UJV55-320

3.2m Grand format UV LED printer…

Sophisticated RIP software maximizes the performance of UJV55-320

User friendly RIP "RasterLink 6" comes as standard

Raster Link 6

◆ More beautiful and advanced print results are achieved by following a user-friendly interface that is easy to operate.
◆ Colour replacement function enhances the ability to re-create printed images.
◆ Print colour can be simulated on Illustrator / Photoshop without an actual print.
  *This function requires MPM2 (Mimaki Profile Master 2).
◆ Program update and profile download can be easily performed via internet.

New image-processing technique reduces tone jumps and uneven colour printing

Mimaki Fine Diffusion 1 (MFD1) has been recently added to the bundled RasterLink6 RIP software. MFD1 reduces the noise that is generated in image data during image processing and enables the production of better print results without tone jumps or uneven colours.

MFD1 applied   No MFD1

IMPROVED PERFORMANCE FOR BACKLIT PRINTING APPLICATIONS
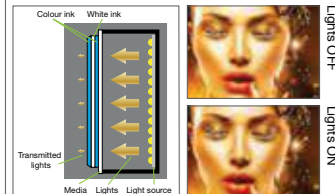
WHITE INK PRINTING

WHITE INK PRINT ENHANCEMENTS

Printing on transparent media is made possible by the application of white ink as an under or over layer.
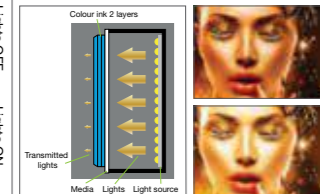
Day & Night Printing on Backlit Materials

[Colour & White & Colour 3 layers]
Printing a white layer between coloured layers, ensures a consistent result whether illuminated or not.
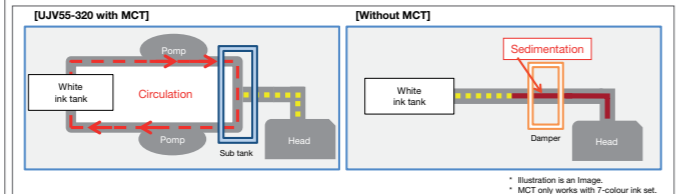
Colour ink   White ink

Lights OFF

Lights ON

Transmitted lights   Media   Lights   Light source

[Colour & Colour 2 layers]
If only 2 layers of coloured ink are applied, the resulting image is too dark when viewed in daylight.

Colour ink 2 layers

Lights OFF

Lights ON

Transmitted lights   Media   Lights   Light source

White ink circulation technology MCT (Mimaki Circulation Technology)

By periodically circulating white ink in line from tank to head, pigment deposition is prevented. MCT ensures stable production and reduction of ink discharge and waste.
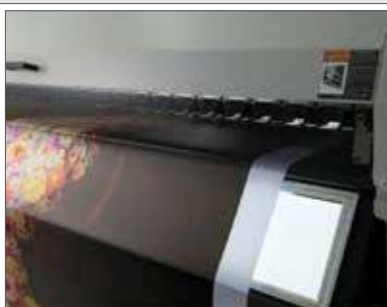
[UJV55-320 with MCT]   [Without MCT]

Pump
White ink tank   Circulation
Pump   Sub tank   Head

Sedimentation
White ink tank
Damper   Head

* Illustration is an Image.
* MCT only works with 7-colour ink set.

INLINE LIGHTBOX

INLINE LED LIGHTBOX FOR BACKLIT PRINT INSPECTION

Proofing while printing LED backlights illuminate printed media just after printing, reproducing a backlit signage application and ensuring immediate quality inspection.

• No need to stop the printer to check.
• LED lights set in the space after print platen enabling immediate correction if errors occur
• Saves time, ink and media.

• Colour temperature : 7,000 Kelvin
• Brightness easily adjustable.
• LED lights can be removed from the printer.

BACKLIT PRINTING

HIGH 'BLOCKOUT' PERFORMANCE FOR BACKLIT SIGNAGE

A key feature of UV-curable ink is the thickness of the ink layer on the media, which enables much greater 'blockout' performance than other print methods.

This is particularly beneficial in backlit signage applications where the ability to block out backlighting in certain areas improves overall illuminated colour performance and vibrancy.

Specifications

Item		UJV55-320
Head		On-demand piezo head (4 printheads / in 2 staggered array)
Print resolution		300dpi, 600dpi, 900dpi, and 1200dpi
Ink droplet size		Minimum: 7pl Maximum: 36pl
Head gap (Manual adjustment)		1.7mm / 1.9mm / 2.6mm / 3.3mm
Ink	Type	UV LED ink LUS-120
	Colour	4 - Colour (C, M, Y, K) / 7 - Colour (C, M, Y, K, Lc, Lm, W)
	Packaging	1 litre ink bottle, Ink can be filled up to 3 litres per ink colour.
Maximum print width		3,200mm
Maximum media width		3,250mm (Twin rolls printing: 1,524mm × 2)
Minimum media width		210mm
Media thickness		1.0mm or less
Roll outer diameter		Large drive shafts: Φ250mm or less. Small media roll holders: Φ180mm or less.
Roll weight		Large drive shafts: 100kg or less. Small media roll holders: 25kg or less
Dimensions (W × D × H)		5,410mm × 995mm × 1,440mm
Shipping dimensions (W × D × H)		5,714mm × 1,136mm × 1,203mm
Machine weight		910kg
Power supply		AC 200 – 240V ± 10% 50/60 Hz ± 1 Hz, 18 A or less. * 100V Power not available
Power consumption		4.3kVA or less
Operational environment	Temperature	20 – 30 °C (68 – 86 °F)
	Humidity	35 – 65%Rh (No condensing)
	Temperature accuracy	20 – 25 °C (68 – 77 °F)
	Temperature gradient	Less than ± 10 °C/h (± 18 °F/h)
	Dust	0.15mg/m³ (Equivalent to normal office level)

Supplies

Item	Colour	Item No.	Remarks
UV LED Ink LUS-120	Cyan	LUS12-C-BA-1	1L bottle
	Magenta	LUS12-M-BA-1	
	Yellow	LUS12-Y-BA-1	
	Black	LUS12-K-BA-1	
	Light Cyan	LUS12-LC-BA-1	
	Light Magenta	LUS12-LM-BA-1	
	White	LUS12-W-BA-1	
	Flushing Liquid	FL007-Z-BA-1-KA	

Mimaki

SG
SIGN & GRAPHICS

eco

Mimaki
The world imagines… Mimaki delivers

the power to **create**...

![Mimaki]

High performance grand format LED UV inkjet printer

The all new Mimaki UJV55-320 grand format LED UV inkjet printer delivers a unique combination of high quality super wide output for volume production of banners, retail, exhibition and window graphics and other similar applications up to 3.2m wide, with the added versatility of twin-roll simultaneous printing.

ENGINEERING EXCELLENCE AND CREATIVE INNOVATION

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

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

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

··· Mimaki delivers

UJV55-320 delivers ···

- Super wide format printing (up to 3.2m)
- High speed printing up to 110m²/h
- Newly developed LUS-120 high performance UV curing ink including white
- High density print mode for front/backlit applications
- Inline LED Lightbox for backlit print inspection
- MAPS, MFD1, NCU & NRS for optimal print quality & performance
- Simultaneous twin-roll print facility
- Media roll weights up to 100kg

UJV55-320

NEW LUS-120 LED UV 4 and 7 COLOUR INKSET
110m²/h MAX. PRINT SPEED
1200DPI MAX. RESOLUTION
3,200mm MAX. PRINT WIDTH
RASTERLINK 6 RIP SOFTWARE
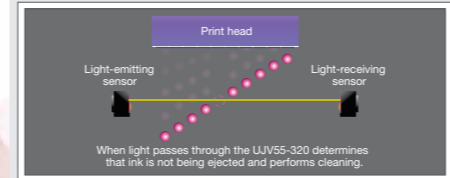3 LITRE INK TANKS

Efficient and Versatile Twin-Roll Simultaneous Printing

Taking advantage of the 3,200mm printing width, two media rolls can be mounted for simultaneous printing. Different print jobs (or the same print job) can be printed on two separate rolls. The user can select the preferred width separately for each roll, within a specified range (210 to 1,524mm).

Prevention of print quality problems - NCU*

The UJV55-320 is equipped with Mimaki's original automatic NCU. Clogged nozzles are automatically detected and cleaned by the NCU. If the clogging is not resolved by cleaning, the UJV55-320 automatically sets the nozzle recovery function NRS and resumes printing. These functions significantly reduce the waste printing caused by clogged nozzles during a continuous printing run.
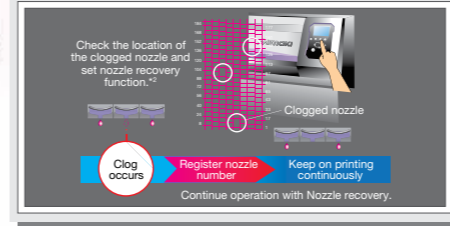
* NCU: Nozzle Check Unit

Print head
Light-emitting sensor   Light-receiving sensor

When light passes through the UJV55-320 determines that ink is not being ejected and performs cleaning.

Productivity maintenance - NRS*1

The NRS substitutes defective nozzles with non-defective nozzles until the technician arrives. This feature enables uninterrupted print operations and continuous productivity.
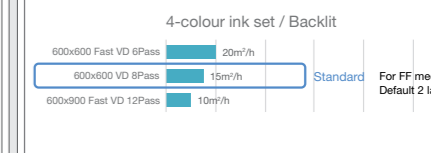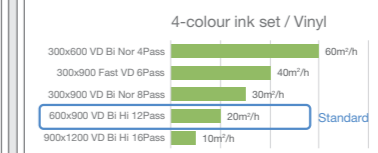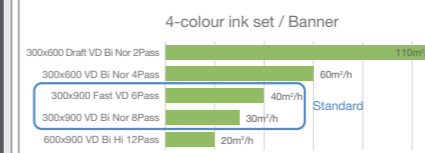
*1 NRS: Nozzle Recovery System   *2 10 nozzles per nozzle row can be registered.

Check the location of the clogged nozzle and set nozzle recovery function.*1,*2

Clogged nozzle

Clog occurs → Register nozzle number → Keep on printing continuously

Continue operation with Nozzle recovery.

Create ··· Indoor and Outdoor Signage, Exhibition, Display and Window Graphics, Front and Backlit Signage, Retail PoS and much more...

EASE OF USE

PRINT SPEED

Print Speed (4-Colour)

4-colour ink set / Banner
300x600 Draft VD Bi Nor 2Pass — 80m²/h
300x900 Fast VD 6Pass — 60m²/h — Standard
300x900 Fast VD 8Pass — 40m²/h
600x900 VD Bi Hi 12Pass — 20m²/h

4-colour ink set / Vinyl
300x600 VD Bi Nor 4Pass — 60m²/h
300x900 Fast VD 6Pass — 40m²/h
300x900 VD Bi Nor 8Pass — 30m²/h — Standard
600x900 VD Bi Hi 12Pass — 20m²/h

4-colour ink set / Backlit
600x600 Fast VD Nor 8Pass — 20m²/h   For FF media Default 2 layers
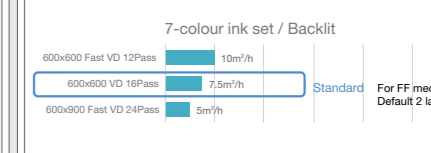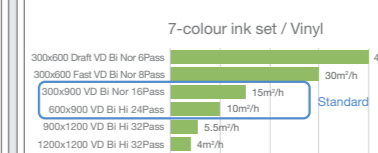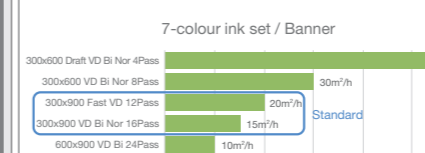600x900 Fast VD 12Pass — 15m²/h — Standard
10m²/h

NB: • Estimated speed when printed on 3.2m wide media.
• If printed on 1.5m-wide media, print speed is halved.

Print Speed (7-Colour)

7-colour ink set / Banner
300x600 Draft VD Bi Nor 4Pass — 40m²/h
300x900 Fast VD 8Pass — 20m²/h — Standard
300x900 Fast VD 12Pass — 15m²/h
600x900 VD Bi 24Pass — 10m²/h

7-colour ink set / Vinyl
300x600 Draft VD Bi Nor 4Pass — 40m²/h
300x900 Fast VD Bi Nor 8Pass — 20m²/h
300x900 VD Bi Nor 16Pass — 15m²/h — Standard
600x900 VD Bi Hi 24Pass — 10m²/h
900x1200 VD Bi Hi 32Pass — 5.5m²/h
1200x1200 VD Bi Hi 32Pass — 4m²/h

7-colour ink set / Backlit
600x600 VD 12Pass — 10m²/h
600x900 VD 16Pass — 7.5m²/h — Standard   For FF media Default 2 layers
600x900 Fast VD 24Pass — 5m²/h

NB: • **In 1200x1200dpi print mode, max. print width is 2.7m.**
• Estimated speed when printed on 3.2m wide media.
• If printed on 1.5m-wide media, print speed is halved.

KEY TECHNICAL FEATURES ···

PRINT QUALITY

4 colours - - CMYK

7 colours - - CMYKLcLmW

IMPROVED PRINT HEAD CONFIGURATION

Head configuration : Four print heads in a staggered array.
1 head : 1,280 nozzles (320 nozzles X 4 lines)
4 heads : total 5,120 nozzles

BEAUTIFUL OUTPUT

MAPS (Mimaki Advanced Pass System)
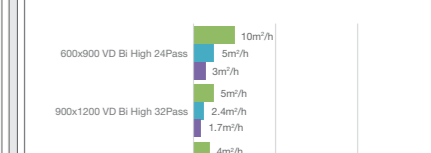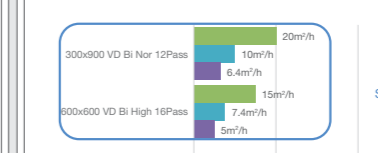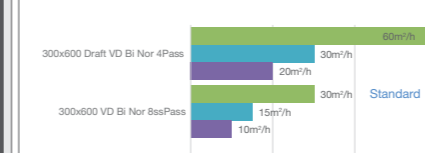Reduces banding by dispersing ink drops between passes.

Waveform Control Technology
Ensures high quality print resolution, by jetting ink drops in straight lines with almost perfect round dots, delivering clear and sharp letters, lines and edges.

Without waveform control
Ink droplets jetted in the shape of deformed circles

With waveform control
Ink droplets jetted in the shape of nearly perfect circles

Superior inkjet technology
Delivers high density print by removing the gap between dots.

Maximum dot size = 36pl

1/360 inch
Large 36pl
Middle
Small 7pl

High density as no gap between dots

Suitable for High speed mode

PRINT SPEED

Print Speed (White Printing)

300x600 Draft VD Bi Nor 4Pass — 60m²/h
300x600 VD Bi Nor 8Pass — 30m²/h
20m²/h
15m²/h — Standard
10m²/h

300x900 VD Bi Nor 12Pass — 20m²/h
600x600 VD Bi Hi 16Pass — 15m²/h
10m²/h
8.6m²/h
7.4m²/h — Standard
5m²/h

600x600 VD Bi High 24Pass — 10m²/h
900x1200 VD Bi High 32Pass — 5m²/h
5m²/h
4m²/h
1.7m²/h
1200x1200 VD Bi High 32Pass — 2m²/h
1.2m²/h

1 layer   2 layers   3 layers

NB: • **In 1200x1200dpi print mode, max. print width is 2.7m.**
• Estimated speed when printed on 3.2m wide media.
• If printed on 1.5m-wide media, print speed is halved.