

Inkjet Printer  
UX Twin Series

**HITACHI**  
Inspire the Next



# TWIN Nozzle



Coding Solutions by Hitachi



# Twin Nozzle & Double Speed For Superior Performance

The traceability requirements of packaging creates a need for more and more information, which has to be tagged - best before date, use-by date or date of filling. Codes for fish and meat which include freezing period and fishing zone pose a challenge for printers.

Hitachi's Continuous Ink Jet Printer with innovative Twin nozzle can print multiple lines of code to match traceability requirements without production line complexity or speed reduction. The Twin Jet contains a circulatory system to provide two nozzles at the same time. The result is outstanding, high-speed printing underlining Hitachi's commitment to quality.

Hitachi offers unique ink drop management ensuring all information is clearly printed.

Both nozzles can be operated independently. Print settings and various font sizes can be adjusted optionally.

Due to the high quantity of available dots per sign, there are many new possibilities to design logos and fonts.

The Twin Jet is ideal for customers with high standards in multiline printing at high-speed and complex codes with text, logo and barcode.

The high-speed UX twin series with its uptime benefits and clean operation is also ideal for the dairy industry where short shelf life and focus on hygiene creates additional pressure on packaging requirements.





# Twin Specific Features



## Flexible 8 Line Print

The UX twin print head now offers the ability to produce 8 lines of text by combining two individual nozzles into one, compact design. In addition, by utilizing Hitachi's first on the market "interlaced" print control technique, multiple line messages are printed clearly and legibly, further reducing coding errors due to misprint.



## High-speed printing

Two nozzles at one print head realizes double-speed printing, which can track even on a high-speed production line, resulting in high-quality printing regardless of the number of print lines.



## Versatile 64-Dot

Hitachi's innovative design now produces 64 vertical dots of print, resulting in large, bold characters. This makes the UX twin nozzle printer ideally suited to mark company logos, UL marks, or any other pattern previously unachievable with traditional print heads.



## Character Stitch Capability

A unique option in the new twin-nozzle printer is the ability to stitch both nozzles together. This results in characters that are bigger and bolder than ever, compared to those printed by individual nozzles. This is particularly useful when character recognition is needed at a distance from the product.

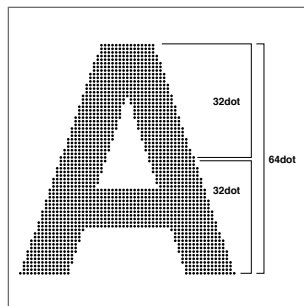
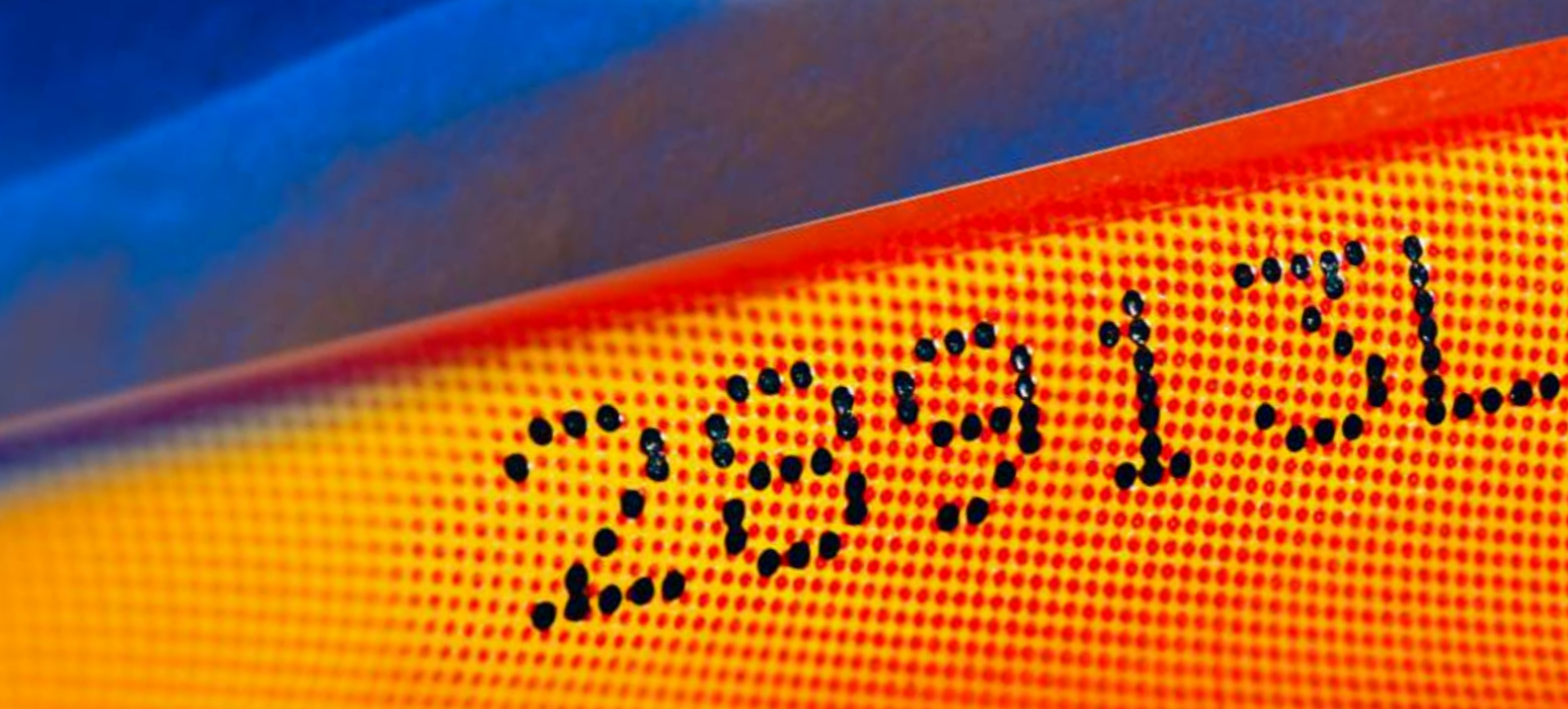


Image is for illustration purposes



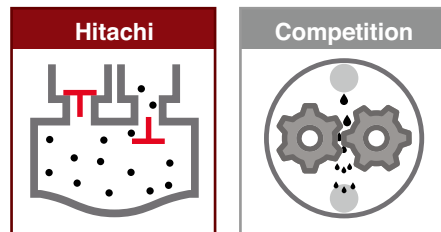
Printing on styrofoam



# UX - The Heart Of Reliability

## Increased Ink Integrity

Unlike a gear pump, a diaphragm pump does not shear the ink passing through it. Ink shearing results in lower viscosity and can adversely affect print quality. Hitachi diaphragm pumps provide a consistent supply of ink to the print head.



## Designed & Built by Hitachi

The diaphragm pump is the heart of each Hitachi printer. For this reason, Hitachi doesn't use an off-the-shelf product. Each pump is designed and built by Hitachi to the highest standards.



## Quad Chamber Design

Each pump is designed with four chambers allowing pump load to be distributed. Subsequently, the life span of each printer is significantly improved over single chamber pump designs.

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## Heavy on Quality

Hitachi diaphragm pumps are one of the heaviest components in each printer. This weight is due to the high-quality components used in the manufacturing of each pump. Quality is never compromised. You create superior products so you should have a partner who does too.



## Individual Pump Replacement

By allowing each ultra-reliable pump to be replaced individually, the Total Cost of Ownership for a UX Series printer is minimized.





### Easy to Use Interface

The display of our twin-nozzle model utilizes the same, easy-to-use touchscreen incorporated in other UX models. A large 10.4" display, and intuitive parameter illustrations reduce the complexity typically found in traditional small screen printers. In addition, messages can be easily changed in one screen, with a live WYSIWYG display.



### Low Total Costs of Operation

Hitachi's design facilitates longevity. Each component of our print-head can be replaced individually, thus reducing the need to purchase costly sub-assemblies. In addition, our preventative maintenance items are all replaceable individually, further reducing the unnecessary replacement of complete ink circuits or complete ink cores.



### Easy Drain Cartridges

Hitachi's ink cartridges can be easily changed without stopping production. In addition, the unique design facilitates the complete evacuation of fluids, allowing users to take advantage of fluids right to the last drop. Empty cartridges are sealed after removal, eliminating the potential release of hazardous solvents.



### Designed for Harsh Environments

The stainless steel cabinet offers IP-55 allowing wash-down and dust protection. The UX Series Twin nozzle's protection is the ideal choice for a variety of printing needs.



# Standard Print Samples

High-speed printing	2 LINE	Nozzle 2	01234567	2 LINE	Nozzle 2	01234567																									
		Nozzle 1	ABCDEFGH 160m/min Font: 5x7		Nozzle 1	ABCDEFGH 200m/min Font: 8x7																									
2, 3-line printing	2 LINE	Nozzle 2	01234567890	3 LINE	Nozzle 2	01234567890																									
		Nozzle 1	ABCDEFGHIJK Font: 7x10		Nozzle 1	ABCDEFGHIJK TWINNOZZLE8 Font: 7x10																									
Multi-line printing (4line, 8line)	4 LINE	Nozzle 2 (2 line English)	05/08/18 ABCD 05/02/19 1234	8 LINE	Nozzle 2 (4 line)	SELL BY AUG 8 MANUFACTURED BY HIES 11:37:17 BEST BY 05 FEB<FEB>2020 LOV 8929 0417 6557																									
		Nozzle 1 (2 line Arabic)	:0/:A/ 1A ABCD :0/:C/ 19 1C3E Font: 5x8		Nozzle 1 (4 line)	HITACHI INDUSTRIAL EQUIPMENT MADE IN JAPAN TEL+81-4345-6077 IOS 9001 Font: 5x7																									
Dot mixture	Nozzle 2	ABCD	HIES UX	017H04	Font: 5x8 12x16																										
	Nozzle 1	BEST BY	05FEB<FEB>2019	S28N02																											
	Nozzle 2	UX	TOKYO EXPO PACKAGING	860	Font: 5x7, 12x16																										
	Nozzle 1	HITACHI INDUSTRIAL EQUIPMENT SYSTEMS	TECHNICAL AREA CODING																												
Logos*	Nozzle 2	[CE]	40 dots	Nozzle 2	[JIS]	48 dots	Nozzle 2	[A]	64 dots	Nozzle 2	[Image]	64 dots																			
	Nozzle 1			Nozzle 1			Nozzle 1																								
	<table border="0"> <tr> <td>Nozzle 2</td> <td>5x7 BOLD 2 LINE S</td> <td>5x7 BOLD 2 LINE B</td> </tr> <tr> <td>Nozzle 1</td> <td>5x7 BOLD 2 LINE S</td> <td>5x7 BOLD 2 LINE B</td> </tr> </table>												Nozzle 2	5x7 BOLD 2 LINE S	5x7 BOLD 2 LINE B	Nozzle 1	5x7 BOLD 2 LINE S	5x7 BOLD 2 LINE B													
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Nozzle 2	7777777	CC	HH	MM	NN	PP	RR	SS	TT																						
Nozzle 1	7777777	CC	HH	MM	NN	PP	RR	SS	TT																						
<table border="0"> <tr> <td>Nozzle 2</td> <td>INRINT</td> <td>NID</td> <td>91ZI</td> </tr> <tr> <td>Nozzle 1</td> <td>-I-Z-H-78 &lt;M-ZE-H-10 Z-HO U-X-V</td> <td></td> <td></td> </tr> </table>												Nozzle 2	INRINT	NID	91ZI	Nozzle 1	-I-Z-H-78 <M-ZE-H-10 Z-HO U-X-V														
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Nozzle 1	-I-Z-H-78 <M-ZE-H-10 Z-HO U-X-V																														
Barcodes	Nozzle 2	[Barcode]	Nozzle 2	[Barcode]																											
	Nozzle 1	0123456 Font: 18x24, 5x7	Nozzle 1	6 11942 03936 4 4400 4" X 10" Font: 24x32, 5x7																											
QR Codes	Nozzle 2	[QR]	Nozzle 2	[QR]	Nozzle 2	[QR]																									
	Nozzle 1	Our Web Here Font: 29x29, 5x7	Nozzle 1	Saki Web Font: 25x25, 5x7	Nozzle 1	Micro QR Code Font: 15x15, 5x7																									
	Nozzle 2	[QR]	Nozzle 2	[QR]	Nozzle 2	[QR]																									
Datamatrix	Nozzle 2	[QR]	Nozzle 2	[QR]	Nozzle 2	[QR]																									
	Nozzle 1	HITACHI Font: 16x16, 5x7	Nozzle 1	Our Web Here Font: 16x36, 5x7	Nozzle 1	[QR] 64 dots**																									

\* When printing logos, please make sure the image is acceptable to the association or the organization.

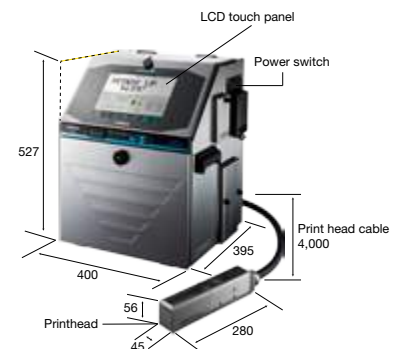
\*\* This printing will be made with use of graphics data (dot-pattern) but not with 2D code function. This graphics data (dot-pattern) should be prepared by the users. Read rate will vary depending on the print condition.

## Standard Specifications

Item	UX-D860W	
Nozzle Size	65µm	
Maximum number of print lines	Up to 8 lines	
Maximum number of print characters	Up to 1,000 characters	
Font (Horizontal x Vertical)	4 x 5	✓
	5 x 5	✓
	5 x 7(8) 9 x 7(8)	✓
	7 x 10	✓
	11 x 11	✓ (Chinese only)
	10 x 12	✓
	12 x 16	✓
	18 x 24	✓
	24 x 32	✓
	30 x 40	✓*
	36 x 48	✓*
48 x 64	✓*	
Character height	2 - 21 mm	
Display & input device	WYSIWYG design Display: TFT LCD (10.4" color), backlight provided Input device: Touch panel, input sound provided	
Screen language (2 languages selectable)	English, Chinese, Korean, Thai, Vietnamese, German, French, Dutch, Italian, Spanish, Portuguese, Swedish, Danish, Greek, Russian, Czech, Polish, Arabic, Serbian, Turkish, Hungarian, Bulgarian, Catalan, Romanian, Finnish, Norwegian, Slovenian	
Maximum print rate (Character per second) (Font 5x5, space 1, 1 line)	Up to 2,296 (Option: Up to 2,563) per nozzle**	
Standard characters	Alphanumeric (A-Z, a-z, 0-9), symbols (27) and space: Total 90	
User patterns	200 patterns each for dot matrix (50 patterns for 30x40, 36x48, 48x64 fonts)	
Print functions	Calendar, Count, Font mixture, Shift Code	
Barcode printing	code39, ITF, NW-7, EAN-13, EAN-8, UPC-A, UPC-E, code128/EAN-128, GS-1 DataBar	
2D code printing	Data Matrix (Alphabet: 49 characters/Numerals: 98 characters), QR Code, Micro QR code	
Message storage capacity	Up to 2,000 messages (Depends on data content)	
Input signal	Print target detection, Printing stop, Rotary encoder pulse, Reciprocal printing, Remote control (Run, Stop, High-voltage ON / OFF, Reset), (NPN / PNP Selectable)	
Output signal	Print in progress or Print complete, Online (NPN / PNP Selectable), Print ready, Fault, Warning (NPN Only)	
Data interface	RS-232C at baud rates selectable up to 115,200bps	
Ethernet (Modbus communication)	IEEE802.3, 100BASE-T	
External memory	USB for user data storage	
Print head cable length / angle	4m (in-line/90 degrees)	
Operating temperature range	0-40° (1072K Ink)	
Operating humidity range	30-90% RH (no condensation)	
Power supply (Automatic voltage selection)	AC100-120/220-240V±10% 50/60Hz 150VA	
Approval	CE, UL, cUL, RCM, FCC, ICES	
Dimensions (Width x Depth x Height)	400 x 395 x 527 mm	
International protection	IP55	
Approximate weight	34kg	

\* The character is printed with the composite character made by the user patterns for both nozzles 1 and 2.

\*\* Ink types and temperature are limited.



Note: Main unit dimensions do not include any projections.

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