PRODUCT GUIDE





UJF-3042/6042MkII e Series

HIGH QUALITY & HIGH PERFORMANCE UV-LED PRINTER

29-10-2021

1.01EU

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Concept

- The MkII e series is designed as an upgrade in efficiency and stability of existing MkII models, and to attract new customers in the promotional and personalization printing market who want to achieve high production volume with improved usability.

- Print quality is further improved with the new halftone processing, the Mimaki Fine Diffusion 2 (MFD2) function.

- A new laser obstacle sensor and the special coated area around the UV LED lamp increase the effectiveness of the media detection and prevent the reflection of UV light.

- Easy integration with new IOT ready automation support for robotics systems on production floor.

- Improved control panel functionality brings the usability of the MkII e series to the next level.



Key features

- Two models are available in two sizes:
  - UJF-3042MkII e with effective print size of 420x300mm
  - UJF-6042MkII e with effective print size of 610x420mm
- Print heads arranged in staggered mode increase the productivity up to 20% when compared to UJF-3042/6042.
- High image quality achieved through print resolutions up to 1200dpi.
- Direct printing on substrates up to 153mm thick.
- Choice of rigid LH-100, or flexible LUS-120 and LUS-150 inks, each with 9 colors including white, clear and primer.
- Mimaki Ink Bulk system (MBIS) with 250ml / 1000ml bottles.
- Newly developed halftone processing, MFD2 reduces graininess of details and improves print quality.
- Easy integration with new IOT ready automation support for robotics systems on production floor.
- Full cover protection prevents dust affecting print quality.
- Very precise positioning is achieved by moving the table with ball screw.
- Rotary printing option.

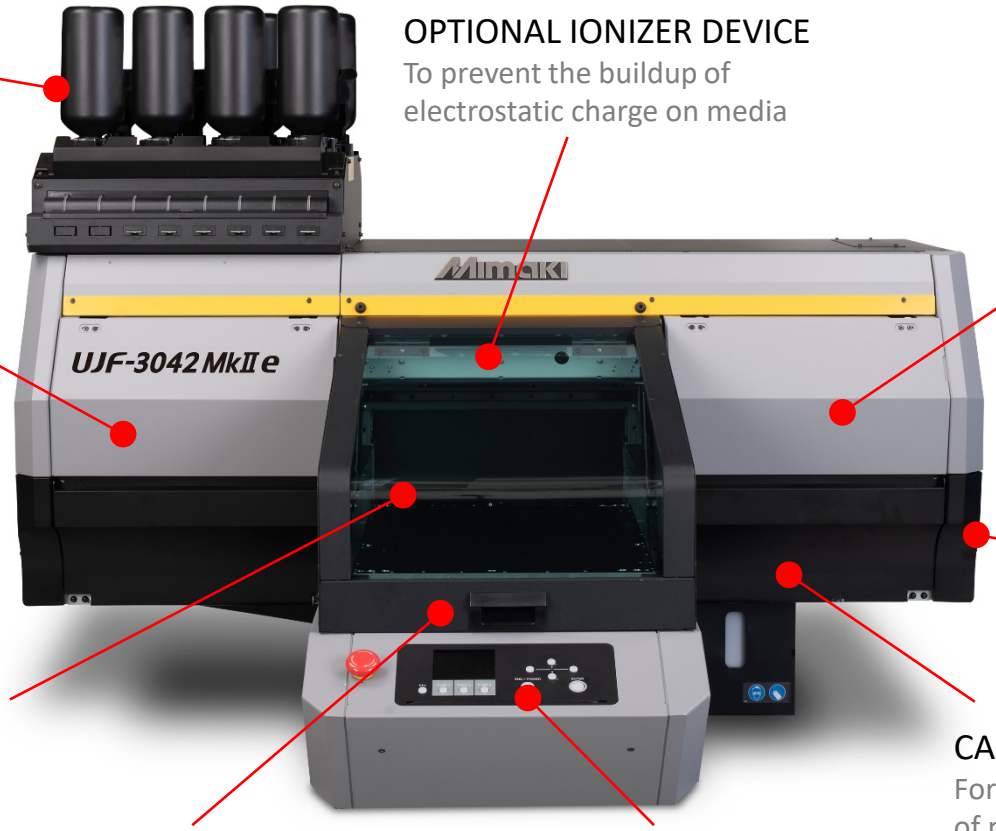
Common features

- Image quality control technology for high quality printing
  - MAPS4, Mimaki Advanced Pass System
  - High quality printing with reduced banding effects and preventing uneven colors
- Variable dots
  - Printing simultaneously smooth color images and high opacity spot colors
- MCC, Mimaki Clear Control
  - Preventing adhesion of dust and occurrence of air bubbles for high quality glossy clear appearance
- MCT, Mimaki Circulation Technology
  - Improves the nozzle stability by removing possible air bubbles in the ink located inside the print head
- NCU, Nozzle Check Unit
  - For monitoring the status of the nozzles
- NRS, Nozzle Recovery System
  - Clogged nozzles are automatically replaced by other working nozzles for non-stop printing
- LD, Long Distance Print
  - LD mode is a print mode suited to print on media with surface height difference less than 4,5mm

Product overview: UJF-3042MkII e

LARGE INK SUPPLY SYSTEM
CMYK, White, Clear and Primer are available in a size of 250ml or 1Ltr bottle

FIXED Y-BAR
Precise dots placement on the material is achieved thanks to the fixed Y-bar and anti-vibration structure of the table drive



OPTIONAL IONIZER DEVICE
To prevent the buildup of electrostatic charge on media

STAGGERED PRINT HEADS
3 print heads in staggered mode for high quality print

IOT READY
Easy integration with IOT ready automation systems on production floor

VACUUM TABLE*
To fix a print substrate on the table

BALL-SCREW MECHANISM
is applied on the table for precise and repeatable movement of the material during the printing

OPERATION PANEL
Operation keys and full color LCD indicate a various settings and operation items

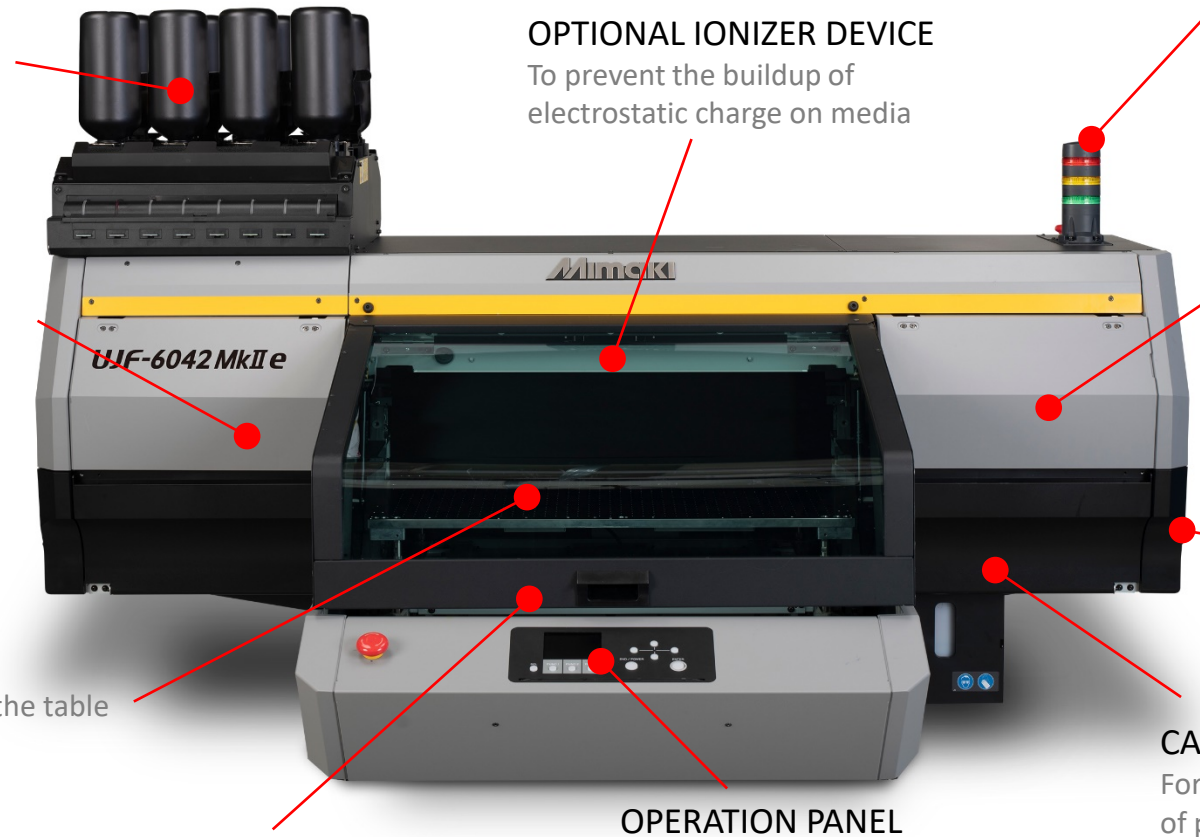
CAPPING STATION UNIT
For automatic cleaning and storage of printheads when the printer is not printing

* Optional items for UJF-3042MkII e

Product overview: UJF-6042MkII e

LARGE INK SUPPLY SYSTEM
CMYK, light colors, White, Clear and Primer are available in a size of 250ml or 1Ltr bottle

FIXED Y-BAR
Precise dots placement on the material is achieved thanks to the fixed Y-bar and anti-vibration structure of the table drive



OPTIONAL IONIZER DEVICE
To prevent the buildup of electrostatic charge on media

STATUS LAMP
at right-top of the machine shows the basic printer status

STAGGERED PRINT HEADS
4 print heads in staggered mode for high quality print

IOT READY
Easy integration with IOT ready automation systems on production floor

VACUUM TABLE
To fix a print substrate on the table

BALL-SCREW MECHANISM
is applied on the table for precise and repeatable movement of the material during the printing

OPERATION PANEL
Operation keys and full color LCD indicate a various settings and operation items

CAPPING STATION UNIT
For automatic cleaning and storage of printheads when the printer is not printing

Product Overview





Item	UJF-3042MkII e	UJF-6042MkII e
Number of print heads / arrangement	3 / staggered	4 / staggered
Max. print area	300 x 420mm (A3)	610 x 420mm (A2)
Max. media height	153mm	153mm
Ink type	LH-100 / LUS-120 / LUS-150	LH-100 / LUS-120 / LUS-150
Ink supply	250ml bottles, 1L bottles	250ml bottles, 1L bottles
Max. resolution	1200 x 1200 dpi	1200 x 1200 dpi
Dimensions	1,355 x 1,290 x 856mm	1,665 x 1,290 x 856mm
Installation Stand	Option	Option
Vacuum table	Option	Standard
Ionizer unit30/60	Option	Option
NCU Option	Option	Standard
Status indication lamp unit	Option	Standard
Ventilating fan unit	Option	Option
Deodorizer unit	Option	Option
Kebab MkII	Option	-
Kebab MkII L	-	Option

System configuration

Standard configuration

UJF-3042MkII e and *UJF-6042MkII e*



&

Raster Link 7

Output / Status

USB 2.0
Ethernet

Output PC

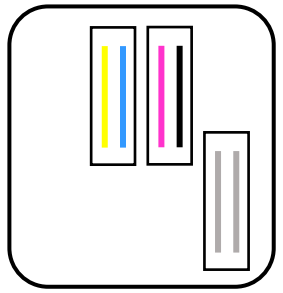


Minimum recommended PC configuration

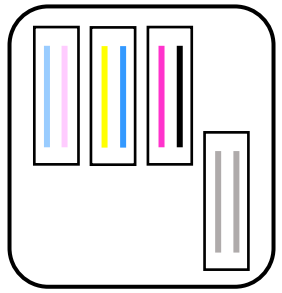
CPU:	Core i5 3.5GHz
Memory:	8GB
HDD:	500GB
I/F :	USB2.0, 4 ports or more
ODD:	DVD-ROM
Network:	1000BASE-T
Compatible OS :	Windows Vista(32/64bit)
	Windows 7(32/64bit)
	Windows 8(32/64bit)
	Windows 10(32/64bit)
Monitor:	1366x768

Latest Print Head Technology

Amount of Heads	3 or 4, depending on model
Heads configuration	Staggered mode
Nozzle Configuration	320 nozzles per line, 2 lines
Print Resolution	Up to 1200dpi
Droplet Size	Starting from 5pl



UJF-3042MkII e



UJF-6042MkII e

Variable Dots

- Higher Image Quality
- Low grains
- Excellent gradients

High Durability

- Industrial Graded Print Head
- Piezo technology
- Low long-term costs



Ink configuration

- Ink type:
  - UV-LED Hard type LH-100
  - UV-LED Flexible type LUS-120, and LUS-150

- Ink supply:
  - 250ml bottle
  - 1Ltr bottle

Ink type	Color	Ink supply	Ink set								
LH-100 LUS-120	9C*1	250ml bottle 1L bottle	3042MkII e			Y	C	M	K	W	W
						Y	C	M	K	W	Cl
						Y	C	M	K	W	Pr
						Y	C	M	K	Pr	Cl
			UJF-6042MkII e	Lc	Lm	Y	C	M	K	W	W
				Lc	Lm	Y	C	M	K	W	Cl
				Lc	Lm	Y	C	M	K	W	Pr
				Lc	Lm	Y	C	M	K	Pr	Cl
				Pr	Cl	Y	C	M	K	W	W
LUS-150*2	7C*3	1L bottle	3042MkII e			Y	C	M	K	W	W
						Y	C	M	K	W	Cl*4
						Y	C	M	K	W	Pr
						Y	C	M	K	Pr	Cl*4
			UJF-6042MkII e	Pr	Cl*4	Y	C	M	K	W	W

*1 Printing in 9 colors cannot be performed at the same time
*2 LUS-150 requires bottle caps SPA-0280 (Cap A Assy)
*3 Printing in 7 colors cannot be performed at the same time
*4 *Clear is LH-100



250ml ink package



1Ltr ink package

Print area

UJF-3042MkII e



300mm

420mm

UJF-6042MkII e



610mm

420mm

Printing speeds: UJF-3042MkII e

1. Color only

Mode	Resolution	Pass	Print speed（m²/h）	Print time per table	Productivity per hour* (A4 sheets)
Draft	600x600	8	2,48	3m03s	Approx. 38 sheets
High speed	600x900	12	1,62	4m40s	Approx. 24 sheets
Standard	600x1200	16	1,22	6m12s	Approx. 18 sheets
High quality	1200x1200	16	0,89	8m27s	Approx. 14 sheets

2. Color + Special colors (2-layer simultaneous print)

Mode	Resolution	Pass	Print speed（m²/h）	Print time per table	Productivity per hour* (A4 sheets)
Draft	600x600	8	2,08	3m38s	Approx. 32 sheets
High speed	600x900	12	1,44	5m14s	Approx. 22 sheets
Standard	600x1200	16	1,12	6m46s	Approx. 16 sheets
High quality	1200x1200	16	0,69	10m55s	Approx. 10 sheets

3. Color + White high density mode (2-layer simultaneous print)

Mode	Resolution	Pass	Print speed（m²/h）	Print time per table	Productivity per hour* (A4 sheets)
Draft	600x600	8	1,88	4m01s	Approx. 28 sheets
High speed	600x900	12	1,33	5m40s	Approx. 20 sheets
Standard	600x1200	16	1,03	7m21s	Approx. 16 sheets
High quality	1200x1200	16	0,62	12m14s	Approx. 8 sheets

* Excluded the time for placing materials and the printer movement before/after print.

1. The print modes shown in this document are the performance of the printer itself.
2. The profiles are created selectively depending on the media type.
3. When the profile is not available, use MPM3 to create the profile for the media.

Printing speeds: UJF-6042MkII e

1. Color only

Mode	Resolution	Pass	Print speed（m²/h）	Print time per table	Productivity per hour (A4 sheets)
Draft	600x600	8	3,52	4m22s	Approx. 52 sheets
High speed	600x900	12	2,29	6m42s	Approx. 32 sheets
Standard	600x1200	16	1,74	8m51s	Approx. 24 sheets
High quality	1200x1200	16	1,28	11m59s	Approx. 20 sheets

2. Color + Special colors (2-layer simultaneous print)

Mode	Resolution	Pass	Print speed（m²/h）	Print time per table	Productivity per hour (A4 sheets)
Draft	600x600	8	2,99	5m08s	Approx. 44 sheets
High speed	600x900	12	2,06	7m28s	Approx. 32 sheets
Standard	600x1200	16	1,57	9m46s	Approx. 24 sheets
High quality	1200x1200	16	0,96	15m57s	Approx. 12 sheets

3. Color + White high density mode (2-layer simultaneous print)

Mode	Resolution	Pass	Print speed（m²/h）	Print time per table	Productivity per hour (A4 sheets)
Draft	600x600	8	2,75	5m36s	Approx. 40 sheets
High speed	600x900	12	1,86	8m11s	Approx. 28 sheets
Standard	600x1200	16	1,44	10m36s	Approx. 20 sheets
High quality	1200x1200	16	0,85	18m09s	Approx. 12 sheets

* Excluded the time for placing materials and the printer movement before/after print.

1. The print modes shown in this document are the performance of the printer itself.
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Improved Functionality: IOT Ready

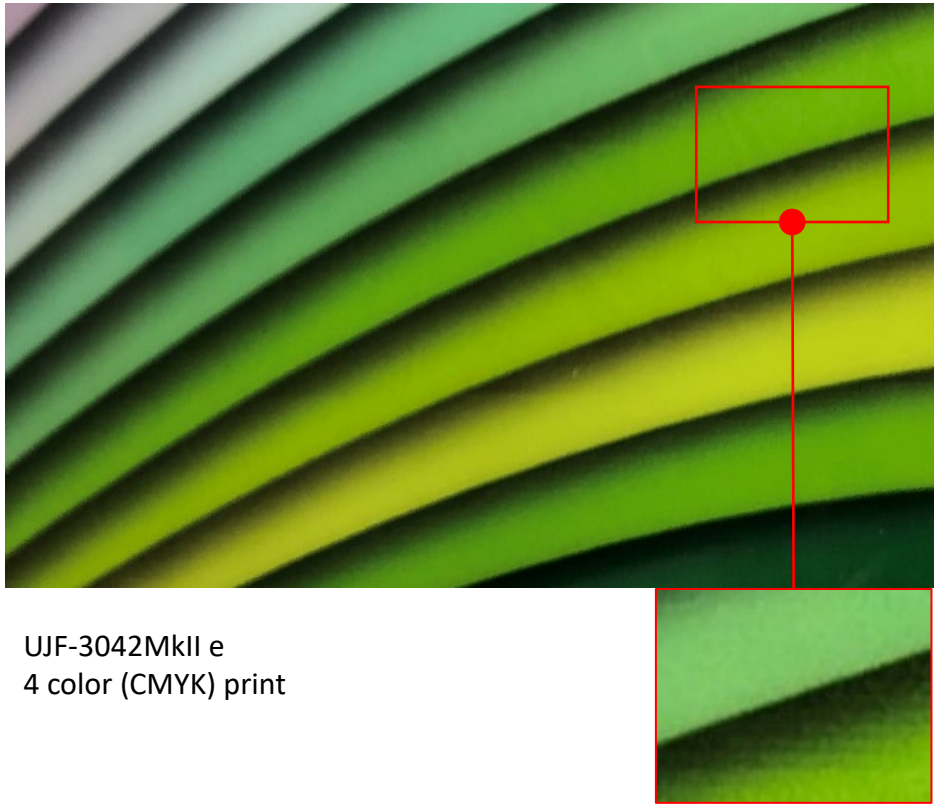
- Easy integration with IOT ready automation systems on production floor
  - MDL commands*1 are used to embed Mimaki printers with the unattended on-demand production lines from customer production systems and peripheral equipment
  - Utilization of the MDL commands control printer operation, including commencing print production and adjusting the position and height of the print substrate table
  - It also provides the information on remaining ink amounts and errors from the printer side



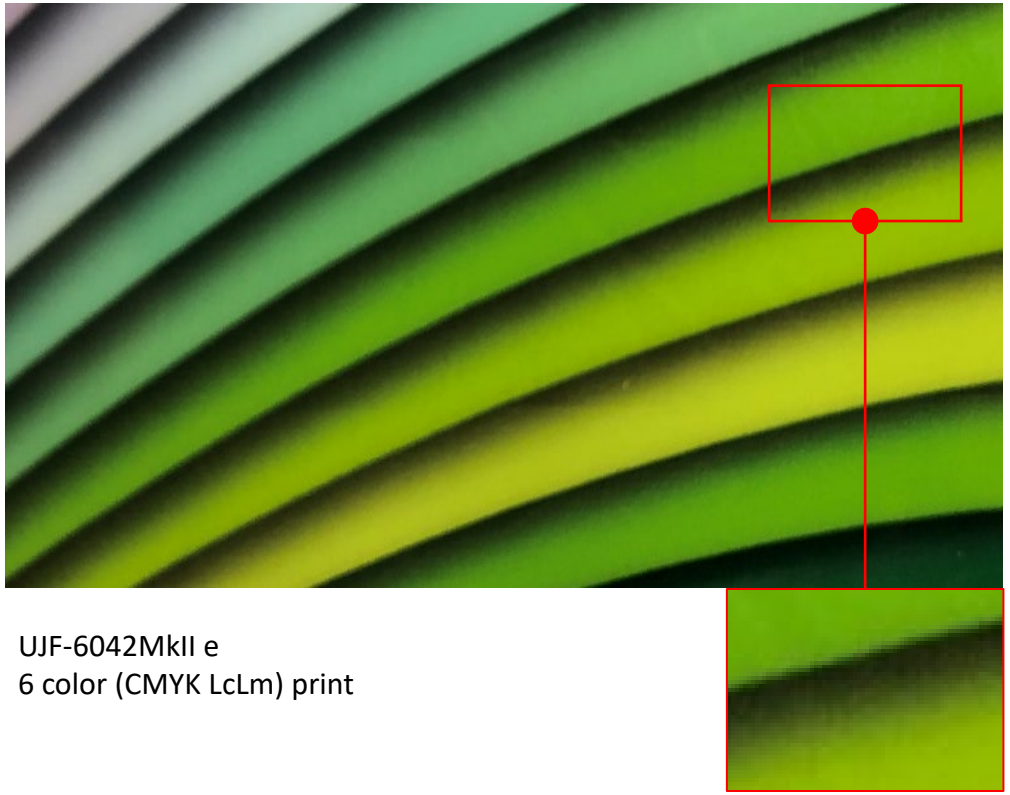
*1: MDL Command is part of SDK Kit for system integrators available for download on Mimaki website

Improved image quality: additional light colors

- UJF-6042MkII e provides smooth image expression with additional Light Cyan and Light Magenta inks.
- Better reproducibility of neutral color by light inks.



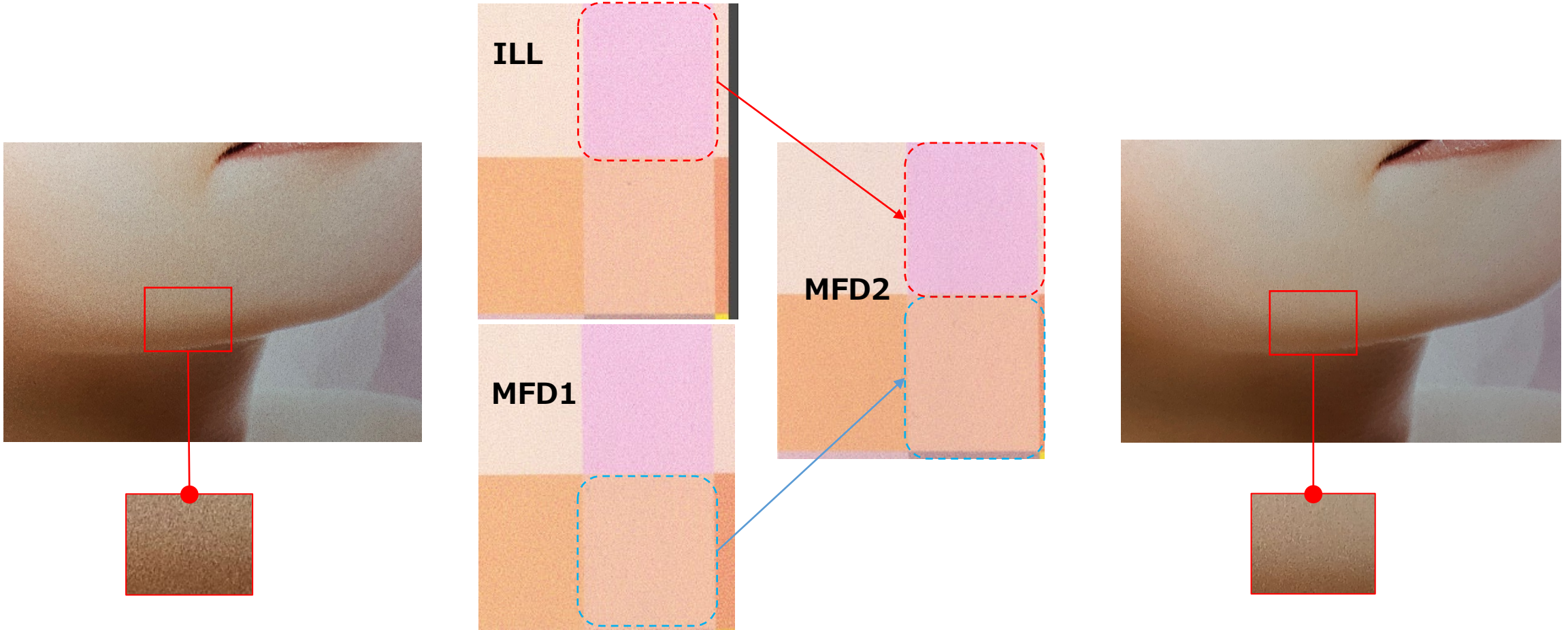
UJF-3042MkII e
4 color (CMYK) print



UJF-6042MkII e
6 color (CMYK LcLm) print

Improved image quality control: Noise cancelation MFD2

- Mimaki Fine Diffusion 2 (*MFD2*) is a new image processing technique that reduces the noise generated in image data during image processing.
- Comparison of different noise reducing technologies shows that MFD2 delivers a much better print results without tone jumps or uneven colors.



New Advanced Printing Software: RasterLink7

- NEW functions in RasterLink7
  - **Variable Data Print** is function that streamlines the production of customized print runs
  - **New Harlequin RIP® Core** for accurate PDF printing with Transparency
  - **Faster PDF** processing with **up to 25%** faster PDF rendering time
  - **New User Interface** that maximizes the screen efficiency
  - **Calibration Tool** for measuring and easily correction of color differences with a colorimeter*
  - **Jig BarCode** function triggers automatic jig printing by scanning a barcode of a specific jig

- Trusted RIP software for Mimaki wide format printers
  - Comes in the box with the printer
  - Easy migration of data from previous version the RasterLink6plus

- Easy to use
  - Simple resizing, cropping, nesting or tailing
  - Easy workflow operation, even for beginners
  - 30 favorite print presets as Hot Folders
  - Up to 4 printers can be controlled from a single PC

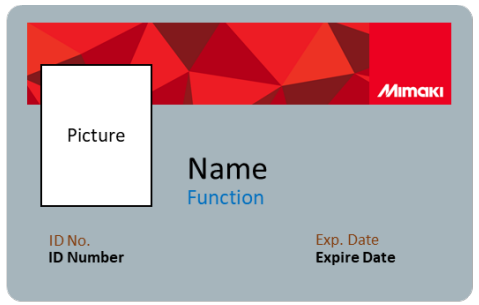
- Professional print quality
  - Smooth gradation with 16-bit rendering
  - Ability to print White, Metallic or Clear inks
  - True PANTONE® Spot Color matching and replacing
  - Accurate ink consumption calculation



*Colorimeter must be prepared by the customer

RasterLink7: Variable Data Print

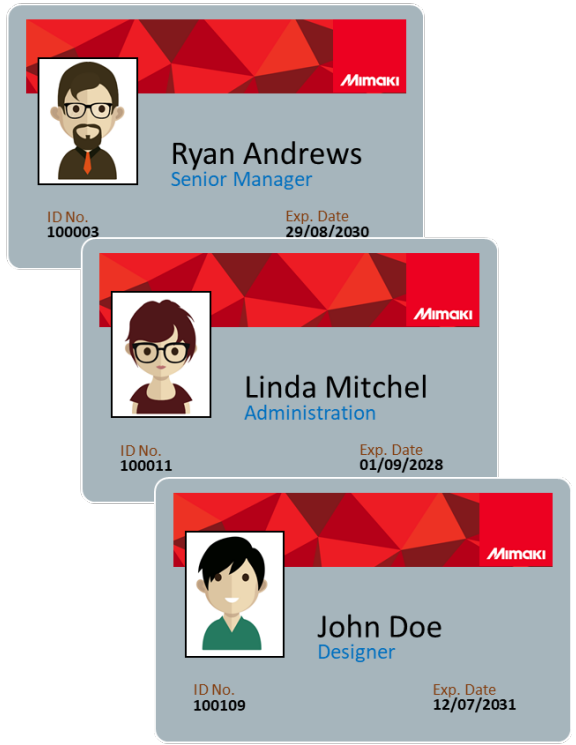
- Variable data printing function in RasterLink7 allows the merging of prepared files in CSV format with up to one thousand lines into predefined design templates.
- The dynamic printing of various applications, such as ID cards, labels, machine plates, and others, is simple as they are done on the go.



DESIGN TEMPLATE

CSV FILE

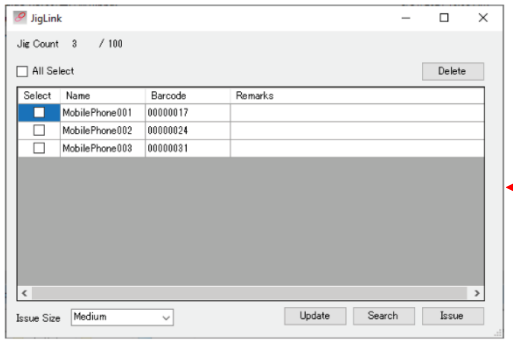
	A	B	C	D	E
1	Name	Function	ID Number	Expire Date	Picture
2	Ryan Andrews	Senior Manager	100003	29/08/2030	C:\pictures\RyanA.jpg
3	Linda Mitchel	Administration	100011	01/09/2028	C:\pictures\LindaM.jpg
4	John Doe	Designer	100109	12/07/2031	C:\pictures\JohnD.jpg
5					
6					
7					
8					



VARIABLE PRINT

RasterLink7: Jig BarCode

- Jig printing is automatically triggered by scanning* a barcode of a specific jig.
- Prevents incorrect jig placement during printing.
- Speeds up the printing process and eliminates waste costs.

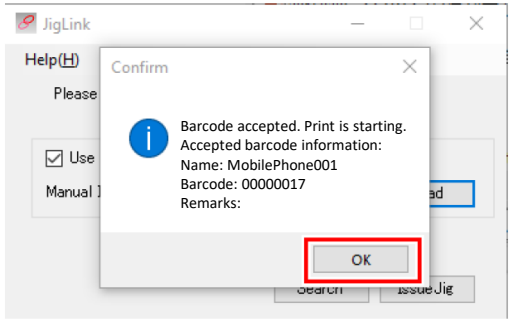


JigLink





Raster Link 7

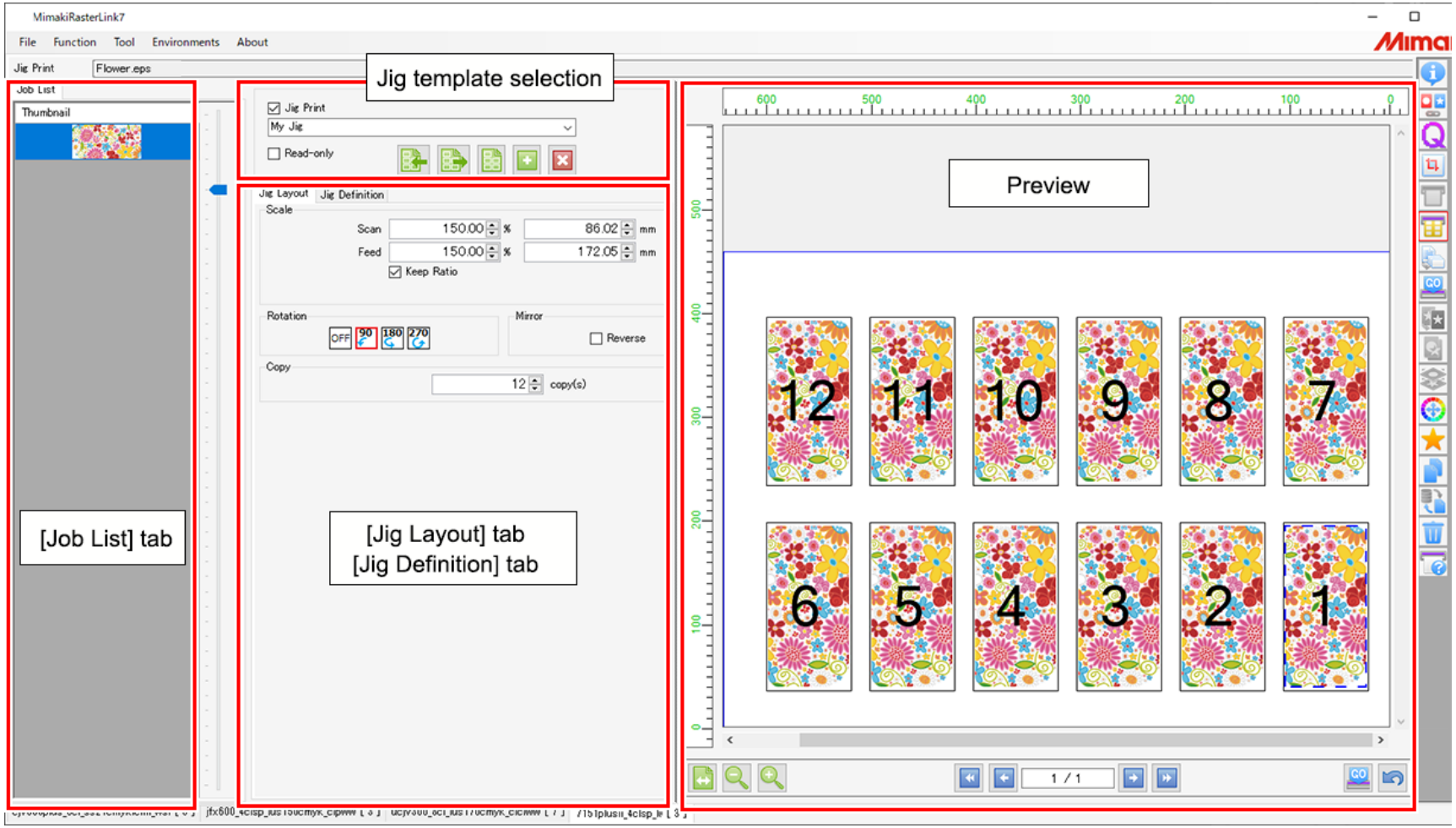




*: Barcode reader must be prepared by the customer

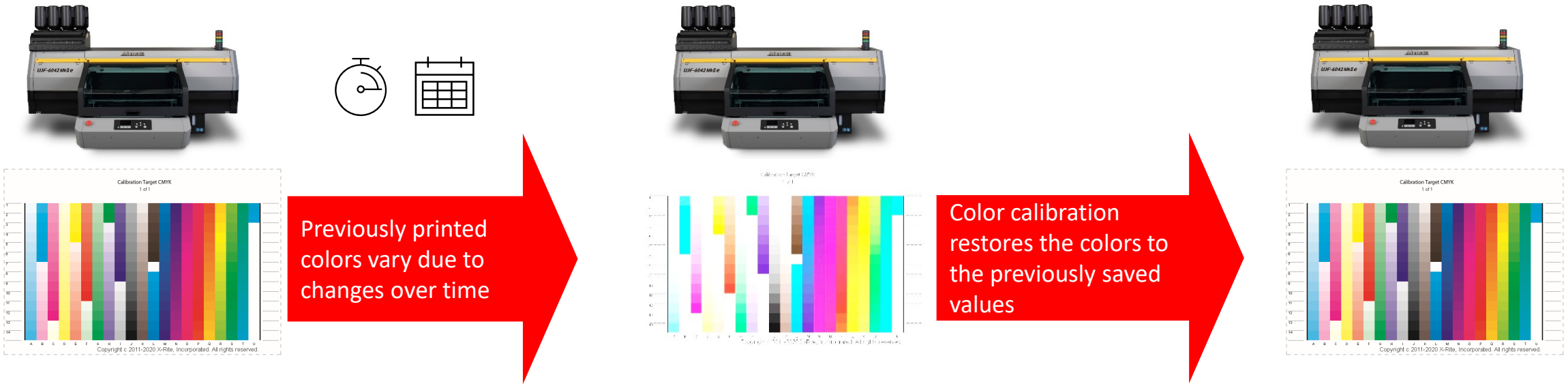
RasterLink7: Jig creation

- The Jig Print feature provides an easy way to design and to print jig templates.
- It provides consistent print quality on identical objects that can be placed in a structured manner.
- This function is very useful and practical when larger series of the same object must be printed.



RasterLink7: Color Calibration

- Maintaining consistent color output from the printer*1.
- Printer color consistency can be maintained by measuring color differences with a colorimeter*2.
- The detected color differences are easily corrected to the specified values.



Raster Link 7 Color Calibration Tool

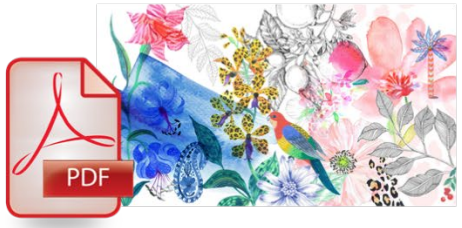
*1: It is necessary to measure color chart at the time of installation
*2: Colorimeter must be prepared by the customer

RasterLink7: PDF 2.0 Native Support

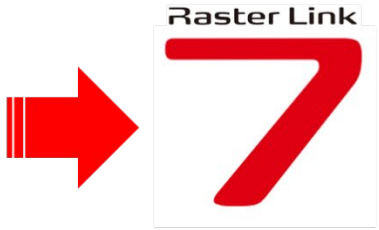
- The Harlequin RIP® Core has been implemented for showing correct previews of PDF colors dynamically and proceeds the PDF's faster than earlier versions.
- RasterLink7 supports all the features of the new PDF 2.0 standard that are relevant for production printing.
- It automatically detects when a PDF file contains any transparency and generates a correct print result, speeding up production time and reducing waste media.



TRANSPARENCY



GRADATIONS

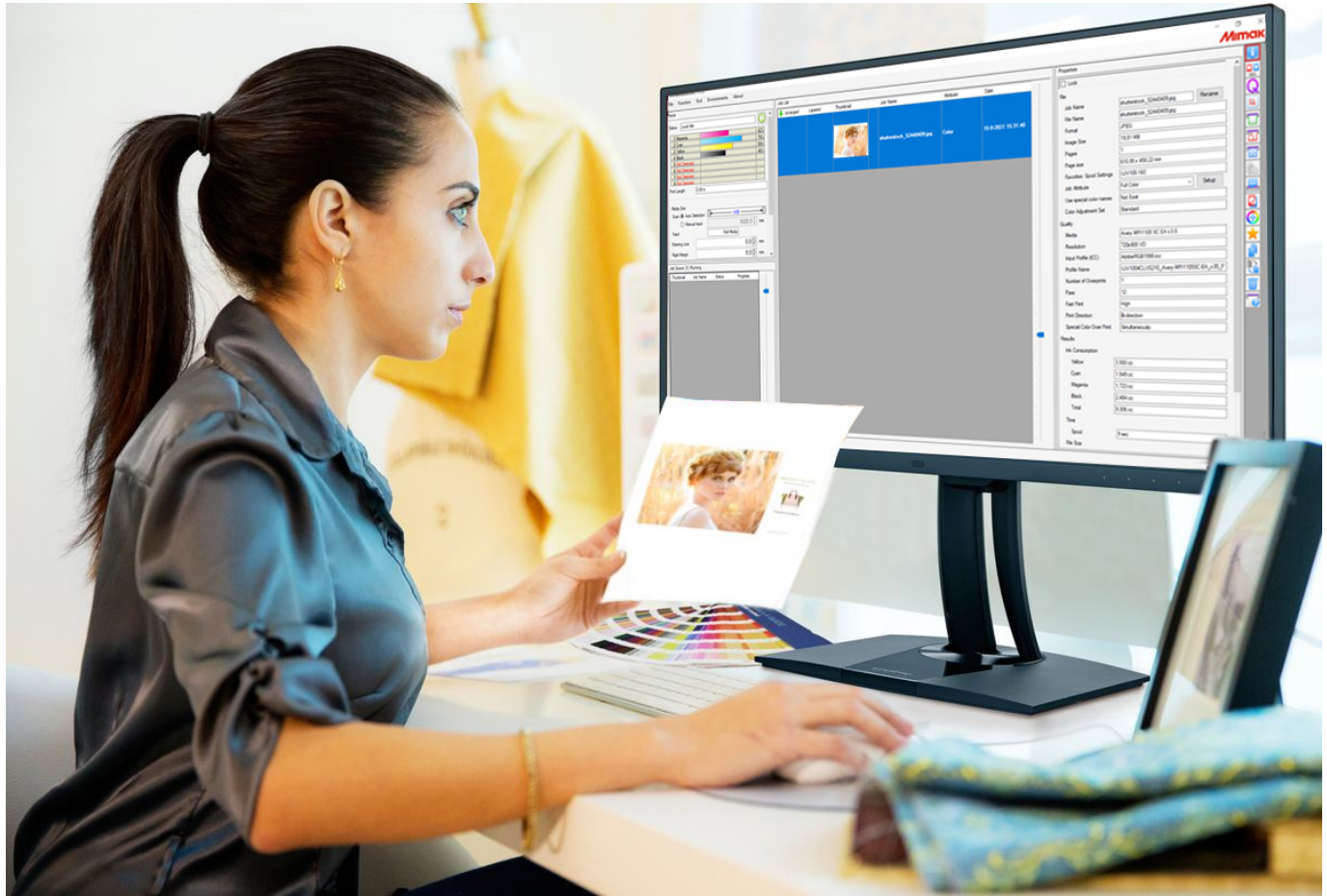






RasterLink7: Optimized User Screen

- The main screen offers now more available space to the user and provides easy navigation and functionality for all your print and job management tasks.
- The refreshed user interface offers a clean and simple look with a smart overview of all functions, printer status, print jobs, and a set of icon tools on one single screen.



Special features: White UV-LED ink

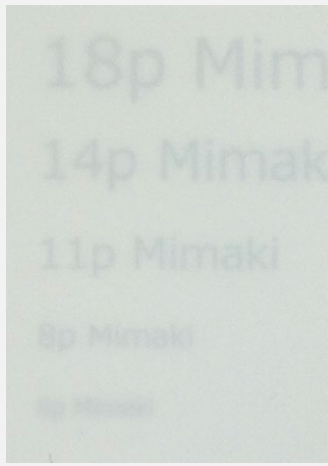
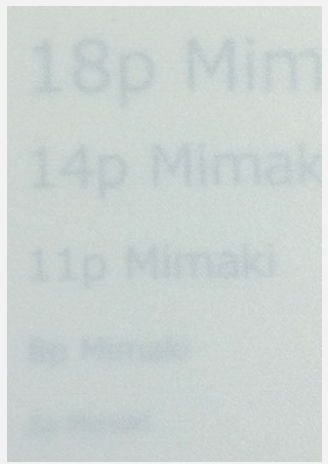
- White ink
  - Higher white opacity with maximum 2 white ink channels
  - White ink is suitable to use as background for printing on transparent and colored materials





Special features: High density white ink

- UJF-MkII e-printers can print white ink at a higher density than the competition.
- The white ink layer is opaquer, allowing brighter and more vibrant colors on top of the white layer.
- The high degree of white ink coverage is achieved by the high-density white print mode in RasterLink7.

Original image	Competitor 1	Competitor 2	Mimaki LH-100	Mimaki LUS-120
				
Transparency level (lower is better)	59%	74%	48%	50%

Print condition:
UJF-6042MkII e: 600 x 600dpi 8p 100%
Media: HK33-WF (transparent PET)
Transmittance measurement: X-rite 341C

Special features: Clear UV-LED ink

- Highlight specific print areas and increase application versatility
  - Adds value to products
  - “Glossy finish” adds shiny effects to high-quality designs
  - “Matte finish” enhances the texture printing
  - “Embossed texture print” expresses the 3D effect by printing clear ink in multiple layers



Special features: ARTISTA Texture Library

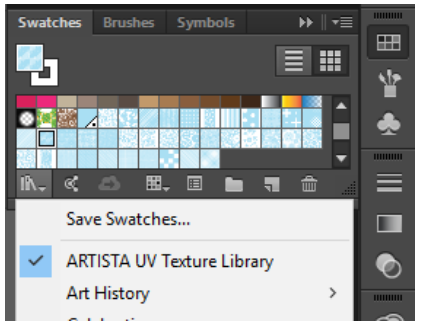
- ARTISTA Texture Library offers 129 predefined swatch patterns for Adobe Illustrator*.
- 3D texture can be easy designed in Illustrator and printed with clear liquid to the material.
- Choice from 3 different pattern groups: BASIC, ARTISTIC and MODERN.

BASIC: 44 different types of basic designed texture patterns

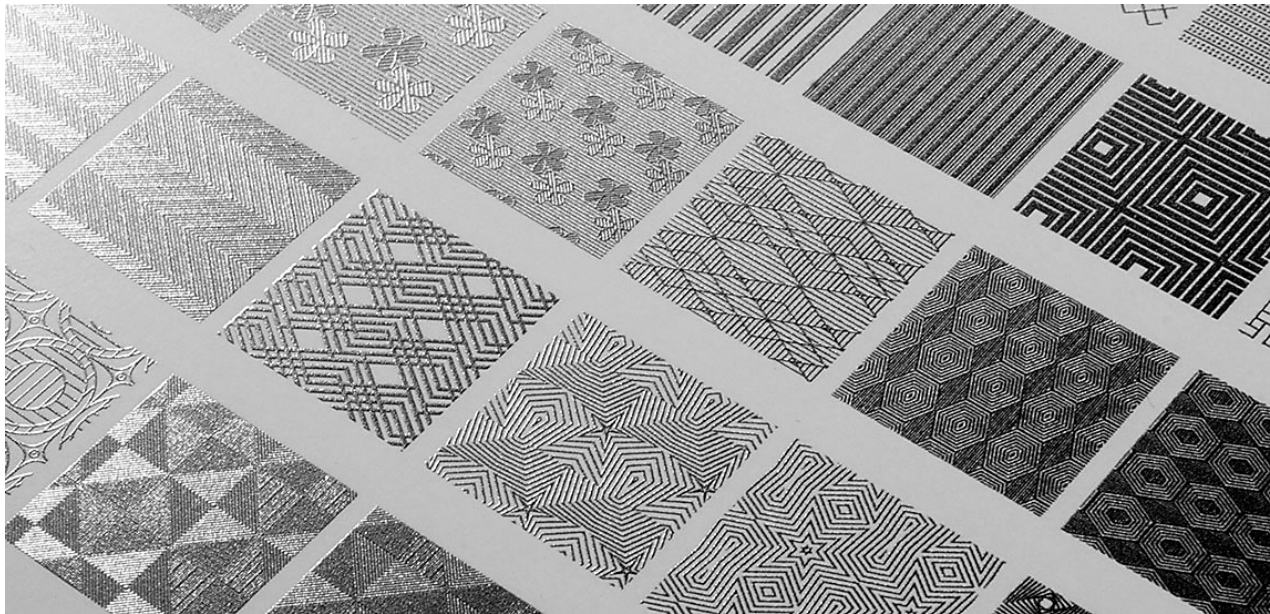
ARTISTIC: 45 different types of patterns with floral or symbolic textured design

MODERN: 40 different types of patterns with modern textured design

- **The ARTISTA Texture Library is located in C:\MijSuite\Swatch\Illustrator**
- **Simply add to Adobe Illustrator by copy and paste it to Adobe Illustrator Preset\Swatch folder**







* ARTISTA Texture Library requires Adobe Illustrator ver. CS or higher

Special features: UV-LED primer

- Printable Primer PR-200
  - Printable PR-200 improves the adhesion, when printing with color inks does not give sufficient adhesion
  - Primer can be applied just on the area where it is needed
  - Effective and economical use of primer retains look and feel of the media

Applying the primer only at area it is needed

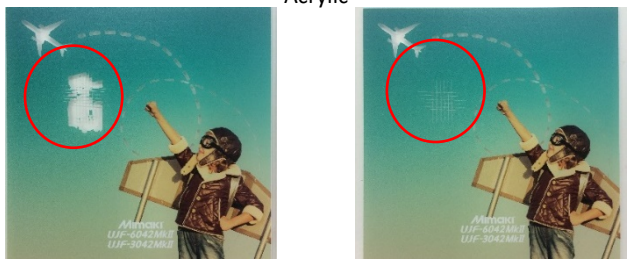
Full color printing

Original texture of material surface remains the same



Comparison of adhesion with/without PR-200

Acrylic



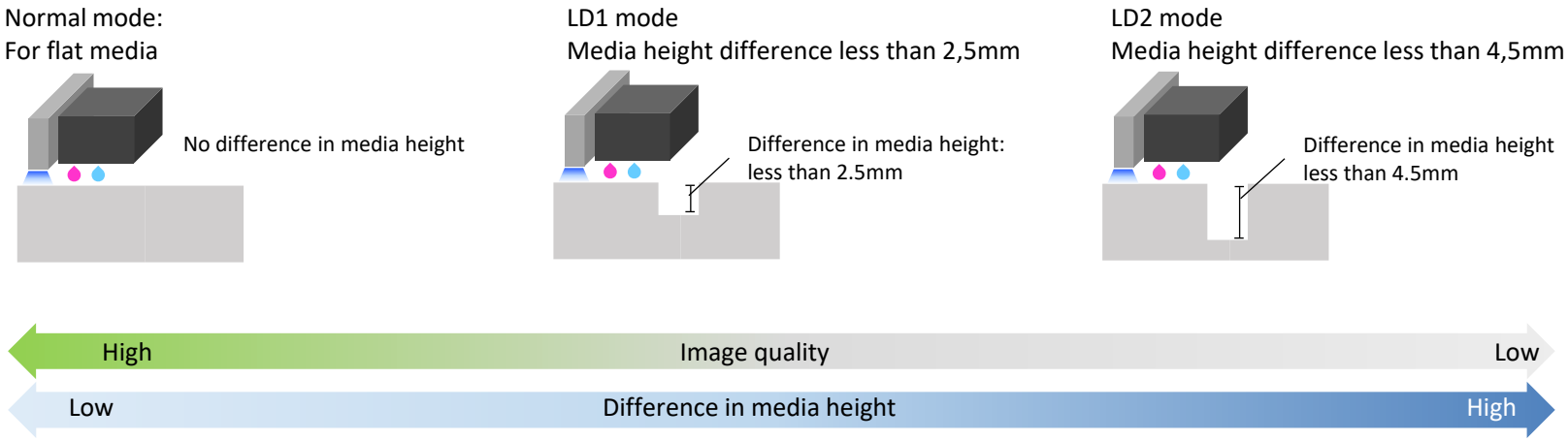
Without PR-200
(White + color only)

With PR-200
(PR-200 + white + color)

Inkjet primer is Mimaki's patented technology
Patent number:
- Japan: 5817059
- USA: US9,132,685 B2

Image quality control: LD mode

- LD mode is a print mode suited to print on media with surface height difference less than 4,5mm.
- In addition to the normal mode, 2 different LD modes are available, LD1 and LD2*.



Notices about LD mode:

1. LD mode works with LH-100/LUS-120 inks only
2. It is not recommended to print clear ink and primer in LD mode
3. Print quality and nozzles stability might become worse if printing on material with height difference higher than 4,5mm
4. LD mode might produce more ink mist compared to normal print mode; therefore, the head surface cleaning is mandatory after printing in LD mode
5. Check print result and nozzle condition on reflective and mirroring media in advance. There is more UV light reflection when printing with higher head gap.
6. Stop using the LD mode if nozzle instability occurs
7. Use the option ionizer unit (OPT-J0414/OPT-J0415) to improve print stability when printing in LD mode

* LD2 mode is available only in resolution 600x600dpi

Image quality control: LD mode

- UJF-3042MkII e print speed in LD mode

Print condition	Print mode	Resolution	Pass	Print speed（m²/h）	Print time per table
Color only	Draft	600x600	8	1,82	4m9s
	Standard	600x1200	16	0,88	8m34s
Color + W	Draft	600x600	8	1,54	4m55s
	Standard	600x1200	16	0,84	8m57s

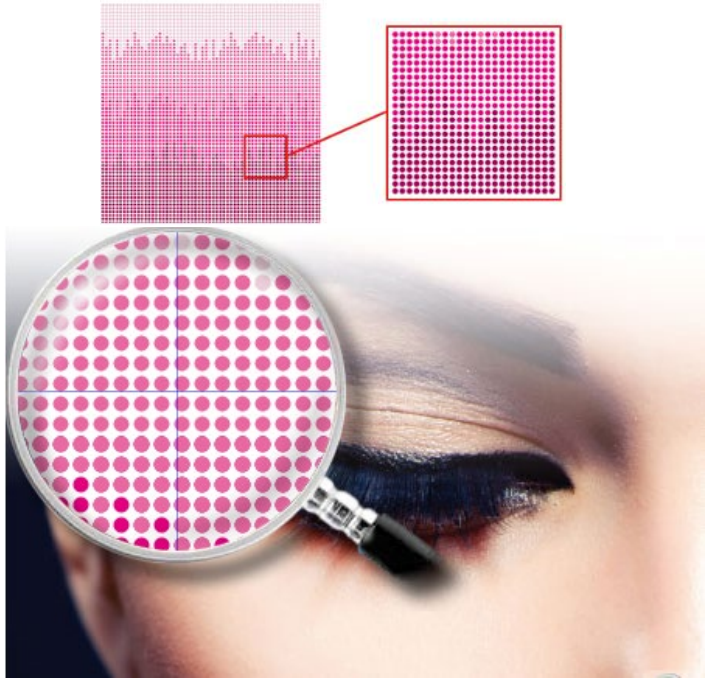
- UJF-6042MkII e print speed in LD mode

Print condition	Print mode	Resolution	Pass	Print speed（m²/h）	Print time per table
Color only	Draft	600x600	8	**2,63**	5m51s
	Standard	600x1200	16	**1,28**	12m2s
Color + W	Draft	600x600	6	**2,13**	7m13s
	Standard	600x1200	16	**1,17**	13m9s

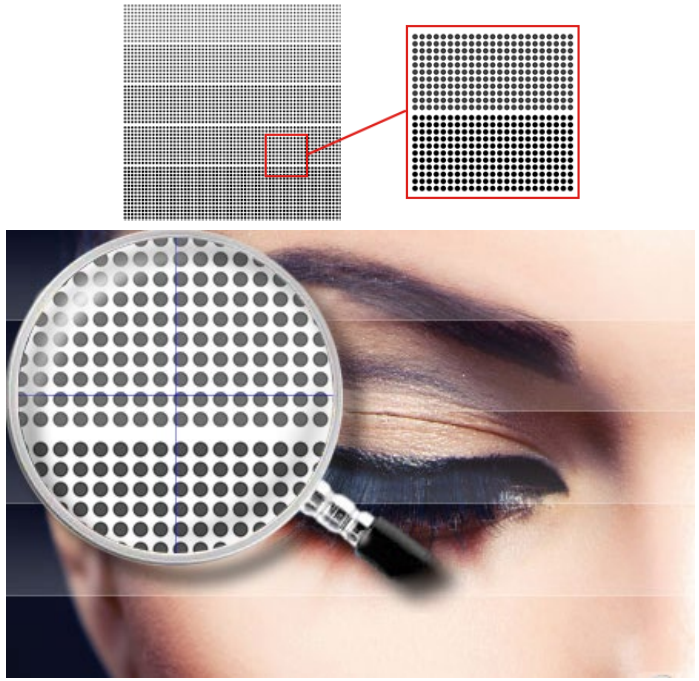
Image quality control: MAPS4

- Mimaki Advanced Pass System (*MAPS4*) for printing without banding
  - The potential for banding and uneven color is greatly reduced with 4th generation of Mimaki's Advanced Pass System, the MAPS4
  - MAPS4 incorporates an advanced algorithm for printing boundaries between passes producing a quality prints with a uniform appearance

With MAPS4
Smooth and invisible boundaries between passes



Without MAPS
Visible boundaries between passes



This function may reduce the printing speed.
The result may vary depending on the media and image data. If the result is not satisfying, use another method such as increasing the number of passes.

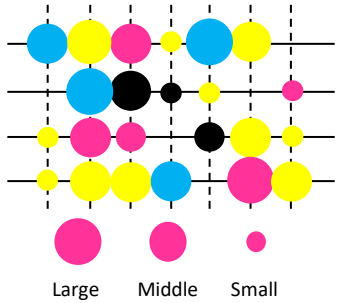
Image quality control: Variable dots

- Variable dots: Grainy appearance reduction system
  - To reduce a grainy appearance, the 3 most optimum drop sizes are automatically selected, depending on the print mode
  - Variable Dot Printing uses smaller drops to produce smoother gradations and bigger drops create uniform solid colors
  - Grainy appearance is also reduced by using the 1800dpi high resolution print mode available for high quality printing



Variable dots





Normal dots



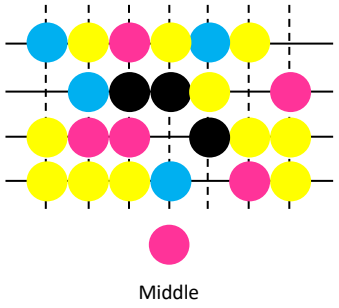
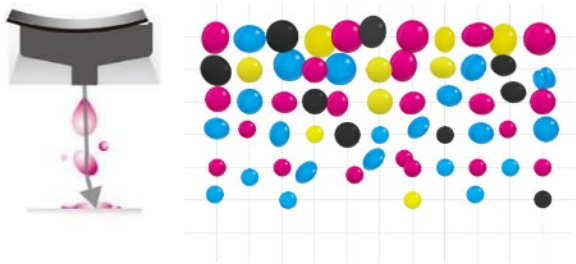


Image quality control: Waveform control

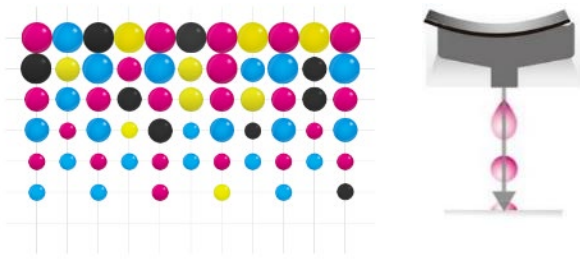
- Waveform control to achieve precise placement of ink droplets
  - The dots are optimized by tuning the frequency depending on ink's viscosity to accurately place and shape individual ink droplets
  - This results in sharper lines, text and image

No waveform control
Ink droplets jetted in as deformed circles





With waveform control
Ink droplets are jetted in as nearly perfect circles



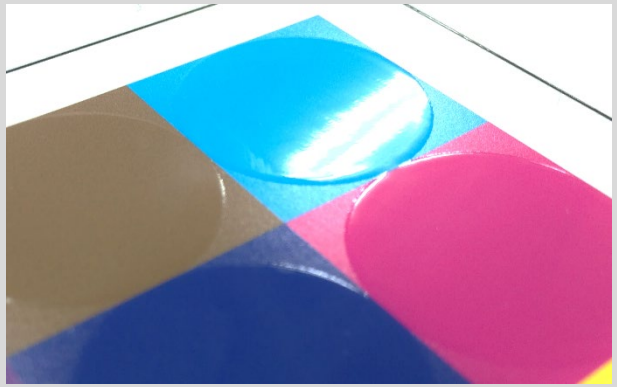
Ink dots overlap
↓
Grainy appearance with blurred edge

High accuracy dot placement
↓
Sharp finish without grainy appearance

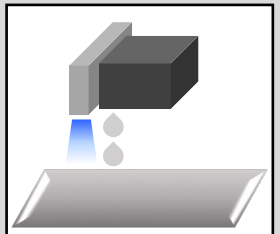
Image quality control: MCC

- Mimaki Clear Control (MCC) enables beautiful clear ink printing.
- Image quality control and less dust attachment by MCC enhances the quality of glossy prints.

Printed with MMC

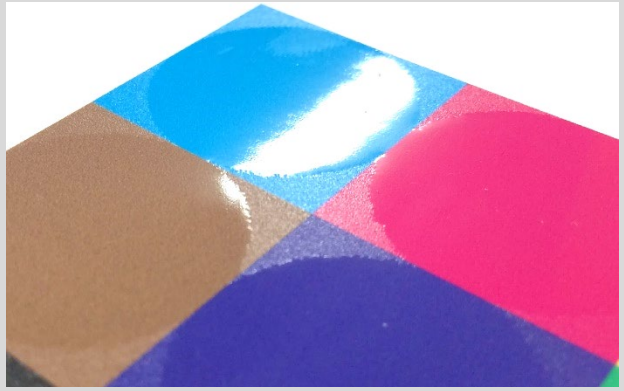


Clear glossy is printed and cured at same time

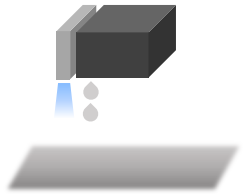


Clear glossy printing and curing at same time

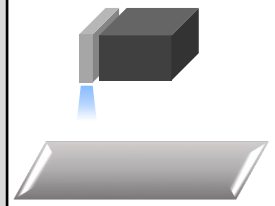
Printed without MMC



Clear glossy print requires 2-steps



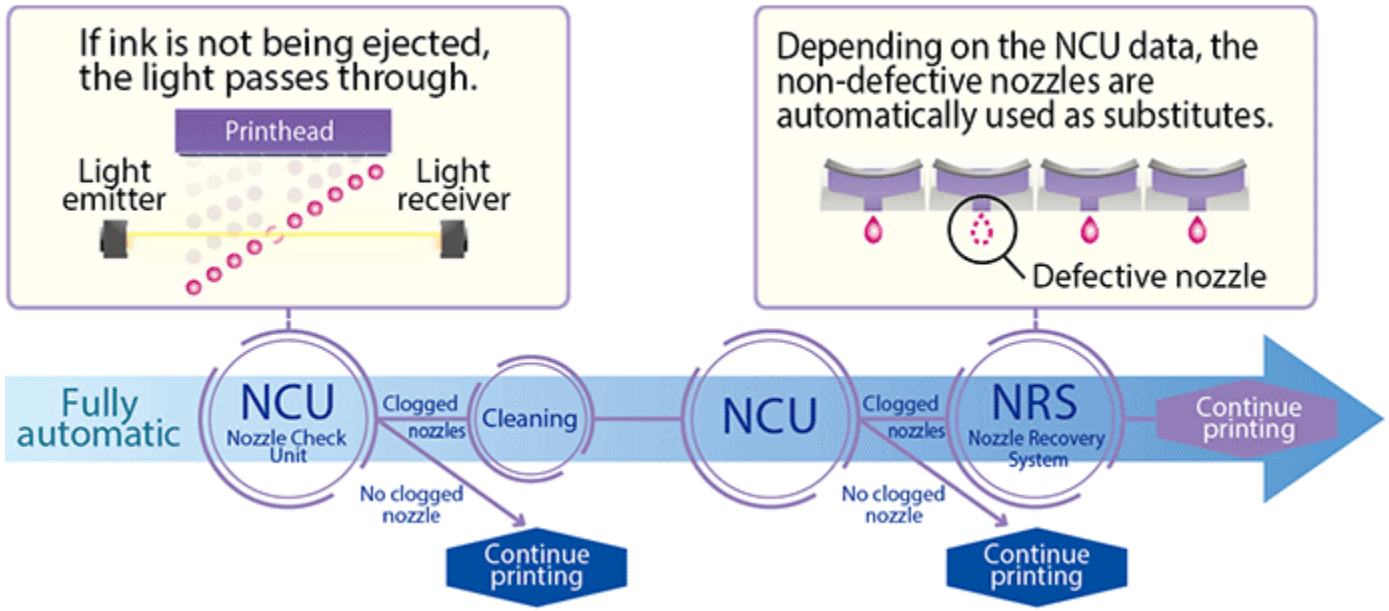
1. Print clear ink with temporal curing



2. Apply final UV curing

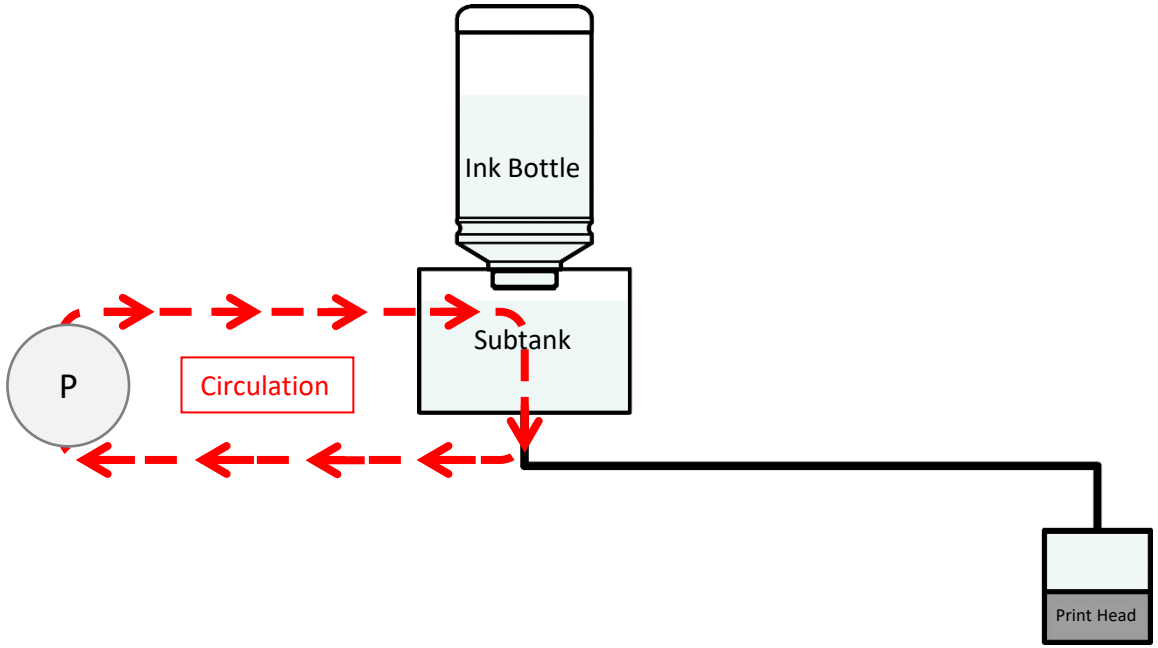
Stability enhancement: NCU and NRS

- Automatic maintenance for uninterrupted printing
  - The Nozzle Check Unit (*NCU*) detects and cleans clogged nozzles automatically.
  - If clogging is not resolved after cleaning, the Nozzle Recovery System (*NRS*) selects substitute nozzles to continue the printing operation.
  - These functions allow the printer to maintain productivity until a technician arrives.
  - Requires less checking time and less media waste, compared to competitors.

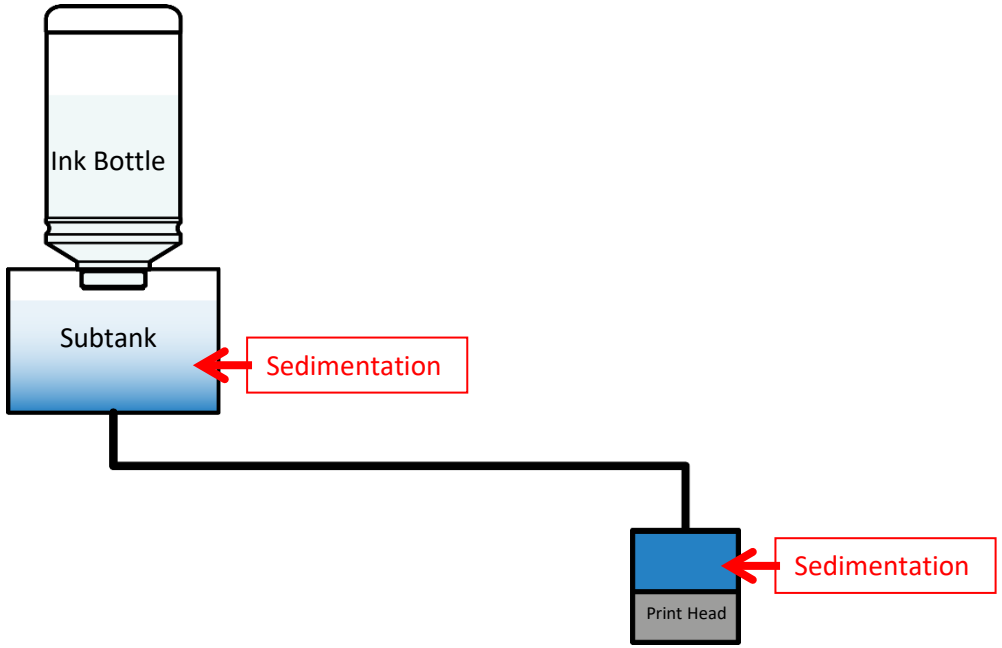


Stability enhancement: White Ink circulation system

- White ink circulation for continuous ink stability
  - Prevents pigment sedimentation by periodically circulating the white ink in the subtank
  - The white ink circulation feature accomplishes stable production and reduction of ink discharge and waste



Ink supply UJF-MkII e series: White ink circulation system



Genuine ink supply: No white ink circulation system

Safety operation: Full front cover

- Full cover protection
  - The cover prevents the dust influence to print quality
  - Safeguard for the operator





Efficient media setting

- Table spacer system for easy attachment of table and media jigs.
- Allows precisely print on objects of different thickness.

Object thickness	Used number of spacer
～53mm	2
50～103mm	1
100～153mm	0



Table spacer



When table spacer is being used

Efficient and safe operation

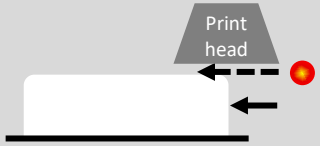
- Gap check sensor
  - Improved gap check sensor detects the media with laser beam.
  - It detects even transparent materials*1

Conventional machines



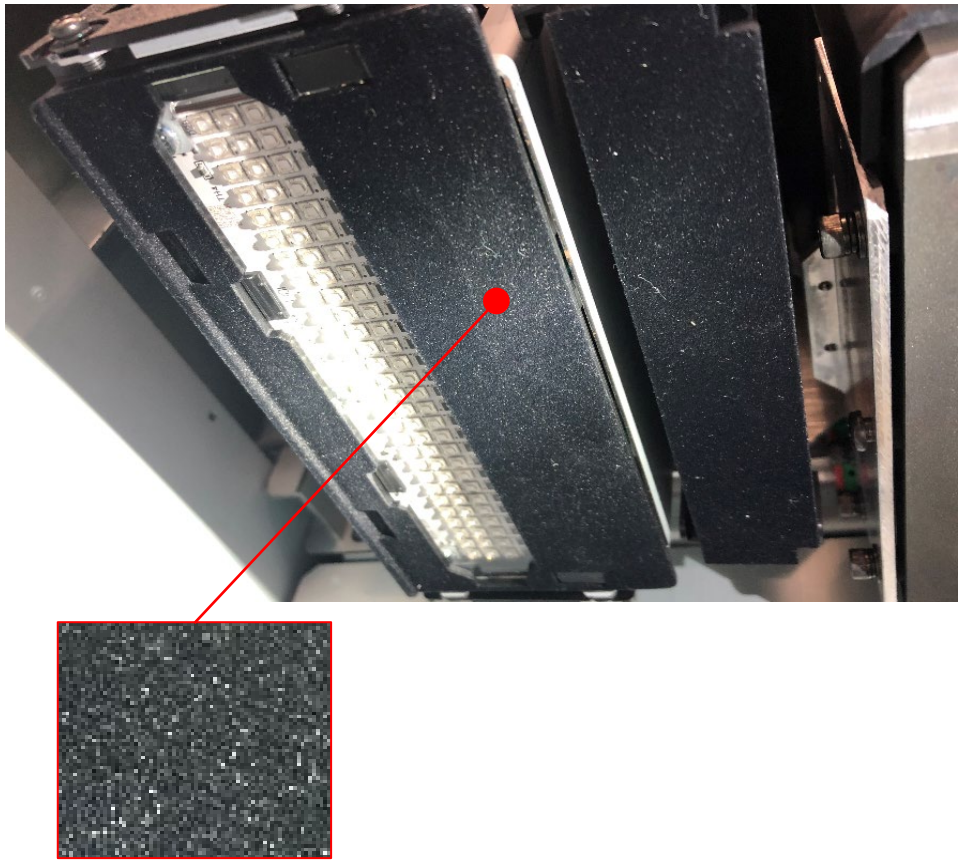
If the media is transparent, the gap check sensor could not detect it properly.
It sometimes causes the print head to crash into the media.

UJF-3042MkII e/ and UJF-6042MkII e



The new laser sensor detects even the transparent media and it prevents print heads from crashing into materials

- UV LED with reflective light protection
  - A special brushed matte coating is applied around the lamp to prevent reflection of UV light and improve print stability

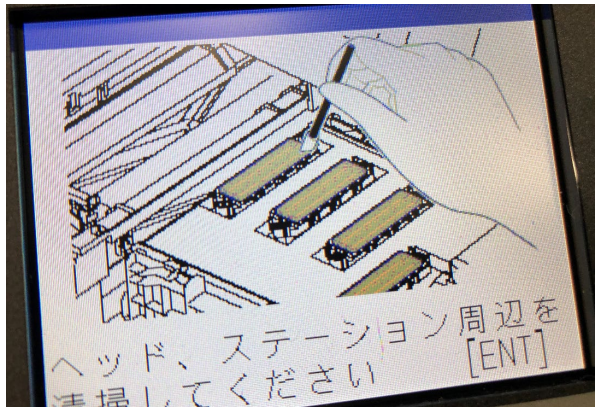


* 1 Depending on the shape and the size of material, detection error might occur.

Improved operation: advanced operation panel

- Full-color LCD display
  - UJF-MkII e series feature a color LCD display panel that shows the printer's status at a glance
  - Operation panel of 3.45inch (52.56 x 70.08mm) full-color display
  - The revised display content shows even more useful information than the previous MkII model, while improving the efficiency of operation and use
- Status LED
  - Blinking in blue: Normal operation
  - Blinking in red: Attention needed
- Available languages
  - English
  - Japanese



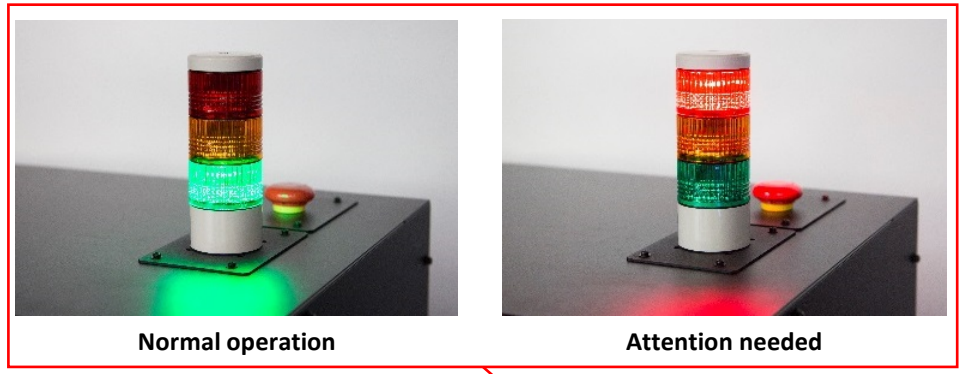




Emergency switches and lamp

- Status indication lamp*1 at right-top of the machine shows the basic printer status

- Emergency switches*1 are located at the left of control panel and behind the status indication lamp

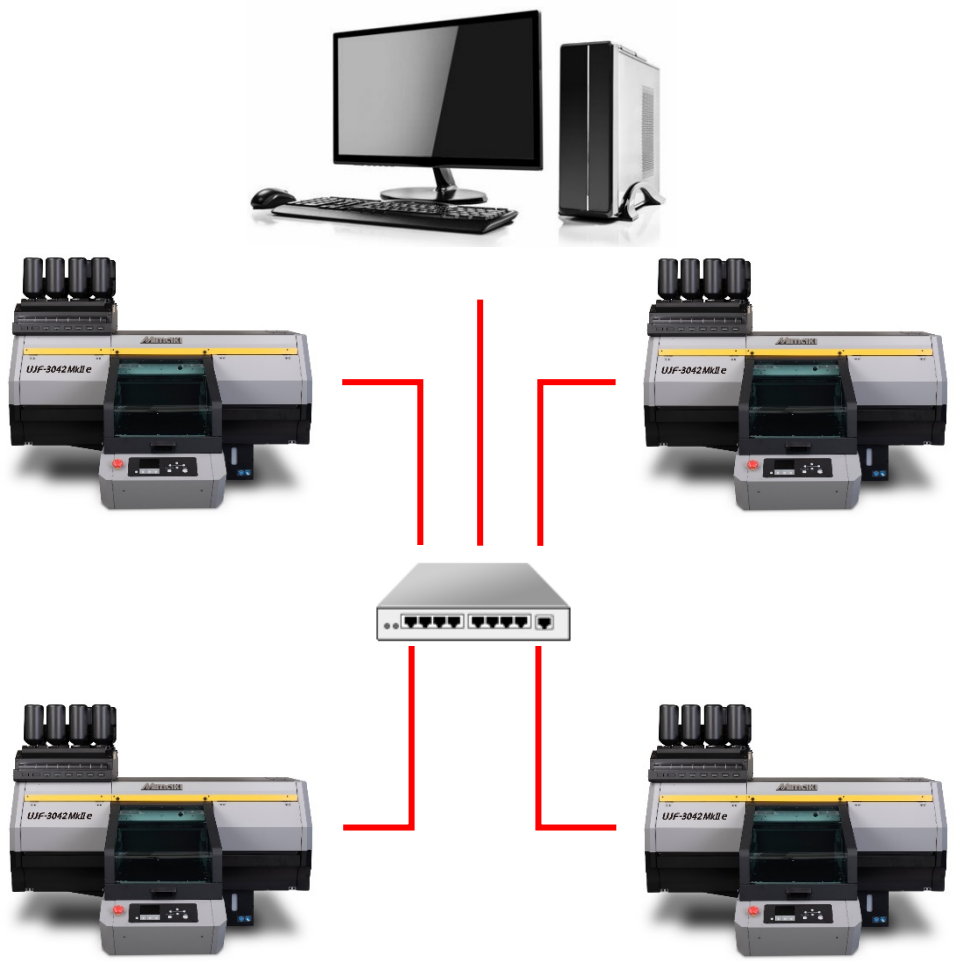




*1 Emergency switches and status indication lamp are Standard equipment for UJF-6042MkII e
For UJF-3042MkII e, these are available as an option with the item code OPT-J0423

Ethernet connection

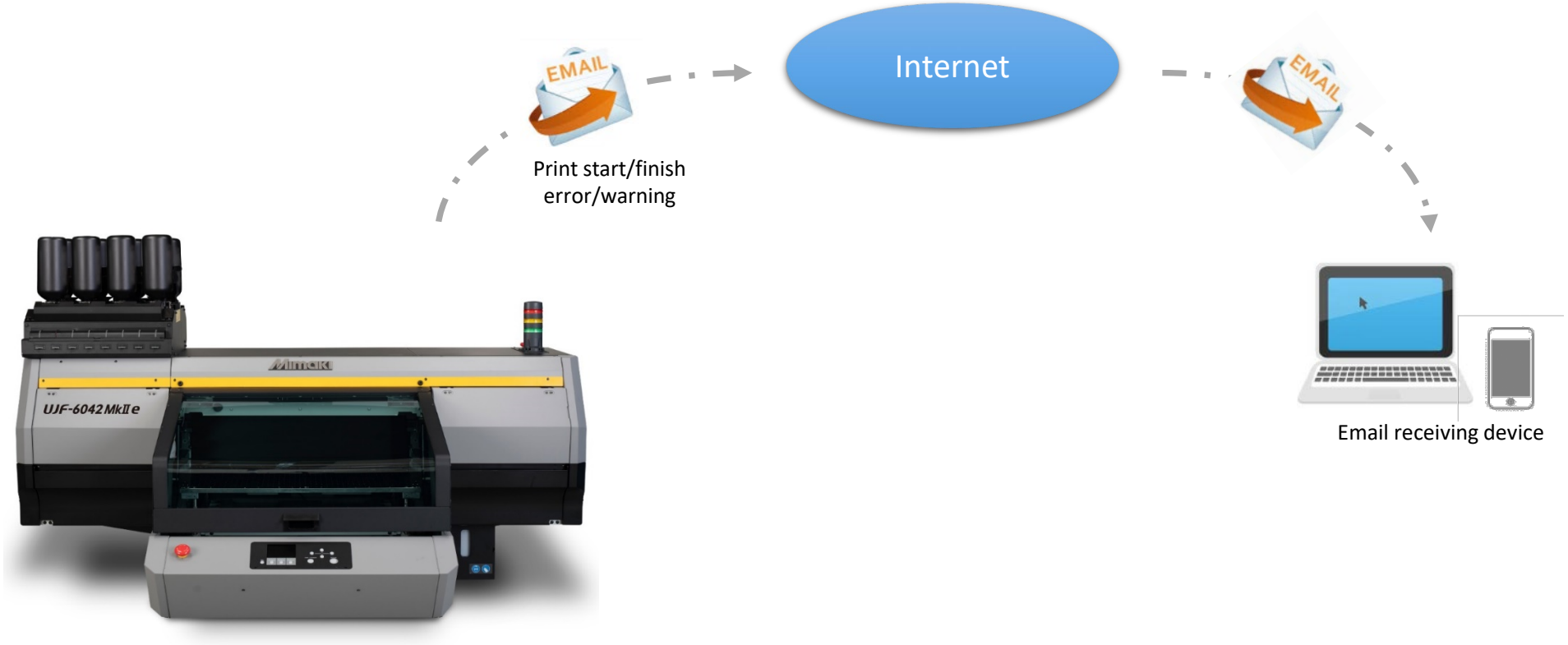
- Ethernet
  - In addition to the USB2.0 connection, an Ethernet connection is also available on the UJF-3042MkII e/6042MkII e
  - It provides convenience by allowing to connect several printers with only one computer
  - Installation is just done by plugging cables into the network



*Please use CAT6 network cables
*Connecting by a relaying router is not supported
*When using Ethernet, please connect the printer and RIP PC in the same network
*When using a switching hub, please use a 1000BASE-T supported model
*RL7 can support maximum 4 printers.
*Waiting for data can occur, depending on the condition of the network

Event mail

- Event mail
  - Status of the printer can be sent from the printer to a PC or mobile phone via the Internet
  - For remote status indication of the printer



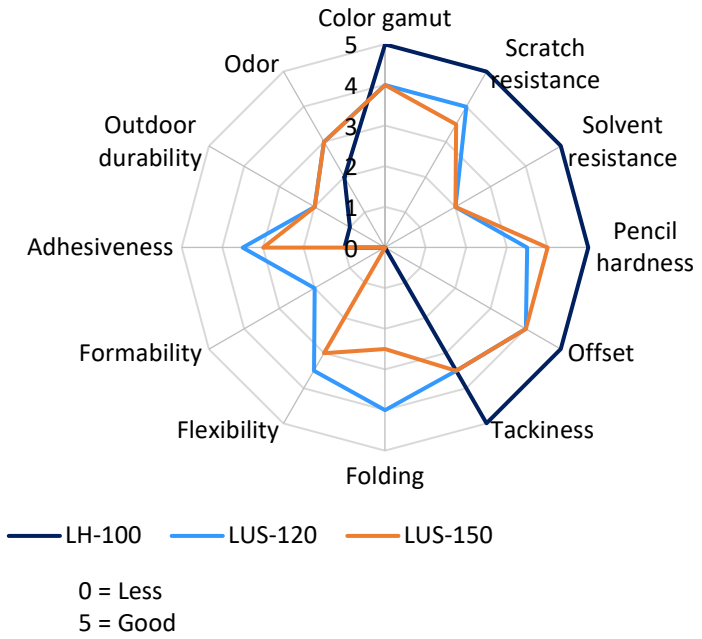
Ink supply system

- MBIS Mimaki Bulk Ink System
  - All bottles fit into a Mimaki Bulk Ink System (MBIS) for efficient change-out when empty.
  - The choice between 250ml or 1-Ltr bottles also ensures customers can better manage their overall inventory





UV-LED inks performance



	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	• 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 less than LH-100 • Adhesiveness and flexibility is less than LUS-120

UV-LED inks scratchiness and solvent resistance

Test	Mode	LH-100		LUS-120		LUS-150	
		Color only	PR-200	Color only	PR-200	Color only	PR-200
Scratch resistance*1	Pencil hardness*2	5H	2H	2H ~ H	HB ~ B	3H ~ H	3H
Flexibility	Flexibility	100% (does not stretch)		170% (Stretches 1.5 times)		150% (Stretches 1.5 times)	
Chemical resistance*3 (Rubbing Test)	Water	✓		✓		✓	
	Ethanol	✓		△		△	
	IPA(100%)	✓		X		X	
	Xylene(100%)	✓		X		✓	
Chemical resistance*4 (Dipping test)	Water	X	△	✓		✓	✓
	Hot water(60°C)	X	X	△		✓	△
	Ethanol(100%)	✓	✓	XX		XX	XX

Evaluation standards:
✓: does not peel off
△: peels off with lower concentration of solution
X: peels off easily
XX: peels off immediately

*1 Scratch resistance tends to depend on hardness of ink film
*2 The pencil hardness can be an index of if the ink film can be scratched off with nails. The hardness of nail is around “H”, therefore the use of the ink which is harder than “H” is recommended, except for the case when the adhesion is poor
*3 Evaluation method: Comprehensively evaluated by the test results of primary, secondary, and tertiary colors
*4 When printing on less adhesive medias, UV ink tends to peel off by the penetration of water or chemicals from the print edge

UV-LED inks adhesion

- List of adhesion depending on the substrate type

Material	Type of substrate		LH-100		LUS-120	
			Color only	PR-200	Color only	PR-200
Resin	Polycarbonate		√	Adheres without primer*1	√	Adheres without primer*1
	Polystyrene		√		√	
	ABS		√		√	
	Pre-treated PET	HK31WF	√		√	
		U292W	X	√	√	
	Acrylics		X	√	X	√
	Glass epoxy		X	√	X	√
	6-nylon		X	√	X	√
	PP/PE		X	X	X	X
Inorganic	Glass		X	√	X	√
Metal	SUS		X	√	X	√
	Aluminium		X	√	X	√
	Copper		X	√	X	√
	Brass		X	√	X	√
Surface treated	Nickel		X	√	X	√

*1 When ink adheres without primer, primer may deteriorate adhesion
* The results above is based on the internal evaluation. The performance is not guaranteed.
Even if the substrate is the same type, adhesion may differ depending on its manufacture or brand.
It is recommended to test it in advance.

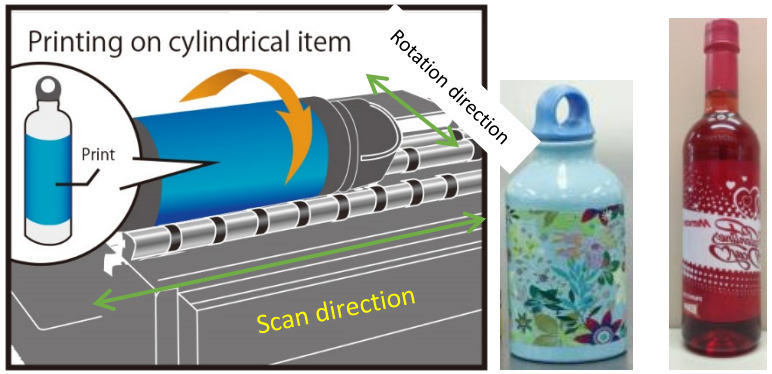
Option Jig: Kebab option

- 360º direct printing on cylindrical items with diameter from 10mm up to 110mm and weight up to 2kg



- Printing on the wide variety of the cylindrical items broadens the range of the application

- Easy installation on the UJF-MkII e series with the special connector



Option Jig: Kebab option

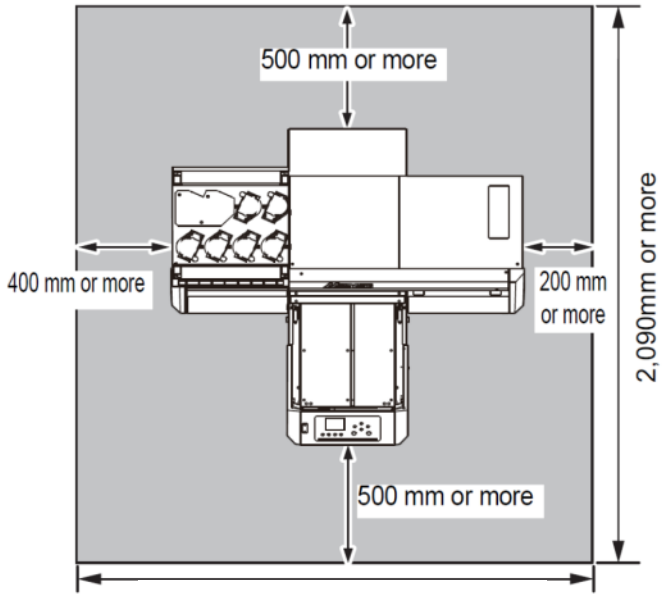
- Kebab MkII specification

Contents		Kebab MkII	Kebab MkII L
Part number		OPT-J0432	OPT-J0433
Supported product		UJF-3042MkII e	UJF-6042MkII e
Rotating angle radius		360°	
Drive system		Roller-driven rotating mechanism	
Printable media shape		Cylindrical	
Media size	Diameter	10mm ~110mm	
	Width	30mm ~ 300mm	30mm ~ 600mm
Printable area	Feed（X）direction	Whole circumference	
	Scan（Y）direction	Less than 300mm	Less than 600mm
Media weight	Smaller diameter	Less than 1.5kg	
	Bigger diameter	Less than 2.0kg	
Interface		Dedicated connector	
Installation environment	Available temp	20°C ~ 35°C	
	Humidity	35 ~ 65 %Rh	
	Guaranteed temp	20°C ~ 25°C (Temperature change: less than 10°C/h)	
	Dust	Equivalent to normal office level	
Weights		Approx. 3kg	Approx. 6kg
Dimension（W x D x H）		366 x 301 x 50mm	674 x 301 x 50mm
Packing size （W x D x H）		465 x 385 x 210mm	775 x 385 x 210mm

Packing and installation

- Installation conditions

Model	Item	Width	Depth	Height	Weight
UJF-3042MkII e	Outside dimension	1,355mm	1,290mm	856mm	135kg
	Packing size	1,500mm	1,150mm	1,120mm	200kg
UJF-6042MkII e	Outside dimension	1,665mm	1,290mm	856mm	150kg
	Packing size	1,800mm	1,150mm	1,120mm	215kg



UJF-3042MkII e: 1,955mm or more
UJF-6042MkII e: 2,265mm or more

Installation environment

Temperature: 20 to 30°C
Humidity: 35 to 65% Rh
Guaranteed temp: 20 to 25°C
Temperature change: ±10°C/H or less
Dust: Equivalent to normal office level

* The space for PC is required separately.
* For the maintenance purpose, space of 1000mm or more is required around the machine.

Specifications

Contents	UJF-3042MkII e	UJF-6042MkII e
Print head	3 drop-on-demand piezoelectric print heads (staggered configuration)	4 drop-on-demand piezoelectric print heads (staggered configuration)
Ink type	LH-100 / LUS-120 / LUS-150 / PR-200	
Ink set	C, M, Y, K, W, Cl, Pr	C, M, Y, K, Lc, Lm, W, Cl, Pr
Ink supply	250ml / 1L bottle supply	
Print area	X:420mm (16.5inch) / Y:300mm (11.8inch)	X:420mm (16.5inch) / Y:610mm (24inch)
Max. media thickness	153mm or less	
Max. media weight	Less than 5kg	Less than 8kg
Circulation system	Ink circulation in ink tube and ink tank for white ink	
Interface	Ethernet / USB2.0	
Noise	Standby: 55dB or less (FAST-A, Front & Rear & Left & Right 1m) Continuous printing: Below 65dB / Discontinuous printing: Less than 70dB	
Power supply	Single phase AC100-240V, ±10%, 50/60Hz ±1Hz	
Dimensions (WxDxH)	1,355mm x 1,290mm x 856mm	1,665mm x 1,290mm x 856mm
Installation area	1,955mm x 2,090mm or more	2,265mm x 2,090mm or more
Weight	135kg	150kg
RIP software	RasterLink7	
Compatible standards	VCCI CLASS A / FCC CLASS A / IEC62368-1/ CB report CE Marking（EMC, Low Voltage, Machinery) / RoHS / REACH / Energy Star / EAC/RCM	

Appendix

- Certificates
- Ink supplies
- Consumables
- Options
- FAQs

Certificates

- GREENGUARD Gold Certification for UV-LED inks
  - Mimaki UV-LED inks LH-100, LUS-120 and LUS-150 inks are GREENGUARD GOLD certified.
  - Products that are GREENGUARD GOLD certified meets the rigorous standards for low emission of volatile organic compounds (VOCs) and ensures that a product is acceptable for use in environments such as schools and healthcare facilities.



Supply items: inks

Part No.	Description	Volume	Packaging	Remarks
LH100-x-BA	LH-100 UV curable ink 1L bottle	1,000ml	Bottle	M, C, Y, K, Lc, Lm, W and Cl
LUS12-x-BA	LUS-120 UV curable ink 1L bottle			
LUS15-x-BA	LUS-150 UV curable ink 1L bottle			M, C, Y, K and W. LUS-150 requires bottle caps SPA-0280 (Cap A Assy)
LH100-x-B2	LH-100 UV curable ink 250ml bottle	250ml		M, C, Y, K, Lc, Lm, W and Cl
LUS12-x-B2	LUS-120 UV curable ink 250mL bottle			
PR200-Z-BA	IJ Primer PR-200 1L bottle	1,000ml		
PR200-Z-B2	IJ Primer PR-200 250ml bottle	250ml		
FL007-Z-BA	Flushing Liquid 07 1L bottle	1,000ml		For cleaning of ink lines

Supply items: consumables

Part No.	Description	Volume	Packaging	Remarks
A101438	Swab 6-axis "S"		1,000 pcs	
SPA-0173	Waste ink tank 1.6L		1 pce	
SPA-0208	Tungsten replacement needle for ionizer		4 pcs	
SPC-0386	UJ Cleaning Swab		10 pcs	
SPC-0387	UV Goggle		1 pce	
SPC-0421	Nozzle Swab		100 pcs	
SPC-0499	KIM TOWEL		50 pcs	
SPC-0574	MAINTENANCE CLOTH		150 sheets	
SPC-0658	WASTE INK TANK ABSORBER		1 pce	
SPA-0232	Bottle tightening jig kit		1 pce	
SPA-0237	Electrode Needle cleaning KIT		1 set	
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	
SPA-0271	WIPER KIT 300TS		10 pcs	
SPA-0290	LED GLASS		2 pcs	
SPC-0819	MIST FILTER SET		Large: 2 sheets, Small: 10 sheets	
SPC-0820	FILTER SET FOR BOTTLE WIPING		4 sheets	
SPC-0822	CAP ABSORBER		2 sheets	
SPC-0569	F-200/LF-200 CLEANING KIT	2 x 100ml	Bottle	
SPC-0568	F-200/LF-200 Washing Liquid	100ml	Bottle	
SPC-0541	UV Primer GM-1	500ml	Can	
SPA-0280	Cap A assy	8 pcs	8 pcs	For LUS-150
SPA-0281	Cap B assy		8 pcs	For LH-100/LUS-120/ LUS-200/LUS-350/PR
SPA-0282	Cap C assy	1 set	6pcs Cap A 2pcs Cap B	For LUS-150 with LH-100 CI/PR

Optional items

Part No.	Description	UJF-3042MkII e	UJF-6042MkII e	Remarks
OPT-J0524	Installation Stand	Option	Option	Use of the optional stand is strongly recommended in order to assure the print quality
OPT-J0421	Vacuum table 30	Option	Standard	Vacuum table 30
OPT-J0414	Ionizer unit 30	Option	-	Ionizer unit for 3042 model
OPT-J0415	Ionizer unit 60	-	Option	Ionizer unit 6042 model
OPT-J0422	NCU option	Option	Standard	Nozzle Check Unit
OPT-J0423	Status indication lamp unit	Option	Standard	Emergency switch and status indication lamp unit
OPT-J0424	Ventilating fan unit	Option	Option	Ventilation fan unit
OPT-J0432	Kebab MK II	Option	-	Kebab MkII for 3042 model
OPT-J0433	Kebab Mk II L	-	Option	Kebab MkII L for 6042 model
OPT-J0522	Deodorizer Unit	Option	Option	When the odor is a concern because of the environmental condition

FAQ 1

	Question	Answer
1	Why is the print speed faster than UJF-3042/6042?	It is because head length of UJF-3042/6042MkII is longer than UJF-3042/6042.
2	Can I print bi-directional?	No, bi-directional printing is not available.
3	What is the minimum and maximum ink drop size?	Maximum drop size: 22pl Minimum drop size: 5pl. White high-density mode uses maximum 27pl.
4	What are the advantages of table drive compared to bar drive?	Table drive improves dot placement accuracy by reducing vibration during printing.
5	Is ball screw installed?	Yes. Ball screw is installed on all three UJF-MkII e models.
6	Are the print table sizes the same as that of UJF-3042FX/HG/6042?	Yes, the print table sizes are the same.
7	Can I use the jig which was designed for UJF-3042FX/HG/6042?	Yes. The positions of the holes on the sheets are exactly the same as that of UJF-3042FX/HG/6042.
8	What is the maximum table stroke?	Driving stroke is 53mm.
9	Is point load possible on the print table?	No.
10	Can I use vacuum function when I print without table spacer?	Yes, you can.
11	Is vacuum different from that of UJF-3042/6042?	No. The vacuum is equivalent to UJF-3042/6042.

FAQ 2

	Question	Answer
12	Can UJF-3042/6042MkII e automatically detect the substrate height?	Yes, it can. After the substrate is placed on print table and REMOTE button is pressed, the printer automatically performs table height adjustment.
13	Are there objects which the gap sensor cannot detect?	Detection of objects with sharp tip or cylindrical objects with thickness less than 4mm may not be accurate.
14	Can I use the machine without cover?	No. You cannot use it without cover.
15	Can I change the illuminance of UV-lamp?	Yes. You can change the illuminance from RasterLink7.
16	Is the ink bottle type the same as that of UJF-7151 plus and JFX200?	Yes, the 1L ink bottle type is the same. In addition, 250ml bottles are available for LH100 and LUS120
17	Are the ink bottles mounted at the back side accessible from front side of printer?	No, ink bottles mounted at back side are accessible only from back side of the printer.
18	Can I use both 1L and 250ml ink bottles at the same time?	Yes, you can.
19	In which print modes does MAPS4 work?	On UJF-MkII e printers, MAPS4 is active in all print modes, except for the undercoat mode.
20	Can I print glossy clear in one process?	Yes. Glossy clear can be printed in one process.
21	Is it possible to print variable data?	Yes, RIP software “RasterLink7” has the function to print variable data.
22	Where can I do the print head daily maintenance?	You can use the maintenance space on the left side of the machine.
23	Which options can be installed by end-user?	The optional vacuum table for UJF-3042MkII e can be installed by end user. Other optional items need to be installed by a technician.
24	Does option stand have casters or adjusters?	It only has casters. Stoppers to fix the casters are also attached.

FAQ 3

	Question	Answer
25	How can I install the optional vacuum table	Detach the standard table and place the optional vacuum table.
26	How does the ventilation fan look like?	The ventilation fan is of same type as the one installed on back side of JV300 series.
27	Can I use [CMYKWW] ink configuration on UJF-6042MkII e?	No. UJF-6042MkII e requires to have all 8 inks installed in the machine.
28	How is the machine packed in a shipment box?	The machine is packed with control panel folded and detached rear cover and the cover for waste ink.

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