## **UX Twin Nozzle Series**

Inkjet Printer

HITACHI Inspire the Next







Hitachi's UX Series continuous inkjet printers represent the pinnacle of innovation in marking and coding technology, all while showcasing Hitachi's reputation for Reliability, Efficiency, and Ease of Use.

### Sample photos

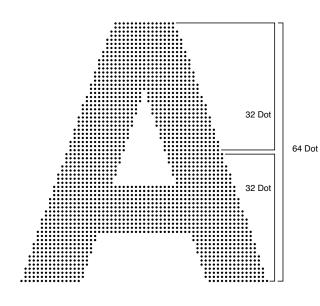


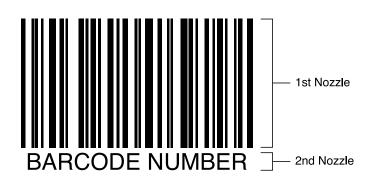






#### **Versatile 64-Dot**





# Twin Specific Features



### Flexible 8-Line Print

The UX twin print head now has the capability of producing 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.



#### **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.



#### **Higher Print Speeds**

Having two nozzles on tap dramatically increases the speed of multiline printing. Traditionally, single nozzle print heads become taxed very quickly when printing multiple lines of print, especially at speed. By sharing the work load between two separate nozzles, this effect is greatly reduced.



### **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.

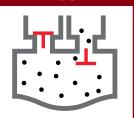


## **#HEART OF RELIABILITY**

### **Increased Ink Integrity**

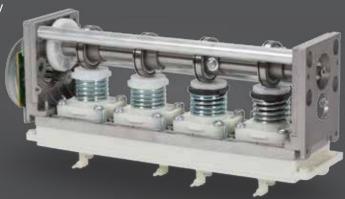
Unlike a gear pump, a diaphragm pump does not shear the ink passing through it. Ink shearing results in lower viscosity and can adversely affect print quality. Hitachi diaphragm pumps provide a consistent supply of ink to the print head.

#### Hitachi



#### Competition





### **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.



### **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. You should have a partner who does too.

### **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.



### **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.



# **UX Specific Features**



### **Low Fluid Consumption**

Makeup evaporation is suppressed by using a pulsating system which sucks the pulsed ink with the best suited flow rate and reduces the air capacity contacting with the ink, thus achieving industry-leading levels of makeup consumption and increasing your bottom line. A large factor in determining fluid consumption is the amount of fluid exposure to the outside environment. Hitachi designs their pump system in such a way that minimizes the exposure. Hitachi's ink recovery system pulsates while being transported back to the ink tank. This technique reduces the surface area-or-exposure area of ink, thus reducing the evaporation rate and increasing your bottom line.



### **Traditional Fluid Recovery Systems**

Ink passes through a channel of air increasing the evaporation rate and, consequently, fluid makeup consumption.

\* As compared to Hitachi current models with 1067K ink at 20°C. About 30% reduction for UX-B and UX-D.



### Hitachi's Pulse Recovery System

Ink is recovered using a pulsating system which reduces the evaporation rate and makeup consumption, thus increasing your bottom line.



### **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.



#### **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.



#### **Low Total Cost 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 as well, further reducing the unnecessary replacement of complete ink circuits or complete ink cores.



### **Designed for Harsh Environments**

The stainless steel cabinet offers IP-55 protection and allows for 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**

Standard Print	a Samples	
High-speed printing	Nozzle 2 01234567 Nozzle 2 01234567	
	Nozzle 1 ABCDEFSH Nozzle 1 ABCDEFSH	200m/min Font: 5x7
2, 3-line printing	Nozzle 2 01234567890 Nozzle 1 ABCDEFGHIJK Font: 7x10	Font: 7x10
Malti-line printing (Aline, Sline)	Nozzle 2 05/08/18 A8CD (2line English) 05/02/19 1234 (4line) DEST BY 05 FOREST BY 05/08/18 1153 1153 1153 1153 1153 1153 1153 11	P° = 1 P° E≻4 T° Font: 5x7
Dot mixture	Nozzle 2 ABCD BY <b>HILL 11 O 17HO4</b> SZ8HOZ  Nozzle 1 O 5 FEB (FEB) 2019	Font: 5x7 12x16
	Nozde 2 UX TWIN TECHNICAL AREA COLING 860  Nozde 1 HITACHI INDUSTRIAL EQUIPMENT SYSTEMS	Font: 5x7 12x16
Logos**	Nozzle 2 Nozzle 2 Nozzle 2 Nozzle 2 Nozzle 1 Nozzle 2 Nozzle 1 Nozzle 2 Nozzle 1 Nozzle 2 Nozzle 1 Nozzle 1 Nozzle 1 Nozzle 1	ots
Bold characters	Nozzle 2 5×7 BOLD 2 LINE B 5×7 BOLD 2 LINE B Font: 547	
Chimney characters	Nozzle 2 Nozzle 2 Nozzle 2 Nozzle 2 Nozzle 2 Nozzle 2 Nozzle 1 Nozzle 1 Nozzle 2 Nozzle 1 Nozzle 2 Noz	
in verted characters (DIN printing)	Nozzle 2 LNI3d NIQ 91×ZI  Nozzle 1	
Barco des	Nozzle 2 Nozzle 2 Nozzle 2 Nozzle 2 Nozzle 2 Nozzle 1 11942 03936 4 4400 4" X 10" Font: 18x24 5x7 Font: 24x32 5x7	
QR codes	Nozzle 2 Nozzle 1 Nozzle 1 Nozzle 1 Micro QR C	
Datamatrix	Nozzle 2         Nozzle 2         Nozzle 2         Nozzle 2           Nozzle 1         HTACHI         Nozzle 1         Our Web Here           Fort: 16x16 5x7         Fort: 16x36 5x7         64 dots %	

<sup>\*1</sup> When printing logos, please make sure the image quality is acceptable to the association or the organization.
\*2 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.

### **Specifications**

		Model	
ltem		300	
		UX-D890W	
Nozzle Size		65μm	
Max. # of Print Lines		Up to 8 lines	
Max. # of Print Characters		Up to 1,000 characters	
Font (horizontal x vertical)	4 x 5	<b>√</b>	
	5 x 5	<b>√</b>	
	5 x 7(8), 9 x 7(8)	<b>√</b>	
	7 x 10	<b>√</b>	
	11 x 11	J	
	10 x 12	<b>,</b>	
(HOHZOHIAI X Vertical)	12 x 16	<b>√</b>	
	18 x 24	<b>,</b>	
	24 x 32	<b>/</b>	
	30 x 40	✓*1	
	36 x 48	✓*1	
	48 x 64	✓.1	
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	
Max. Print Rate (Characters per second) (Font 5x5, space 1, 1 Line)		Up to 2,296 (Option: Up to 2,563) 12	
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 Function		Calendar, Count, Font mixture	
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, 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		IEEE802.3, 100BASE-T	
External Memory		USB for user data storage	
Print-head Cable Length/Angle		4m (in-line/90 degrees)	
Operating Temperature Range		0-45°C (1067K lnk) <sup>*2</sup>	
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 (W x D x H)		400 x 395 x 527 mm	
International Protection		IP55	
Approximate Weight		34kg	

<sup>&</sup>lt;sup>1</sup> The character is printed with the composite character made by the user patterns for both nozzles 1 and 2.

<sup>&</sup>lt;sup>12</sup> Ink types and temperatures are limited.





### **Hitachi Industrial Equipment**

Hitachi Industrial Equipment Systems Co., Ltd. Hitachi America, Ltd.

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Registration number: JQA-QMA12087 Registration date: April 1, 2005

The Marking Systems and Hoist Systems Division (Taga Division) of Hitachi Industrial Equipment Systems Co., Ltd. obtained international standard ISO 9001 certification for the quality assurance of the Ink Jet Printer contained in this brochure.