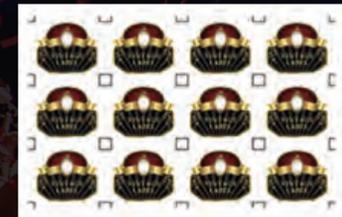# The "Print and Cut" function immediately turns an idea into a real product

The multiple functions of the CJV300 models enable high-quality printing and high-accuracy cutting. The CJV300 alone completes the production of labels, stickers, and vehicle wrapping films.

The continuous-register mark-detection function enables continuous media cutting.

The CJV300 automatically detects all register marks set by the RasterLink6 on the media, and cuts contour lines precisely by utilizing simultaneous automatic calibration.

The over-cut and corner-cut functions ensure clearly cut edges with no residues.

The over-cut function ensures sharply cut edges with no residues by making a cross cut at the start and end positions of the contour cutting. The corner-cut function ensures sharply cut edges by making cross cuts at each corner.

The clamp-pressure automatic-switching function enables continuous operation.

The pressure of the media clamps is automatically switched to a set value for printing and cutting. No pressure adjustment by the operator is required during continuous operation.

The "Cut and Print" function improves the workability of thin materials.

This function prevents common problems, such as film separation and faulty cut results, by cutting the media before printing.

Versatile cutting methods satisfy a range of market demands.

"Half-cut" cuts the contour of printed image and holds the cut image on media. "Die cut" completely cuts the printed image from media. "Perforation cut" produces a series of half and die cuts, leaving a few connection points that retain the printed image on media. This function is useful for clipping images from media, and also used as crease lines.

Print and cut on no-register mark media / Cut and print function

Media up to 1m in length do not require register marks. This function reduces the medium requirements.

The segment correction function facilitates precision cutting over longer-length prints.

This function detects intermediate register marks and enables four-point corrections for each segment to ensure accurate contour cutting over longer-length prints, even if the image is distorted.

Outstanding speed

Maximum printing speed: 105.9m²/h

The CJV300 models provide high productivity and high image quality.

4-color ● C ● M ● Y ● K

PVC

	0 10 20 30 40m²/h
Draft 540x720dpi 4Pass Bi	32.7 m²/h
High Speed 720x1080dpi 6Pass Bi	20.2 m²/h
Standard 720x1440dpi 12Pass Bi	10.4 m²/h
High Quality 1440x1440dpi 16Pass Bi	4.3 m²/h

Banner

	0 10 20 30 40 50 60 70 80 90 100m²/h
Super Draft 360x360dpi 1Pass Bi	105.9 m²/h
Draft 540x360dpi 2Pass Bi	69.2 m²/h
High Speed 540x720dpi 4Pass Bi	32.7 m²/h
Standard 720x720dpi 4Pass Bi	29.5 m²/h
High Quality 720x1080dpi 8Pass Bi	15.4 m²/h

8-color ● C ● M ● Y ● K ● Lc ● Lm ● Or

PVC

	0 10 20 30 40m²/h
Draft 540x360dpi 6Pass Bi	22.7 m²/h
High Speed 540x720dpi 8Pass Bi	17.4 m²/h
Standard 720x1080dpi 12Pass Bi	10.5 m²/h
High Quality 720x1440dpi 24Pass Bi	5.3 m²/h

Banner

	0 10 20 30 40 50m²/h
Draft 360x360dpi 4Pass Bi	50.5 m²/h
High Speed 540x360dpi 4Pass Bi	33.9 m²/h
Standard 540x720dpi 8Pass Bi	17.4 m²/h
High Quality 720x1080dpi 16Pass Bi	7.9 m²/h

* Printing speeds were measured on a CJV300-160.

RasterLink 6

It would mean nothing to provide high-performance software with a variety of useful functions if the software itself is too difficult and complicated to use... The newly developed RasterLink software was designed to be extremely user-friendly with this idea in mind. With a wide variety of newly added features, RIP software, software for people of all ages and backgrounds, now encompasses a perfect package with all of the features needed to reproduce beautiful full-color finishes in high definition with the easiest set of controls to use to navigate with!!

■ Specifications

Item		CJV300-130	CJV300-160
Printhead		On-demand piezo head (2 staggered printheads)	
Print resolution		360 dpi, 540 dpi, 720 dpi, 1440 dpi	
Maximum print width		1,361 mm (53.5 in)	1,610 mm (63.3 in)
Maximum media width		1,371 mm (53.9 in)	1,620 mm (63.7 in)
Ink	Type/Color	Eco-solvent ink SS21 (C, M, Y, K, Lc, Lm, Lk, Or, W, Si) BS3 (C, M, Y, K) only available in emerging countries Water-based sublimation ink Sb53 (Bl, M, Y, K, DK, Lb, Lm)	
	Package size	SS21: 440 ml Ink cartridge/2 L Ink pack (White and silver are provided in 220 ml Ink cartridge only.) BS3: 600 ml Ink pack/2 L Ink pack Sb53: 440 ml Ink cartridge/2 L Ink pack * Optional MBIS3 (Mimaki Bulk Ink System3) is required for using 2 L Ink pack.	
	Circulation system	MCT (Mimaki Circulation Technology) (Only applies to white and silver inks)	
Media thickness		1.0 mm or less	
Rolled media weight		40 kg (88lb) or less	
Certifications		VCCI class A / FCC class A / ETL (UL 60950-1) CE Marking (EMC, Low voltage, and Machinery directive) / CB RoHS / REACH and Energy Star / RCM	
Interface		USB 2.0, LAN for E-mail notification function	
Power supply		Single-phase (AC100~120V / AC200~240V) × 2	
Power consumption		100V: 2.88kW (1.44kW × 2), 200V: 3.84kW (1.92kW × 2)	
Operational environment		Temperature: 20~30°C (68~86°F), Humidity: 35~65% Rh (Non condensing)	
Dimensions (W × D × H)		2,525 mm × 700 mm × 1,392 mm (99 in × 28 in × 55 in)	2,775 mm × 700 mm × 1,392 mm (109 in × 28 in × 55 in)
Weight		167 kg	178 kg

■ Supplies

Item	Color	Item No.	Remarks
SS21	Cyan	SPC-0501C	440 ml Ink cartridge
	Magenta	SPC-0501M	
	Yellow	SPC-0501Y	
	Black	SPC-0501K	
	Light Cyan	SPC-0501LC	
	Light Magenta	SPC-0501LM	
	Orange	SPC-0501Or	
	Light Black	SPC-0501Lk	
	White	SPC-0504W-2	220 ml Ink cartridge
	Silver	SPC-0504Si	220 ml Ink cartridge
	Cyan	SPC-0588C	2,000 ml Ink pack
	Magenta	SPC-0588M	
	Yellow	SPC-0588Y	
	Black	SPC-0588K	
	Light Cyan	SPC-0588LC	
	Light Magenta	SPC-0588LM	
	Orange	SPC-0588Or	
	Light Black	SPC-0588Lk	
BS3	Cyan	SPC-0667C	600 ml Ink pack
	Magenta	SPC-0667M	
	Yellow	SPC-0667Y	
	Black	SPC-0667K	
	Cyan	SPC-0693C	2,000 ml Ink pack
	Magenta	SPC-0693M	
	Yellow	SPC-0693Y	
	Black	SPC-0693K	
Sb53	Blue	SB53-BL-44	440 ml Ink cartridge
	Magenta	SB53-M-44	
	Yellow	SB53-Y-44	
	Black	SB53-K-44	
	Deep Black	SB53-DK-44	
	Light Blue	SB53-LBL-44	
	Light Magenta	SB53-LM-44	
	Blue	SB53-BL-2L	2,000 ml Ink pack
	Magenta	SB53-M-2L	
	Yellow	SB53-Y-2L	
	Black	SB53-K-2L	
	Deep Black	SB53-DK-2L	
	Light Blue	SB53-LBL-2L	
	Light Magenta	SB53-LM-2L	

Print 'n' cut

IMAGINATION TO CREATION

Mimaki Green Technology

Print 'n' cut

IMAGINATION TO CREATION

Silver ink inspires imagination

Newly developed SS21 silver ink is available. Being 1.67* times brighter than conventional silver inks, SS21 ink adds brilliant and beautiful mirror effects to print results.

* Obtained from comparison measurements of SS21 and ES3 silver inks conducted at the Mimaki HQ.

Silver color added to catch copies and logos strikes a profound impression on the viewers, which makes silver printing very appealing.

The intensity of brightness in the silver ink varies as per the viewing angle. Such a high level of brightness attracts the viewer.

Diverse print expressions stimulate your creativity

Achieves a higher level of expression by using orange ink

By using the orange ink as a process color, 94.8% of the PANTONE color chart is covered with approximate colors. Thanks to a wider gamut with the orange ink, food freshness can be simulated, and corporate colors can be faithfully represented.

Conventional ink-set

Ink-set including the orange ink

Accurate expression with light black ink

The light black ink improves the printed grayscale gradation. It also faithfully represents monochrome data without introducing unexpected color shifts. Light black ink ensures a more accurate color representation.

Conventional ink-set

Ink-set including the light black ink

Alluring print quality that invigorates your creative abilities
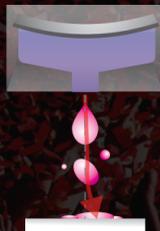
Banding reduction

The reputable anti-banding function MAPS2 has been improved to MAPS3*. Advanced MAPS3 scatters ink droplets and overlaps prints on areas of frequent banding.

* MAPS3: Mimaki Advanced Pass System 3

Advanced ink jet technology ensures high-quality printing at all times

Mimaki's unique advanced ink jet technology allows the print head to jet each ink droplet at the appropriate jetting angle while retaining excellent ink droplet circularity. This advanced technology ensures that texts, lines, and edges are clearly printed.
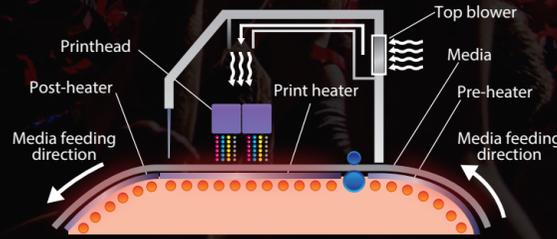
Printing without waveform management

Printing with optimized waveform

3-Way intelligent heater

A 3-way intelligent heater fixes droplets placed on media. By using Mimaki's original technology in heating the media at a controlled temperature, ink can be fixed while maintaining high color development and high image quality. Thus the CJV300 provides both steady color development and easy handling after printing.

- Pre-heater: Heats media to the optimum temperature before printing.
- Print heater: Dries ink after it lands on media before it bleeds, improving color development.
- Post-heater: Enhances ink drying and achieves stable take-up.
- Top blower: Air blower supports drying of ink.

Printhead
Top blower
Media
Post-heater
Print heater
Pre-heater
Media feeding direction
Media feeding direction

3-way Intelligent Heater patent No.
Japan: 4889059 USA: 8.444.262 China: ZL 200910222559.8

Smooth gradation printing

By ejecting 3 different dot sizes (Large/Medium/Small), images are expressed smoothly without graininess, even in large-format printing. Furthermore, the Large dot size is 35pl and by using this size effectively, light and shade can be expressed firmly while using higher printing speed settings.

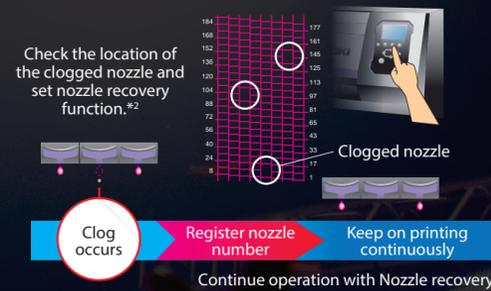
Simple and practical for everyday use

Continuous operation support pack to minimize downtime

The CJV300 is prepared with the following continuous operation support pack to minimize downtime in case of emergency such as machine failure.

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.
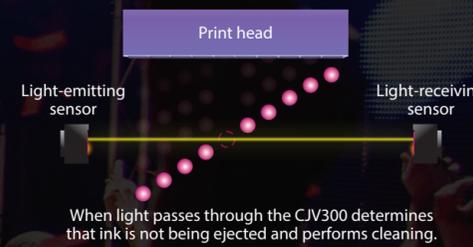
*1 NRS: Nozzle Recovery System
*2 10 nozzles per nozzle row can be registered.

Check the location of the clogged nozzle and set nozzle recovery function.*[2]

Clogged nozzle

Clog occurs → Register nozzle number → Keep on printing continuously

Continue operation with Nozzle recovery.

Prevention of print quality problems - NCU*

The CJV300 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 CJV300 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.
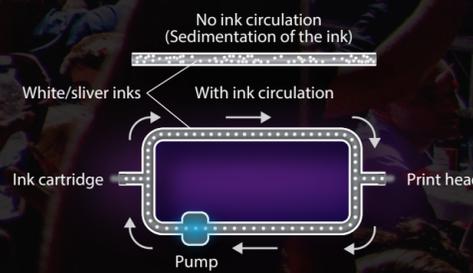
* NCU: Nozzle Check Unit

Print head
Light-emitting sensor
Light-receiving sensor

When light passes through the CJV300 determines that ink is not being ejected and performs cleaning.

Stable printing using the ink circulation system - MCT*

MCT is a standard feature included to effectively avoid the settling of white and silver pigments in the ink lines by regularly circulating the ink. It prevents print troubles and enables stable output from the start of operation. In addition, MCT contributes to reduction of ink waste, thereby supporting environmentally and economically friendly applications.

* MCT is only available for white and silver inks.
(MCT = Mimaki Circulation Technology)

No ink circulation (Sedimentation of the ink)
White/silver inks
With ink circulation
Ink cartridge
Print head
Pump

Reliable ink supply system

UISS*	The CJV300 is equipped with a 2-ink cartridge per color. Even if one cartridge becomes empty, ink supply continues from the other cartridge, preventing print suspension from ink end.
Non-stop ink replacement	Cartridges that are out of ink can be replaced while printing. This prevents print suspension from ink end.
MBIS III (Option)	Optional MBIS III with its large 2L ink pack enables continuous printing at a reduced operational cost.

* UISS is compatible only with the CMYK ink set.