Broadening business potential by UV

Sign graphic image of backlight OFF in daytime

Specifications

Item		UCJV300-160	UCJV150-160
Print head		On-demand piezo head	
Print resolution		300 dpi, 600 dpi, 900 dpi, 1,200 dpi	
Max. print width		1,610 mm (63.4 in)	
Max. media width		1,620 mm (63.8 in)	
Ink	Type	LED-UV ink LUS-170	
	Color	4C (C, M, Y, K)	4C (C, M, Y, K)
		7C (C, M, Y, K, Lc, Lm, W)	
	Capacity	1 L (Bottle supply)	
Media thickness		1.0 mm or less	
Media roll weight		40 kg (88.2 lb) or less	
Media roll outer diameter		φ250 mm (9.8 in) or less	
Cut speed		Max.300 mm/s (420 mm/s in 45 degrees direction)	
Cut pressure		10 - 450 gf	
Cutter types		Eccentric cutter, Blade for small character, Blade for reflective sheet	
		Blade for fluorescent sheet, Blade for PVC with low-pressure	
Interface		USB2.0 / Ethernet 1000 BASE-T	
Safety standard		VCCI Class A / FCC Class A / Compliant with UL 60950-1, ETL /	
		CE Marking (EMC, Low Voltage, Machinery Directive), RoHS/	
		CB Report / REACH • ENERGY STAR / RCM	
Power supply		Single phase (AC100 - 120/200 - 240 V±10%, 50/60 Hz±1 Hz) x2	
Power consumption		AC100V : 1.44 kW / AC200 V : 1.92 kW x 2 or less	
Operational environment	Temperature	20 - 30 degC (68 - 86 degF)	
	Humidity	35-65% Rh (Non condensing)	
	Recommended temperature	20 -25 degC (68 - 77 degF)	
	Temperature gradient	±10 degC (±50 degF)/h or less	
	Dust level	Equivalent to normal office level	
Outside dimension (W x D x H)		2,900 x 776 x 1,475 mm (114.2 x 30.6 x 58.1 in)	
Weight		188kg (414.5 lb)	183kg (403.4 lb)

* Specifications, designs and dimensions stated in this list may be subject to change without notice due to technical improvement etc.

Supplies

Product name	Color	Item code	Remarks
LED-UV ink LUS-170	Cyan	LUS17-C-BA	1L bottle
	Magenta	LUS17-M-BA	
	Yellow	LUS17-Y-BA	
	Black	LUS17-K-BA	
	White	LUS17-W-BA	
	Light Cyan	LUS17-LC-BA	
	Light Magenta	LUS17-LM-BA	

Software

RasterLink6 PLUS

Newly upgraded RIP software with higher functionality and more user-friendliness

Added useful functions
● ID Cut for consecutive cutting
● Multi layers print for wider expressiveness
● Braille print for easy operation of braille print
PDF including transparent effect is applicable.
● PDF data image with transparent effect is faithfully printable as the original.

● Some of samples in this catalogue are artificial renderings. ● Specifications, design and dimensions stated in this catalogue may be subject to change without notice for technical improvements etc. ● The corporate names and merchandise names written in this catalogue are the trademark or registered trademark of the respective corporations. ● Inkjet printers print using extremely fine dots, so colors may very slightly vary after replacement of print heads. ● Also note that if using multiple printer units, colors could vary slightly from one unit to other(s) due to slight individual differences.

Print & Cut LED-UV Curable Inkjet Printer

Mimaki

UCJV300-160
UCJV150-160

Leading the Future of Sign Graphics through
UV Innovation

Mimaki Green Technology

ENERGY STAR

GREENGUARD

High-spec model with 4 layers print
UCJV300-160

High-spec model with 4 layers print in addition to UV-LED, Print & Cut.
It is a versatile model widely supporting job by short delivery time to advertisement sign with leading design.

Entry model with UV-LED
UCJV150-160

Excellent model focused to UV-LED printing technology and Print & Cut function with high cost-performance.
It can meet various demands of customers quickly.
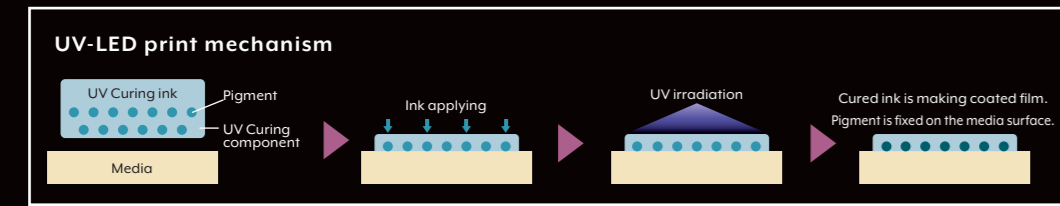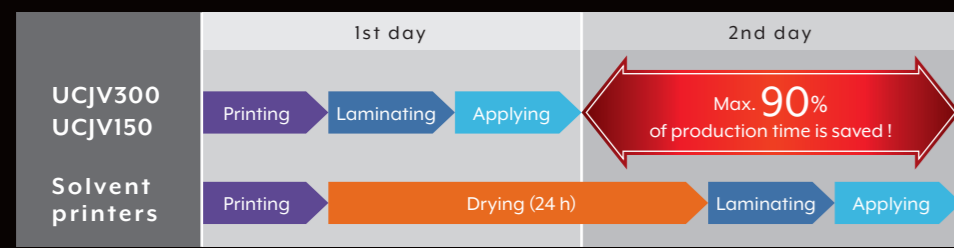
UCJV300-160
UCJV150-160

UV-LED print
enhancing the work efficiency

Immediate processing and deliver are available by UV-LED.

With the UV ink property of immediate curing upon UV light irradiation, no drying time is required. The post-processing and sign applying are possible instantly. Required time for production is saved to be possible to undertake even on an order of tight scheduled work. It is immune from ink blocking while printing by multi layers or using white ink. There is no necessity to mind media stains nor to attend by operator.
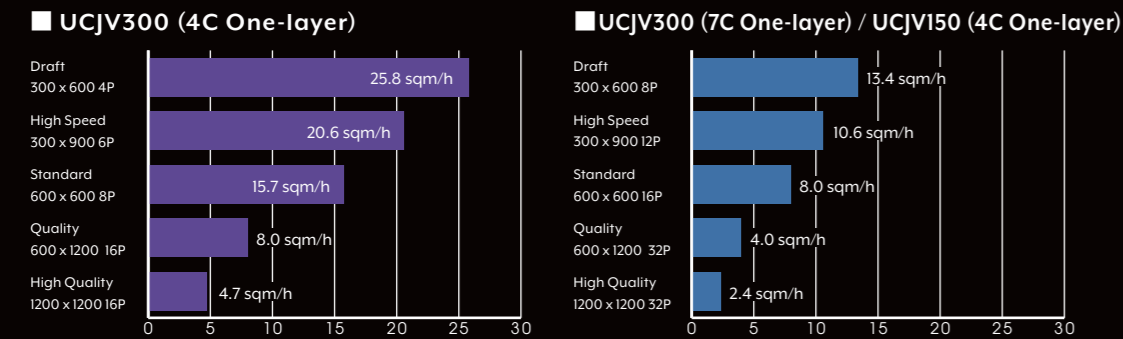
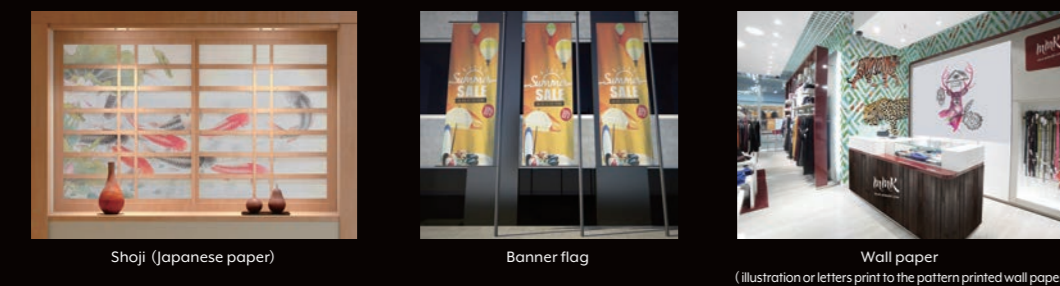Ink is instantly cured by UV irradiation just upon the print.

	1st day			2nd day		
UCJV300 UCJV150	Printing	Laminating	Applying	Max. 90% of production time is saved !		
Solvent printers	Printing		Drying (24 h)		Laminating	Applying

UV-LED print mechanism

UV Curing ink — Pigment / UV Curing component
Media
Ink applying
UV irradiation
Cured ink is making coated film. Pigment is fixed on the media surface.

High speed ! UV-LED print by max. print speed 25.8 sqm/h

■ UCJV300 (4C One-layer)

Draft 300 x 600 4P	25.8 sqm/h
High Speed 300 x 900 6P	20.6 sqm/h
Standard 600 x 600 8P	15.7 sqm/h
Quality 600 x 1200 16P	8.0 sqm/h
High Quality 1200 x 1200 16P	4.7 sqm/h

■ UCJV300 (7C One-layer) / UCJV150 (4C One-layer)

Draft 300 x 600 8P	13.4 sqm/h
High Speed 300 x 900 12P	10.6 sqm/h
Standard 600 x 600 16P	8.0 sqm/h
Quality 600 x 1200 32P	4.0 sqm/h
High Quality 1200 x 1200 32P	2.4 sqm/h

Possible to print the wider range of materials ! Broadening application.

UV ink is printable to PVC and tarpaulin which are compatible with solvent, as well good matching with fabric, non specified ink-receiving paper and PET. More varied applications with UCJV300-160 due to mountable white ink.

Shoji (Japanese paper)   Banner flag   Wall paper (illustration or letters print to the pattern printed wall paper)

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4 layers print
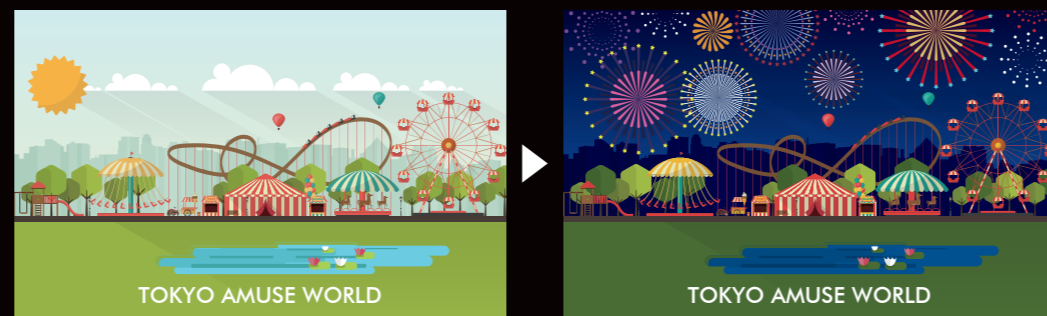### enabling a new advertisement expression

Design is changing with backlight, [Day & Night Printing]

A very new advertising expression with showing different image effect between daytime and nighttime which can be created by 4 layers print*. [Day & Night Printing], a visible design change is presented by backlighting of 4 layers print of [Color]+[Black]+[White]+[Color]. A proposal of highly designed sign can be put forward without any retouches of current simple light box but just ON/OFF of internal lamp. It can make a graphic change or an illumination of specified area etc.

* 4 layers print is available only to UCJV300-160 that white ink is mounted.

4th layer Color layer: usually visible
3rd layer White layer: enhancing coloring of the color layer
2nd layer Black layer: covering the image coming up when illuminated by backlight
1st layer Color layer: visible only when lighting from backside.

[Back light OFF]
Visible image in daytime. Only 4th layer is visible.

MIMAKI HOME

[Back light ON]
Visible image in nighttime. By backlighting, the color image of 1st layer is coming up.

TOKYO AMUSE WORLD → TOKYO AMUSE WORLD

Example of entrance sign of amusement park. One sign can present two different & optimal images for day and night working hour.

The pre-check of final image is possible by [RasterLink6Plus]

The final image of 4 layers print is available on the monitor of Illustrator operation by [RasterLink Tools], the Plug-in tool of Adobe Illustrator of Mimaki RIP software [RasterLink6Plus]. The check of ON/OFF image of inside lighting before print is available by the monitor of PC. It saves retry of print to reduce media losses.
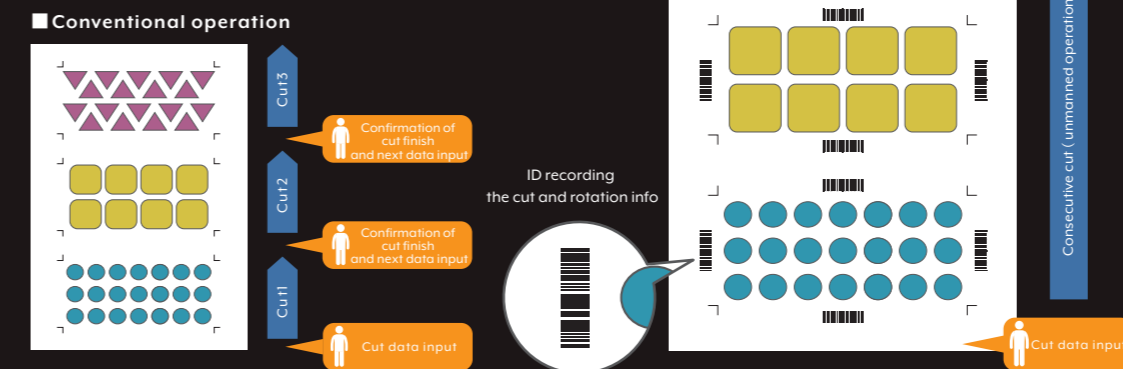
* Preview cannot completely show the same with the practical print image.

Immediate materializing an image idea by
Print & Cut

[UCJV300/150-160] is equipped with cutting function of high performance and high efficiency to be able to make labels, stickers and car wrapping film by one unit only.

[ID Cut] can help to cut easily even for multiple types data of small lot of each.

[ID Cut] is to print together ID (Barcode) for recognition of cutting details and media rotation with crop marks while placing the crop mark on the RIP. And then cut data of every print data is readable to start cutting automatically. Then with this function, cutting starts without any respective cutting order by operator at RIP software. It saves media losses by failure of data transmission.

High work efficiency without time nor media loss

■ Conventional operation

Confirmation of cut finish and next data join
Cut data input

■ [ID Cut] function by UCJV

ID recording the cut and rotation info
Cut data input

Continuous registration mark detection

Continuous reading of registration marks arranged on the RIP and revision of cutting position based on the read marks for accurate cut.

Print & Cut without registration marks

Cutting is available without registration marks for minimum loss of media.

Intermediate registration mark detection

For a correct cut of long outline by multiple corrections of position with intermediate registration marks.

VODKA

Ecology
by the newly developed ink

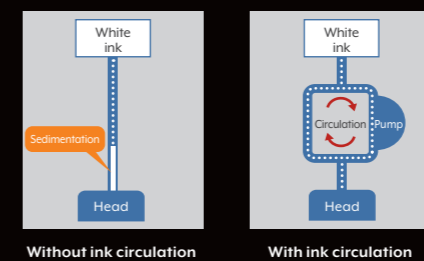## Newly developed environmentally friendly UV ink, [LUS-170]

Newly developed ink, [LUS-170] adaptive to environment, generates hardly VOC and can cure without the irradiation of short wavelength UV causing ozone. [LUS-170] yellow ink is eco-friendly and nickel free though general yellow inks are compounding it. [LUS-170] acquired the [GREENGUARD Gold] certification, which is based on most strict global standard of chemical substance diffusion, assuring the product property conforms to schools and medical facilities. It is surely considered to environment and safety.

GREENGUARD GOLD

MCT (Mimaki Circulation Technology) * = Ink circulation system, which allows stable printing

Mounted [MCT] of periodical white ink circulation suppressing the sedimentation of pigment. Preventing the ink trouble and it supports stable printing from starting of printer. Moreover MCT can contributes to the control of ink waste, too, to be effective environmentally and economically.

* MCT is available only to white ink.

Without ink circulation   With ink circulation
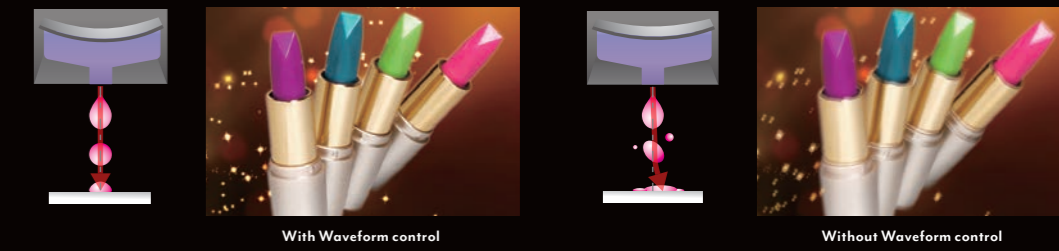

[MAPS4 *] to reduce banding

MAPS function makes the banding less visible by dispersing pass boundaries or getting in gradation-like where the banding is conspicuous while printing. It can reduce generation of banding and uneven color.

* MAPS4 = Mimaki Advanced Pass System4

MAPS : OFF
MAPS : ON

Mimaki's print technology
in pursuit of essential beauty

Mimaki Waveform Control Technology for high quality print

By Mimaki's originally advanced ink discharging control, jetting ink drops in straight with almost a perfect circle dots to accomplish high accuracy dot placement to the media. Thanks to apply UV ink of instant curing, very fine line for maps can be expressed sharply without bleeding.

With Waveform control   Without Waveform control

[NRS *] maintains the productivity

[NRS] is mounted as when a problem occurs in some nozzles, other nozzles will take place to continue to print. Without the stop operating of wait of arrival of service staff, the productivity is maintained.

* NRS = Nozzle Recovery System

Business solution
not interfering by continuous running

Preventing print failure by [NCU *]

Mimaki original system [NCU] is mounted to check the nozzle status automatically. When a nozzle clogging is found, auto cleaning is executed to eliminate it. If it does not help, NRS performs to recover the nozzle automatically to restart the print. Suppressing to the minimum media loss due to nozzle-out while continuous printing.

* NCU = Nozzle Check Unit

While the light penetration, the system recognizes the ink is not discharging.
Light emitter   Printhead   Light receiver

An other nozzle takes place the ink jetting for a clogged nozzle. The setting is automatically done based on the NCU information.
Defective nozzle