





## 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 abilty to produce 8 lines of text by combining two individual nozzles into one, compact design. In additon,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.



#### **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.



#### **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.



#### **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.



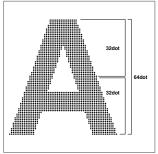


Image is for illustration purposes





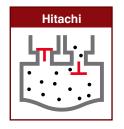
Printing on styrofoam

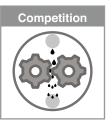


### UX - The Heart Of Reliability

#### **Increased Ink Integrity**

Unlike a gear pump, a diagraphm pump does not shear the ink passing through it. Ink shearing results in lower viscosity and can adversely affect print quality. Hitachi diagraphm 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 standarts.



#### **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.

#### **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 faciliates 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	Nozzle: 01234567 Nozzle: 01234567		
	Nozzle 1 HECDEFGH 160m/min Font: 5x7  Nozzle 1 HECDEFGH 200m/min Font: 5x7		
2, 3-line printing	Nozzle 2 01234567890		
Multi-line printing (4line, 8line)	Nozzle 2 (2 line D5 / 02 / 19 12 34 Nozzle 2 (4 line) Nozzle 1 (2 line Arabic) Font: 5x8 Nozzle 1 (4 line) Nozzle 1 (4 line) Font: 5x8		
	Nozzle 2 ABCD HIES UX 017H04 BEST BY HIES UX 528N02		
Dot mixture	Nozzle 1 05FEB(FEB)2019 Font: 5x8 12x16		
	Nozzle 2 UXTWIN TECHNICAL AREA CODING 860		
	Nozzle 1 HITACHI INDUSTRIAL EQUIPMENT SYSTEMS Font: 5x7, 12x16		
Logos*	Nozzle 2 Nozzle 2 Nozzle 2 Nozzle 2 Nozzle 1 Nozzle 2 Noz		
Bold characters	Nozzle 2 Nozzle 2 Nozzle 1  SX7  BOLD 2 LINE S  SX7  BOLD 2 LINE B  Font: 5x7		
Chimney characters	Nozzle 2 Nozzle 1 Nozzle 2 Nozzle 1 Nozzle 1 Nozzle 2 Nozzle 1 Nozzle 2 Nozzle 2 Nozzle 2 Nozzle 3 Nozzle 4 Nozzle 3 Nozzle 3 Nozzle 3 Nozzle 4 Nozzle 5 Nozzle 5 Nozzle 5 Nozzle 5 Nozzle 5 Nozzle 6 Nozzle 7 Nozzle 7 Nozzle 7 Nozzle 7 Nozzle 7 Nozzle 8 Noz		
Inverted characters (DIN printing)	Nozzle 2 INIAA NIO 91XZI Nozzle 1		
Barcodes	Nozzle 2  Nozzle 2  Nozzle 1  Font: 18x24, 5x7  Font: 24x32, 5x7		
QR Codes	Nozzle 2         Nozzle 2         Nozzle 2         Nozzle 2           Nozzle 1         Our Leb Here         Nozzle 1         Font: 15x15, 5x7		
Datamatrix	Nozzle 2         Nozzle 2         Nozzle 2           Nozzle 1         Nozzle 1         Our Meb Here         Nozzle 1           Font: 16x16, 5x7         Font: 16x36, 5x7         64 dots**		

<sup>\*</sup> 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		65µт
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	<b>/*</b>
	48 x 64	<b>√*</b>
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, Reciprocative 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 lnk)
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

 $<sup>^\</sup>star$  The character is printed with the composite character made by the user patterns for both nozzles 1 and 2.  $^{\star\star}$  Ink types and temperature are limited.



Note: Main unit dimensions do not include any projections.

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