



| Improves reproducibility of special effects (such as transparency) of PDF data

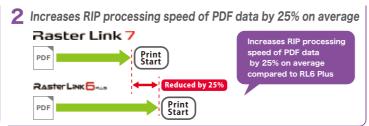
| Increases RIP processing speed of PDF data by 25% on average

| Prints out the variable data by Variable print function

Displays frequently used setting and pop-up windows

PDF data with a lot of special effects embedded

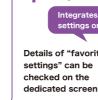




### 3 Variable print function









23.0

18.6

13.6



#### Print speed

Glossy PVC 4C				Tarnsparent media 4C+W			
Print mode		Print speed(m²/h)	Print mode			Print speed(m²/h)	
High Speed	360x1200 8P	Bi	18.6	High Speed	360x1200 8P	Bi	9.3
Standard	720x900 12P	Bi	13.6	Standard	720x900 12P	Bi	6.8
Quality	720x900 16P	Bi	10.0	Quality	720x900 16P	Bi	5.0
High Quality	1200x1200 16P	Bi	7.0	High Quality	1200x1200 16P	Bi	3.5

The print speed by the printer of 6C (CMYKWCI) ink set is same as the above 4C+V

#### Supplies

High Speed

360x1200 8P

1200x1200 16P

Standard 720x900 12P

Specifications					
Item		UJV100-160			
Print head		On-demand piezo head (double head staggered layout)			
Printing resolution		360 dpi, 720 dpi, 900 dpi, 1200dpi			
Ink	Type/Color	UV-curable ink LUS-170(C,M,Y,K,W,CL)			
	Capacity	1L bottle			
Maximum drawing range		1,610 mm (63 in)			
Maximum width		1,620 mm (64 in)			
Media	Thickness	1.0 mm or lower			
	Roll diameter	φ250 mm or less			
	Roll weight	45kg (99 lb) or less			
Interface		USB2.0 / Ethernet			
Power specifications		Single-phase AC100-120V / AC200-240V±10%, 50/60Hz±1Hz			
Power consumption		AC100V: 1,440 kW or less / AC200V: 1.92kW or less			
Operational environment		Temperature: 20-30 degC (68-86 degF) Humidity: 35-65%Rh (without condensation)			
External dimensions (WxDxH)		2,775 x 700 x 1,475 mm (109 x 28 x 58 in)			
Main unit weight		167 kg (368 lb)			

	Color	Item code	Remarks		
	Cyan	LUS17-C-BA			
LUS-170 UV ink GREENGUARD Gold certificated ink	Magenta	LUS17-M-BA			
	Yellow	LUS17-Y-BA	1L bottle		
	Black	LUS17-K-BA	TE bottle		
	White	LUS17-W-BA			
	Clear	LUS17-CL-BA			

Standard 720x900 12P

The LUS-170 has acquired "GREENGUARD Gold certification", which is guaranteed to be suitable for schools and medical institutions based on the strictest chemical substance diffusion standards in the world. This ink generates almost no VOC (\*1)(\*2), which is the cause of photochemical oxidant generation, and is designed to reduce load to the global environment



- 11: VOC=Volatile organic compounds
   22: No volatile organic compounds are generated after UV curing by our internal investigation but may occur very slightly before curing.

## **Ethernet supported!**

Creat a free and efficient working environment





#### Inks and substrates:

Please note that properties and adhesion, weather resistance, etc. of ink and substrates can vary.
 Please test materials before printing.

## Safety notice: These printers produce UV radiation. To protect your health, please observe the following guidelines carefully:

- Do not look directly into the UV light source, or expose your skin (such as your hands) directly to the UV light source.
   Depending upon the print mode, some VOCs could be emitted from printed area not yet cured and hardened.
   In addition, please read and follow the instructions and guidelines of the manual carefully.
- •Some examples shown in this catalog are artificial renderings. •Specifications, designs and dimensions shown in this catalog may be subject to change without notice for technical improvements. ●The corporate and merchandise names in this catalog are the trademarks or registered trademarks of the respective corporations. ●Inkjet printers use extremely fine dots, so colors may vary slightly
- after replacement of print heads. Also note that when using multiple printer units, colors could vary slightly from one unit to another due to slight individual differences. •Please note that descriptions and data in this catalog are as of November 2020.

# mimaki.com

# MIMAKI ENGINEERING CO., LTD.

2182-3 Shigeno-otsu, Tomi-city, Nagano 389-0512, Japan Tel. +81-268-64-2281

## Mimaki Global Network

MIMAKI USA, INC.

MIMAKI BRASIL COMERCIO E IMPORTAÇÃO LTDA MIMAKI INDIA PRIVATE LIMITED

MIMAKI ENGINEERING (TAIWAN) CO.,LTD. Singapore MIMAKI SINGAPORE PTE. LTD.

Europe MIMAKI EUROPE B.V. Indonesia PT MIMAKI INDONESIA Australia MIMAKI AUSTRALIA PTY, LTD. SHANGHAI MIMAKI TRADING CO..LTD. Thailand MIMAKI (THAILAND) CO.,LTD.

DB10376-00

For **SIGN GRAPHICS** 

# Roll-to-Roll LED-UV Curable Inkjet Printer

# **UJV100-160**













# UJV100-160 Expert printing made easy.

The UJV100-160 is a high-speed UV LED inkjet printer mounted with two newly developed printheads to deliver high image quality with max. print resolution of 1200 dpi and max. print speed of 23m2/h.\* It is equipped with the DAS (Dot Adjustment System), which automatically adjusts the media setting and various other functions that make it possible to execute a fine and stable output with simple operations, based on more than 15 years of experience and knowledge of Mimaki, an expert in UV printing technology, while focusing on image quality and productivity. Since the LUS-170 UV curable ink for UJV100-160 can be processed without waiting for the drying time, so indoor signs, POPs and stickers can be finished quickly and also suitable for high visibility window displays, decorative transparent acrylic panels, and vivid signage such as light boxes. It can be used with commercially available media like paper and PET film without an ink receiving layer, which helps to reduce the material cost. Furthermore, this ink is VOC-free and environmentally friendly.

The UJV100-160 is well-balanced in every aspect of productivity, operability, work efficiency, and environmental friendliness at an affordable price, and will contribute greatly to the expansion of your business.

\* Print speed by 4C at draft mode (360x900 dpi 6P Bi)

# Reliable functions pursuing "Quality x Usability x Stability"



The function to adjust automatically the dot position and the feed amount that affect print quality as the standard equipment.

After changing a media and a printing condition,

the ink dot position and media feeding amount must be adjusted accordingly. Since DAS automatically applies them, printing can be performed without labor and variation of adjustment by the operator (1).

\* 1 : Some media cannot be automatically applied.

#### DAS -

It is the function to print a dedicated pattern to the media and read by the sensor mounted on the carriage to adjust automatically:

- Dot position (Dot jetting position at the bi-direction)
- Feeding amount (Media feeding amount)



mproper dot position



(Insufficient feeding amount)



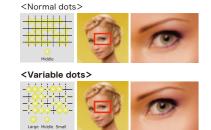
(Excessive feeding amount)



Proper dot position and feeding amount

#### Minimum ink size 4pl Beautiful print of less granularity feeling

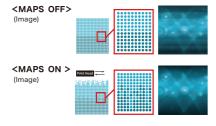
Three different ink dot sizes are used in printing to enable high-quality print with reduced granular feeling.



Dots are combined with the minimum size of 4pl to enable smooth color printing with less granular feeling.

# "MAPS4" supported (Mimaki Advanced Pass System) Banding reduction function

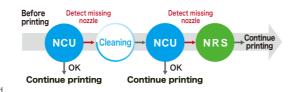
By printing the border of the path in a gradation tone, banding (horizontal stripes), uneven color, and glossy stripes are reduced to achieve smooth printing.



Based on printing conditions such as media/ink type and resolution, the most suitable gradation pattern is automatically selected and printed.

### NCU/NRS employed to monitor missing nozzlesa

The sensor automatically detects the condition of nozzles. When the NCU (Nozzle Check Unit) detects a missing nozzle, it automatically performs cleaning. If there is a nozzle problem left unsolved by the cleaning, NRS (Nozzle Recovery System) automatically replaces the defective nozzles with other nozzles, and enables users to continue their operation without waiting for service personnel.



# High productivity leads to work efficiency and new applications

As immediately cured by UV irradiation after printing, it does not need the drying time required for water-based inks and solvent inks. Thanks to the high printing speed and no loss of drying time, the work efficiency is dramatically improved to be possible to handle sudden jobs. This will give you a time for other works or considering a new proposition added value to expand your business.

#### High speed print!

Reliable production capacity that responds firmly to urgent requests with high-speed printing.

Glossy PVC 18.6 m²/h
Transparent media 9.3 m²/h



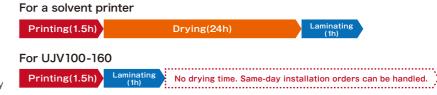


#### Possible to print & install on the same day

Swift post-processing after printing since no drying time is required

UV curable ink of no drying process because the ink is instantly cured by UV light  $\,$  irradiating.

Since post-processing & construction can be performed immediately, shortened production time and high productivity can lead to handle jobs with short delivery time.

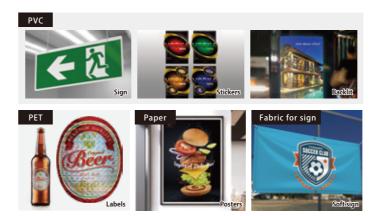


# Go for new business applications with wide-spread expressiveness with UV curable ink printing

### Abundance of available media materials

In addition to PVC and tarpaulin, fabric and paper without ink receiving layer are possible to print, which are difficult with solvent ink or latex ink. Printing on PET film is also available. (\*2) A variety of proposals to clients are available by the high versality for media.

\*2 : Be sure to perform a pre-evaluation.



# White ink & Clear ink for high value-added print with diverse powers of expression

By applying white ink, it is possible to print on transparent media and colored media (\*3) to obtain a wider range of expression. Clear ink as well enables to show a highly-designed expression.

\*3: Applied to 2 layers printing but not to more than 2 layers such as "White -Color-White".







| Improves reproducibility of special effects (such as transparency) of PDF data

| Increases RIP processing speed of PDF data by 25% on average

| Prints out the variable data by Variable print function

Displays frequently used setting and pop-up windows

PDF data with a lot of special effects embedded





### 3 Variable print function



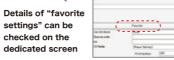
4. Easy-to-check displays



360x1200 8P

1200x1200 16P

Standard 720x900 12P





Standard 720x900 12P

#### Print speed

Glossy PVC 4C				Tarnsparent media 4C+W			
Print mode		Print speed(m²/h)	Print mode			Print speed(m²/h)	
High Speed	360x1200 8P	Bi	18.6	High Speed	360x1200 8P	Bi	9.3
Standard	720x900 12P	Bi	13.6	Standard	720x900 12P	Bi	6.8
Quality	720x900 16P	Bi	10.0	Quality	720x900 16P	Bi	5.0
High Quality	1200x1200 16P	Bi	7.0	High Quality	1200x1200 16P	Bi	3.5

The print speed by the printer of 6C (CMYKWCI) ink set is same as the above 4C+W

#### Specifications

Item		UJV100-160		
Print head		On-demand piezo head (double head staggered layout)		
Printing resolution		360 dpi, 720 dpi, 900 dpi, 1200dpi		
Ink	Type/Color	UV-curable ink LUS-210(C,M,Y,K,W,CL)		
	Capacity	1L bottle		
Maximum drawing range		1,610 mm (63 in)		
	Maximum width	1,620 mm (64 in)		
Thickness		1.0 mm or lower		
iviedia	Roll diameter	$\phi$ 250 mm or less		
Roll weight		45kg (99 lb) or less		
Interfac	e	USB2.0 / Ethernet		
Power specifications		Single-phase AC100-120V / AC200-240V±10%, 50/60Hz±1Hz		
Power consumption		AC100V: 1,440 kW or less / AC200V: 1.92kW or less		
Operational environment		Temperature: 20-30 degC (68-86 degF) Humidity: 35-65%Rh (without condensation)		
External dimensions (WxDxH)		2,775 x 700 x 1,475 mm (109 x 28 x 58 in)		
Main unit weight		167 kg (368 lb)		

#### Supplies

High Speed

	Color	Item code	Remarks	
	Cyan	LUS21-C-BA		
LUS-210 UV ink	Magenta	LUS21-M-BA		
	Yellow	LUS21-Y-BA	1L bottle	
GREENGUARD Gold certificated ink	Black	LUS21-K-BA	IL bottle	
	White	LUS21-W-BA		
	Clear	LUS21-CL-BA		

23.0

18.6

13.6

The LUS-210 has acquired "GREENGUARD Gold certification", which is guaranteed to be suitable for schools and medical institutions based on the strictest chemical substance diffusion standards in the world. This ink generates almost no VOC (\*1)(\*2), which is the cause of photochemical oxidant generation, and is designed to reduce load to the global environment



- 11: VOC=Volatile organic compounds
   22: No volatile organic compounds are generated after UV curing by our internal investigation but may occur very slightly before curing.

# **Ethernet supported!**

Creat a free and efficient working environment





#### Inks and substrates:

Please note that properties and adhesion, weather resistance, etc. of ink and substrates can vary.
 Please test materials before printing.

- Safety notice: These printers produce UV radiation.
  To protect your health, please observe the following guidelines carefully:
- Do not look directly into the UV light source, or expose your skin (such as your hands) directly to the UV light source.
   Depending upon the print mode, some VOCs could be emitted from printed area not yet cured and hardened.
   In addition, please read and follow the instructions and guidelines of the manual carefully.
- •Some examples shown in this catalog are artificial renderings. •Specifications, designs and dimensions shown in this catalog may be subject to change without notice for technical improvements. ●The corporate and merchandise names in this catalog are the trademarks or registered trademarks of the respective corporations. ●Inkjet printers use extremely fine dots, so colors may vary slightly
- after replacement of print heads. Also note that when using multiple printer units, colors could vary slightly from one unit to another due to slight individual differences. •Please note that descriptions and data in this catalog are as of November 2020.

# mimaki.com

# MIMAKI ENGINEERING CO., LTD.

2182-3 Shigeno-otsu, Tomi-city, Nagano 389-0512, Japan Tel. +81-268-64-2281

## Mimaki Global Network

MIMAKI USA, INC. MIMAKI BRASIL COMERCIO E IMPORTAÇÃO LTDA

MIMAKI INDIA PRIVATE LIMITED MIMAKI ENGINEERING (TAIWAN) CO.,LTD. Singapore MIMAKI SINGAPORE PTE. LTD.

Europe MIMAKI EUROPE B.V. Indonesia PT MIMAKI INDONESIA Australia MIMAKI AUSTRALIA PTY, LTD. SHANGHAI MIMAKI TRADING CO..LTD. Thailand MIMAKI (THAILAND) CO.,LTD.

DB10378-01

For **SIGN GRAPHICS** 

Roll-to-Roll LED-UV Curable Inkjet Printer

# **UJV100-160**













# UJV100-160 Expert printing made easy.

The UJV100-160 is a high-speed UV LED inkjet printer mounted with two newly developed printheads to deliver high image quality with max. print resolution of 1200 dpi and max. print speed of 23m2/h.\* It is equipped with the DAS (Dot Adjustment System), which automatically adjusts the media setting and various other functions that make it possible to execute a fine and stable output with simple operations, based on more than 15 years of experience and knowledge of Mimaki, an expert in UV printing technology, while focusing on image quality and productivity. Since the LUS-210 UV curable ink for UJV100-160 can be processed without waiting for the drying time, so indoor signs, POPs and stickers can be finished quickly and also suitable for high visibility window displays, decorative transparent acrylic panels, and vivid signage such as light boxes. It can be used with commercially available media like paper and PET film without an ink receiving layer, which helps to reduce the material cost. Furthermore, this ink is VOC-free and environmentally friendly.

The UJV100-160 is well-balanced in every aspect of productivity, operability, work efficiency, and environmental friendliness at an affordable price, and will contribute greatly to the expansion of your business.

\* Print speed by 4C at draft mode (360x900 dpi 6P Bi)

# Reliable functions pursuing "Quality x Usability x Stability"



The function to adjust automatically the dot position and the feed amount that affect print quality as the standard equipment.

After changing a media and a printing condition,

the ink dot position and media feeding amount must be adjusted accordingly. Since DAS automatically applies them, printing can be performed without labor and variation of adjustment by the operator (1).

\* 1 : Some media cannot be automatically applied.

#### DAS -

It is the function to print a dedicated pattern to the media and read by the sensor mounted on the carriage to adjust automatically:

- Dot position (Dot jetting position at the bi-direction)
- Feeding amount (Media feeding amount)



nproper dot position



(Insufficient feeding amount)



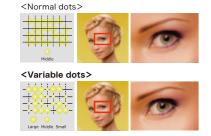
(Excessive feeding amount)



Proper dot position and feeding amount

#### Minimum ink size 4pl Beautiful print of less granularity feeling

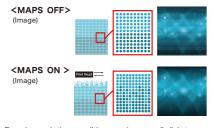
Three different ink dot sizes are used in printing to enable high-quality print with reduced granular feeling.



Dots are combined with the minimum size of 4pl to enable smooth color printing with less granular feeling.

# "MAPS4" supported (Mimaki Advanced Pass System) Banding reduction function

By printing the border of the path in a gradation tone, banding (horizontal stripes), uneven color, and glossy stripes are reduced to achieve smooth printing.



Based on printing conditions such as media/ink type and resolution, the most suitable gradation pattern is automatically selected and printed.

### NCU/NRS employed to monitor missing nozzlesa

The sensor automatically detects the condition of nozzles. When the NCU (Nozzle Check Unit) detects a missing nozzle, it automatically performs cleaning. If there is a nozzle problem left unsolved by the cleaning, NRS (Nozzle Recovery System) automatically replaces the defective nozzles with other nozzles, and enables users to continue their operation without waiting for service personnel.



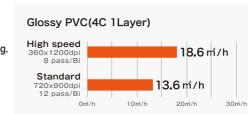
# High productivity leads to work efficiency and new applications

As immediately cured by UV irradiation after printing, it does not need the drying time required for water-based inks and solvent inks. Thanks to the high printing speed and no loss of drying time, the work efficiency is dramatically improved to be possible to handle sudden jobs. This will give you a time for other works or considering a new proposition added value to expand your business.

#### High speed print!

Reliable production capacity that responds firmly to urgent requests with high-speed printing.

Glossy PVC 18.6 m²/h
Transparent media 9.3 m²/h





### Possible to print & install on the same day

Swift post-processing after printing since no drying time is required

UV curable ink of no drying process because the ink is instantly cured by UV light irradiating.

Since post-processing & construction can be performed immediately, shortened production time and high productivity can lead to handle jobs with short delivery time.

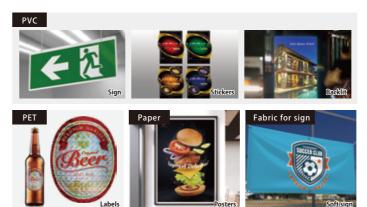


# Go for new business applications with wide-spread expressiveness with UV curable ink printing

#### Abundance of available media materials

In addition to PVC and tarpaulin, fabric and paper without ink receiving layer are possible to print, which are difficult with solvent ink or latex ink. Printing on PET film is also available. (\*2) A variety of proposals to clients are available by the high versality for media.

\*2 : Be sure to perform a pre-evaluation.



# White ink & Clear ink for high value-added print with diverse powers of expression

By applying white ink, it is possible to print on transparent media and colored media (\*3) to obtain a wider range of expression. Clear ink as well enables to show a highly-designed expression.

\*3: Applied to 2 layers printing but not to more than 2 layers such as "White -Color-White".

