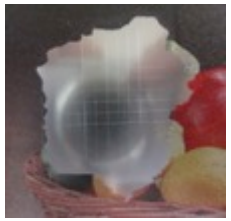
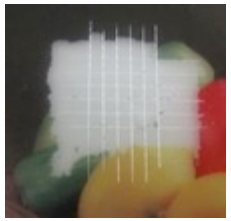
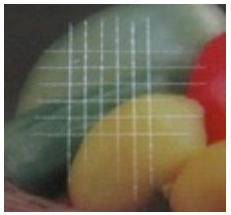
C = also needed when using own vacuum unit

* Independent power supply is needed for the vacuum units

** No caster attached

Available Options 3

- **OPT-J0392, PR100/200KIT for JFX500-2131**
  - Needed for installing the Primer in new and existing JFX500-2131
  - Additional parts needs to be ordered depending of the current ink configuration. Contact your service department
  - Makes it possible to print the primer in the area only where it's needed
  - By using an inkjet primer, the adhesion between ink and substrate increases
  - Adhesion can differ depending on the ink and media combination
  - Always test the adhesion on beforehand

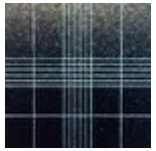
	LH-100 Color only	LH-100 + PR-100	LH-100 + PR-200
SUS stainless steel			
Epoxy Glass			

* When printing with primer, use the profile "Evonic PLEXIGLAS XT v3.2".
For better adhesion, RasterLink6 automatically changes the intensity of the LED lamp and the amount of primer.

Adhesion Test: LH-100

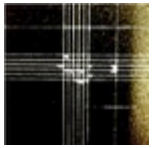
JFX500-2131	LH-100 Color Only		
Material:	**Without Primer**	**PR-100**	**PR-200**
Pet			
PC			
Acrylic			
PVC			
Glass			
SUS (stainless steel)			
Aluminium			
Copper			
Brass			
Anodized Aluminium			
Nickel Chrome plating			

Evaluation standards using tape and cross cut:



Excellent / Good

Ink does not peel off using tape after cross cutting.



Medium

Ink may peel off using cross cutting.
Ink peels off using tape after cross cutting

Poor

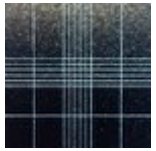
Ink peels off during crosscutting

The test above was conducted based on an internal standard, the results are not guaranteed

Adhesion Test: LUS-120

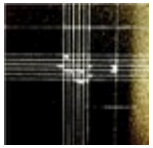
JFX500-2131	LUS-120
Material:	**Color Only**
Pet	
PC	
Acrylic	
PVC	
Glass	
SUS (stainless steel)	
Aluminium	
Copper	
Brass	
Anodized Aluminium	
Nickel Chrome plating	

Evaluation standards using tape and cross cut:



Excellent / Good

Ink does not peel off using tape after cross cutting.



Medium

Ink may peel off using cross cutting.
Ink peels off using tape after cross cutting

Poor

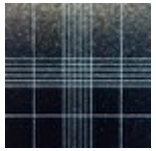
Ink peels off during crosscutting

The test above was conducted based on an internal standard, the results are not guaranteed

Adhesion Test: LUS-150

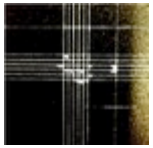
JFX500-2131	LUS-150 Color Only		
Material:	**Without Primer**	**PR-100**	**PR-200**
Pet			
PC			
Acrylic			
PVC			
Glass			
SUS (stainless steel)			
Aluminium			
Copper			
Brass			
Anodized Aluminium			
Nickel Chrome plating			

Evaluation standards using tape and cross cut:



Excellent / Good

Ink does not peel off using tape after cross cutting.



Medium

Ink may peel off using cross cutting.
Ink peels off using tape after cross cutting

Poor

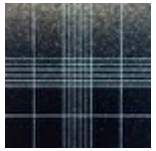
Ink peels off during crosscutting

The test above was conducted based on an internal standard, the results are not guaranteed

Adhesion Test: LUS-200

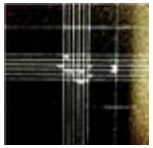
JFX500-2131	LUS-200
Material:	**Color Only**
Pet	
PC	
Acrylic	
PVC	
Glass	
SUS (stainless steel)	
Aluminium	
Copper	
Brass	
Anodized Aluminium	
Nickel Chrome plating	

Evaluation standards using tape and cross cut:



Excellent / Good

Ink does not peel off using tape after cross cutting.



Medium

Ink may peel off using cross cutting.
Ink peels off using tape after cross cutting

Poor

Ink peels off during crosscutting

The test above was conducted based on an internal standard, the results are not guaranteed

JFX500-2131 Specifications

	JFX500-2131
Print head	On demand piezo head
UV lamp	LED-UV
UV lamp life time	5,000 hours or more
Resolution	300dpi, 600dpi, 900dpi, 1200dpi
Minimum drop size	7pl
Maximum drop size	21pl
The number of variable dot	3
Printing width	2,100mm x 3,100mm
Settable substrate thickness	50mm
Settable substrate weight	50kg/㎡
Absolute accuracy	±0.3mm or ±0.3% from specified print distance
Repeatability	±0.2mm or ±0.1% from specified print distance
Suction area divides	4 divides (X direction)
Ink types	LH-100, LUS-120, LUS-150, LUS-200
Available Colors	M,C,Y,K,W,Cl,Pr
Ink supply	1L bottle, 250ml* bottle
Ink capacity	2L
Interface	USB2.0
Power requirements	Single phase AC200～240V 50/60Ｈｚ, 20A or less
Installment environment	Temperature 15℃~30℃、Humidity 30%~65RH
Dimensions	(W)4,100×(D)4,462×(H)1,490mm

*Notes for use of 250ml bottle:

1. 250ml bottle is available only for LH-100, LUS-120, PR200
2. It is required to upgrade firmware to ver. 2.90 or higher
3. Do not use 250ml bottle for initial fill-up

APPENDIX:

Supply items - inks

Part No.	Description	Volume	Packaging	Remarks
LH100-x-B2	LH-100 UV curable ink 250ml bottle	250ml	Bottle	M, C, Y, K, W and Cl
LH100-x-BA	LH-100 UV curable ink 1L bottle	1,000 ml		
LUS12-x-B2	LUS-120 UV curable ink 250ml bottle	250ml		
LUS12-x-BA	LUS-120 UV curable ink 1L bottle	1,000 ml		
LUS15-x-BA	LUS-150 UV curable ink 1L bottle	1,000 ml		
LUS20-x-BA	LUS-200 UV curable ink 1L bottle	1,000 ml		M, C, Y, K, and W
PR100-Z-BA	IJ Primer PR-100 1L bottle	1,000 ml		PR100/200 KIT is required
PR200-Z-B2	IJ Primer PR-200 250ml bottle	250 ml		PR100/200 KIT is required
PR200-Z-BA	IJ Primer PR-200 1L bottle	1,000 ml		
FL007-Z-BA	Flushing Liquid 07 1L bottle	1,000ml		For cleaning of ink lines

Supply items – consumables 1

Part No.	Description	Volume	Packaging	Remarks
SPA-0189	Head filter replacement kit		20 sheets	
SPA-0193	Wiper replacement kit		5 x 2 pcs	
SPA-0196	Ink filter replacement kit		8 pcs	
SPA-0197	Waste ink tank SL (Placed in a box)		1 pce	
SPA-0208	Tungsten replacement needle for ionizer		4 pcs	
SPA-0209	Air filter kit		10 pcs	
SPA-0210	Ink bottle 2L tank		1 pce	
SPA-0212	RF absorber replacement kit		20 sheets	
SPA-0214	Washing bypass tube jig kit assy UV			Replacement by technician is required
SPA-0215	Cap absorber replacement kit		10 sheets	
SPA-0216	Cap absorber front side replacement kit		10 sheets	
SPA-0217	Cap absorber bottom side replacement kit		10 sheets	
SPA-0220	Air purge jig UJV		20 pcs	
SPA-0234	Layout pin kit		10 pcs	
SPA-0237	Electrode Needle cleaning KIT		1 pce	

Supply items – consumables 2

Part No.	Description	Volume	Packaging	Remarks
SPA-0238	Replacement Filter for Electrode Needle cleaning KIT		10 pcs	
SPA-0239	Inside electrode wall cleaning KIT		1 set	
SPA-0240	Replacement Filter for Inside electrode wall cleaning KIT		10 pcs	
SPC-0386	UJ cleaning swab		10 pcs	
SPC-0387	UV goggle		1 pce	
SPC-0394	Anti freezing liquid	1,000ml	2 x 1,000ml	
SPC-0421	Nozzle swab		100 pcs.	
SPC-0499	Kim towel		50 sheets	
SPC-0527	Cleaning Stick for Head Surrounding		50 pcs	For daily maintenance
SPC-0568	F-200/LF-200 Washing Liquid	100ml	Bottle	
SPC-0569	F-200/LF-200 CLEANING KIT	2 x 100ml	1 set	Daily maintenance kit
SPC-0574	Maintenance cloth		150 sheets	

Optional items

Part No.	Description	Remarks
OPT-J0217	Vacuum unit (Single phase)	Single phase 200-240V, 30A, 1.9kw
OPT-J0232	Vacuum unit (Three phase)	Three phase 380-480V, 20A, 3.4kw
OPT-J0330	JFX500 OPTION BLOWER CONNECTOR KIT	
OPT-J0202	External vacuum I/F（Interface）unit	Single phase/Three phase200-400V,30A It is used to connect the printer a non-Mimaki vacuum unit.
OPT-J0392	PR100/200KIT FOR JFX500	Needed for installing the primer in JFX500-2131
OPT-J0137	USB2.0 Cable 5M	
SPM-005	Mimaki Profile Master 3 (Software only)	Color management software + Colorimeter
OPT-J0322	Ionizer Kit	

Print Speed List (LH-100)

4C ink set (1Layer: Color only)					LH-100		
Mode	Resolution	Pass	Uni/Bi	Scan	Speed	LED Lamp (In)	LED Lamp (Out)
Standard	600x900	12Pass	Bi	Hi	**26.0m²/h**	30mm	80mm
Quality	1200x1200	16Pass	Uni	Normal	**10.5m²/h**	30mm	80mm

4C+W ink set (1layer: Color Only)					LH-100		
Mode	Resolution	Pass	Uni/Bi	Scan	Speed	LED Lamp (In)	LED Lamp (Out)
Standard	600x900	12Pass	Bi	Hi	**18.1m²/h**	30mm	80mm
Quality	1200x1200	16Pass	Uni	Normal	**7.1m²/h**	30mm	80mm

4C+W ink set (2Layer: Color → White or White → Color / 1Layer: White only)					LH-100	
Mode	Resolution	Pass	Uni/Bi	Scan	Speed	LED Lamp (In)	LED Lamp (Out)
Production	600x900	12Pass	Bi	Hi	**18.1m²/h**	30mm	80mm
Standard	600x900	24Pass	Bi	Hi	**9.4m²/h**	30mm	80mm
Quality	1200x1200	16Pass	Uni	Normal	**7.1m²/h**	30mm	80mm
High Quality	1200x1200	32Pass	Bi	Normal	**5.9m²/h**	30mm	80mm

Print Speed List (LH-100)

4C+Pr ink set (2Layer: Primer → Color / 1Layer: Primer only)					LH-100		
Mode	Resolution	Pass	Uni/Bi	Scan	Speed	LED Lamp (In)	LED Lamp (Out)
Standard	600x900	24Pass	Bi	Hi	**9.4m²/h**	30mm	80mm
Quality	1200x1200	16Pass	Uni	Normal	**7.1m²/h**	30mm	80mm
High Quality	1200x1200	32Pass	Bi	Normal	**5,9m²/h**	30mm	80mm

4C+Cl ink set (1Layer: Clear only)					LH-100		
Mode	Resolution	Pass	Uni/Bi	Scan	Speed	LED Lamp (In)	LED Lamp (Out)
Production	600x900	12Pass	Bi	Hi	**18.1m²/h**	30mm	80mm
Standard	600x900	24Pass	Bi	Hi	**9.4m²/h**	30mm	80mm
Quality	1200x1200	16Pass	Uni	Normal	**7.1m²/h**	30mm	80mm
High Quality	1200x1200	32Pass	Bi	Normal	**5.9m²/h**	30mm	80mm

4C+Cl ink set (2Layer: Color → Clear)					LH-100		
Mode	Resolution	Pass	Uni/Bi	Scan	Speed	LED Lamp (In)	LED Lamp (Out)
Production	600x900	12Pass	Bi	Hi	**9.0m²/h**	30mm	80mm
Standard	600x900	24Pass	Bi	Hi	**4.7m²/h**	30mm	80mm
Quality	1200x1200	16Pass	Uni	Normal	**3.5m²/h**	30mm	80mm
High Quality	1200x1200	32Pass	Bi	Normal	**2.9m²/h**	30mm	80mm

Print Speed List (LUS-120/LUS-150/LUS-200*)

4C ink set (1Layer: Color only)					LUS-150		
Mode	Resolution	Pass	Uni/Bi	Scan	Speed	LED Lamp (In)	LED Lamp (Out)
Draft	300x450HQ	3Pass	Uni	Normal	**60.0m²/h**	30mm	80mm
High Speed	300x450HQ	6Pass	Bi	Normal	**47.1m²/h**	30mm	80mm
Production	600x600	8Pass	Bi	Hi	**37.1m²/h**	30mm	80mm
Standard	600x900	12Pass	Bi	Hi	**26.0m²/h**	30mm	80mm
Quality	1200x1200	16Pass	Uni	Normal	**10.5m²/h**	30mm	80mm

4C+W ink set (1Layer: Color only)					LUS-120 / LUS-150 / LUS-200*2		
Mode	Resolution	Pass	Uni/Bi	Scan	Speed	LED Lamp (In)	LED Lamp (Out)
Draft	300x450HQ	3Pass	Uni	Normal	**45.0m²/h**	30mm	80mm
High Speed	300x450HQ	6Pass	Bi	Normal	**33.8m²/h**	30mm	80mm
Production	600x600	8Pass	Bi	Hi	**26.2m²/h**	30mm	80mm
Standard	600x900	12Pass	Bi	Hi	**18.1m²/h**	30mm	80mm
Quality	1200x1200	16Pass	Uni	Normal	**7.1m²/h**	30mm	80mm

4C+W ink set (2Layer: Color → Spot or Spot → Color / 1Layer: White only)						LUS-120 / LUS-150 / LUS-200*2	
	Resolution	Pass	Uni/Bi	Scan	Speed	LED Lamp (In)	LED Lamp (Out)
High Speed	600x600	8Pass	Bi	Hi	**26.2m²/h**	30mm	80mm
Production	600x900	12Pass	Bi	Hi	**18.1m²/h**	30mm	80mm
Standard	600x900	24Pass	Bi	Hi	**9.4m²/h**	30mm	80mm
Quality	1200x1200	16Pass	Uni	Normal	**7.1m²/h**	30mm	80mm
High Quality	1200x1200	32Pass	Bi	Normal	**5.9m²/h**	30mm	80mm

*2 LUS-200 is available only with CMYKW ink set.

Print Speed List (LUS-150)

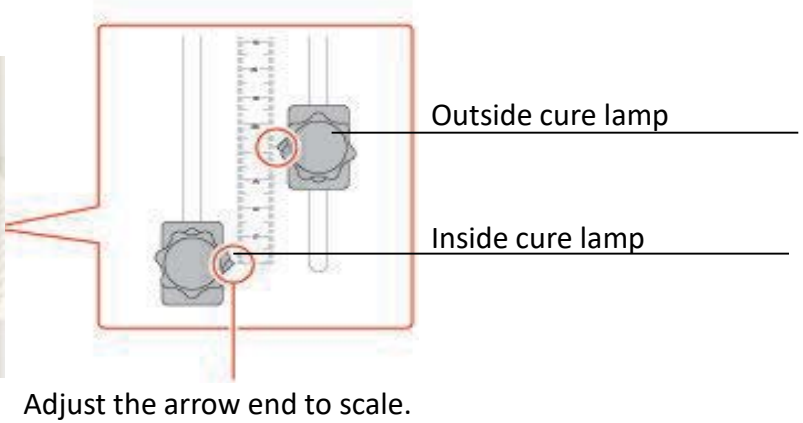
4C+Pr ink set (2Layer: Primer → Color / 1Layer: Primer only)					LUS-150		
Mode	Resolution	Pass	Uni/Bi	Scan	Speed	LED Lamp (In)	LED Lamp (Out)
High Speed	600x600	8Pass	Bi	Hi	**26.2m²/h**	30mm	80mm
Production	600x900	12Pass	Bi	Hi	**18.1m²/h**	30mm	80mm
Standard	600x900	24Pass	Bi	Hi	**9.4m²/h**	30mm	80mm
Quality	1200x1200	16Pass	Uni	Normal	**7.1m²/h**	30mm	80mm
High Quality	1200x1200	32Pass	Bi	Normal	**5,9m²/h**	30mm	80mm

4C+Cl ink set (1Layer: Clear only)					LUS-150		
Mode	Resolution	Pass	Uni/Bi	Scan	Speed	LED Lamp (In)	LED Lamp (Out)
High Speed	600x600	8Pass	Bi	Hi	**26.2m²/h**	30mm	80mm
Production	600x900	12Pass	Bi	Hi	**18.1m²/h**	30mm	80mm
Standard	600x900	24Pass	Bi	Hi	**9.4m²/h**	30mm	80mm
Quality	1200x1200	16Pass	Uni	Normal	**7.1m²/h**	30mm	80mm
High Quality	1200x1200	32Pass	Bi	Normal	**5.9m²/h**	30mm	80mm

4C+Cl ink set (2Layer: Color → Clear)					LUS-150		
Mode	Resolution	Pass	Uni/Bi	Scan	Speed	LED Lamp (In)	LED Lamp (Out)
High Speed	600x600	8Pass	Bi	Hi	**13.1m²/h**	30mm	80mm
Production	600x900	12Pass	Bi	Hi	**9.0m²/h**	30mm	80mm
Standard	600x900	24Pass	Bi	Hi	**4.7m²/h**	30mm	80mm
Quality	1200x1200	16Pass	Uni	Normal	**3.5m²/h**	30mm	80mm
High Quality	1200x1200	32Pass	Bi	Normal	**2.9m²/h**	30mm	80mm

LED Lamp Positioning

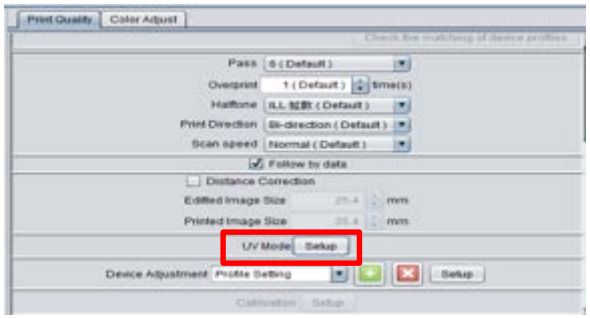
- **The alignment of LED-UV lamps needs to be adjusted depending on the print job**
  - The lamps on the outside are named the Outside Cure Lamp
  - The lamps on the inside are named the Inside Cure Lamp



- **The position of the LED-UV Lamps**
  - Slides Outside Cure Lamps to 80mm
  - Slides Inside Cure Lamps to 30mm

UV Modes

- **LED-UV irradiation conditions by media are added**
  - There are optimum irradiation patterns depending on the media
- **LED-UV irradiation condition is embedded in Profile Ver3.2.**
  - The use of LED-UV irradiation conditions, requires F/W2.0(or later) and RL6 Ver1.7.2(or later)



Print condition screen

UV mode screen

- **Changing profile set value**
  - By selecting “Profile Setting” on the UV mode screen, the printing in the recommended UV irradiation is performed. The UV irradiation set value can also be adjusted between 70% and 130%.
  - *1 By setting value strong side, UV irradiation becomes stronger. This may lead to cure ink too much which causes ink crack when bending media.
  - *2 By setting value weak side, UV irradiation becomes weaker. In this case, the ink may not be cured enough.
  - *3 A warning is displayed when adjusting UV irradiation or changing conditions (Pass, Print direction, Scan speed, Overprint).

Thank you

MIMAKI EUROPE B.V.