

Hybrid UV LED Curing Inkjet Printer

UJV-160 UV PRINTER

Mimaki



Printing on roll and rigid media



UV LED Curable

Print on roll & rigid

Flexible / hard Ink

1200 DPI
MAX. RESOLUTION

4 COLOURS + WHITE

7 sqm/h 600 x 900 dpi
5 sqm/h 1200 x 1200 dpi

Print on
heat sensitive media

No drying time

Innovative UV LED Inkjet Printer

Printing on heat sensitive media is made possible with environmentally-friendly UV LED curing technology



European Digital Press association chooses UJV-160 as
The Best Wide Format Printer up to 1.6 m of 2009

MARKET
SIGN GRAPHICS

Expanding business opportunities with innovation

UV LED printing: technological and environmental benefits

Technological benefits

- ✓ Problem-free printing on heat sensitive and other demanding media
- ✓ No drying time, the printed media is cured immediately
- ✓ UV LEDs do not require warm up time
- ✓ Long lifetime of LEDs up to 5000 hours

Environmental benefits

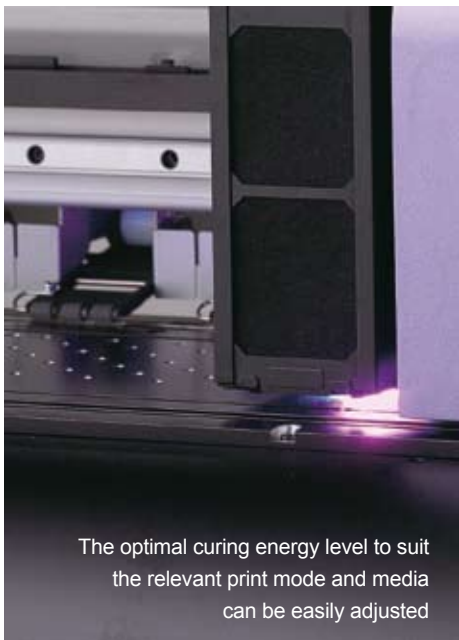
- ✓ Low energy consumption
- ✓ Low level of VOC's
- ✓ Print ozone free, no short wavelength ultraviolet rays
- ✓ Reusable Eco ink packages (600 cc)



New technology, new bene

Multifunctional

UJV-160 offers extraordinary flexibility. Users can choose between roll and rigid media, as well as either hard ink or flexible ink. No matter what the choice is, UJV-160 opens up endless possibilities to print on different kinds of substrates and for various applications.



The optimal curing energy level to suit the relevant print mode and media can be easily adjusted

No media deformation

Vulnerability to heat is one of the problems associated with printing on PVC. Users employing the UJV-160 do not have to worry. Mimaki's first inkjet printer using UV LED technology does not emit infrared rays that cause thermal deformation of PVC. The innovative UV LED curing technology enables problem-free printing on PVC and other heat sensitive media.

No drying time

UV curing enables instantaneous drying. Thus, no post printing drying time is necessary. The job turnaround time from printing to processing is shortened and improves work efficiency and productivity.

Hard and flexible UV inks

Flexible LF-200 ink is available for printing on curved and stretchable media and hard LH-100 ink for printing on rigid substrates. These are available in 600 cc ink containers and reusable Eco-packages.

Mimaki's flexible UV LED curable inks employ a formula which enables stretching of

the substrates after print for applications such as car wrapping. The cured ink does not crack, even when the surface is bent or curved. This enables printing on thin PVC for vehicle wrapping, shutters and many more similar applications. 3M offers an MCS warranty programme* for graphics printed with LF-200 ink.

*Only when using 3M's specific media and recommended method.

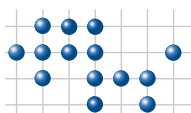
White ink

The "White Ink Overlay Print" function, Mimaki's exclusive innovation, allows for simultaneously white and full colour printing on transparent or opaque substrates, as well as realises a beautiful finish with accurate overlay.



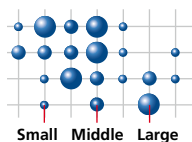
Conventional dots

Uniform dot sizes



Variable dot

Three different ink dot sizes can be used



Variable dot sizes

3 dot sizes, S, M and L, can be controlled. Also uniform dot size can be employed.

High quality printing with 1200 dpi

UJV-160 achieves its high image quality due to a maximum resolution of 1200 x 1200 dpi and employs three variable dot sizes. This enables rich and vivid colours bringing the designer intended images to life.

Print speed (Variable dots)

	1	2	3	4	5	6	7	8	9	10	m ² /h
1200 x 1200 dpi 8 pass Uni-direction					5.0 (53.8)						
600 x 900 dpi 6 pass Uni-direction					7.0 (75.3)						
600 x 600 dpi 4 pass Bi-direction										12.0 (127.0)	

* Depending on print mode, non-curing UV ink remains



Benefits

Environmentally friendly, eco compliant technology

UV LED curing technology does not emit short wavelength ultraviolet rays that generate ozone. Additionally, UV LED curing inks contain low levels of VOC's, thus reducing the environmental footprint even further.

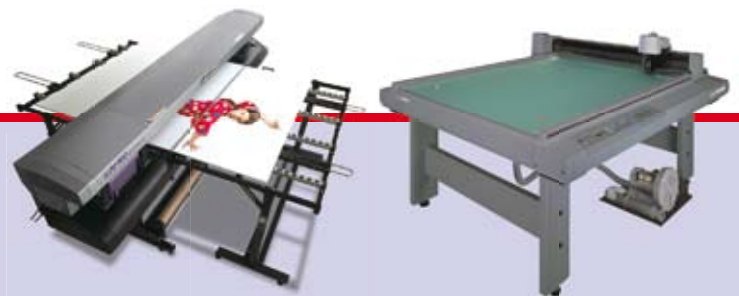
UV LEDs can last up to 5000 hours and reduce power consumption by half or less, compared to conventional UV-curing lamps.*

*Compared with Mimaki's own metal halide lamp.



Substrates and applications

UJV-160 enables printing on roll and rigid media. This includes media such as vinyl, backlit, banner, canvas, paper, aluminum composite panels, acrylic boards, carton boards, foam boards and channel boards.



Print and cut combo with CF2 Series

for rigid media up to 10 mm

The tables for rigid media are included

As standard, UJV-160 comes with feed and delivery tables in order to enable printing on rigid substrates up to 10 mm thickness and 12 kg weight. The tables are foldable, thereby saving space when not needed.

(sq.ft.)
11 12

(29.1)

New generation output software with 16 bit rendering (a standard item)

The high performance RIP software is designed to fully enable all advanced features of the UJV-160 printer

RasterLink⁴SG



Tone jumps are likely to occur.

Smooth gradation without tone jumps.

- 16 bit rendering eliminates tone jumps and produces fine colour reproductions.
- Different images can be freely nested on the RIP.
- Various editing functions support effectively and productively the extraordinary high print quality.
- Able to network in hybrid environments where Windows and Macintosh co-exist.

Specifications

Item		
Head		On-demand Piezo head
Print resolution		600 dpi, 1200 dpi
Ink	Type	UV-curable flexible ink (5 colour: C, M, Y, K, W) UV-curable hard ink (5 colour: C, M, Y, K, W)
	Max. capacity	1,200 cc (600 cc x 2 ink packs)/colour
Maximum Print width		Roll: 1,610 mm (63.3"), Rigid: 1,600 mm (63.0")
Media	Width	1,620 mm (63.7")
	Thickness	Max. 10 mm (0.39")
	Weight	Roll: less than 25 kg (55 lbs.)
		Rigid: less than 12 kg (26.5 lbs.)
Roll diameter	Inside: 2 inch, 3 inch / Outside: Less than \varnothing 180 mm (7.1")	
Media cutting		Manual cutting
Ink curing		UV LEDs
Media heater		Pre/print heater
Media take-up device		Roll take-up device (Standard), inside/outside selectable
Interface		USB 2.0
Applicable standard		VCCI class A, UL60950-1, FCC class A, CE marking (EMC directive, low voltage directive), CB report, RoHS
Power		AC100V~120V, 200~240V \pm 10%, 50~60Hz \pm 1Hz, less than 1.68KVA
Operating environment		15°C~30°C, 35~65%Rh (No condensation)
Dimensions (W x D x H)	Main unit	3300 mm x 780 mm x 1290 mm (129.9" x 19.8" x 50.7")
	Max. capacity + media stand	3300 mm x 4300 mm x 1290 mm (129.9" x 169.3" x 50.7") (Main unit and table with support wire)
Weight	Main unit	260 kg (573 lbs.)
	Media table	50 kg (110 lbs) x 2 units

Supplies

Item	Colour	Item No.	Remarks
LF-200 Flexible UV ink	C/M/Y/K/W	SPC-591 C/M/Y/K/W	600 cc pack
LH-100 Hard UV ink	C/M/Y/K/W	SPC-0597 C/M/Y/K/W	
F-200 cleaning cartridge		SPC-0516FS	440 cc cartridge

Notice

- Ventilation is required since volatile substances are emitted from non-curing UV ink.
- Post-printing performance (adhesion, weather durability, etc.) varies according to the media.
- If substrates other than described are to be used, please test beforehand.
- Adhesion performance differs according to the substrate. In some cases optimisation of ink and anchor coat / overcoat are necessary.



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



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