HITACHI
Inspire the Next

Ink Jet Printer
UX *Series*

THE WIDE WORLD

The world leader in coding

Hitachi, which manufactured the first Japanese industrial inkjet printer in 1975, has boasted of a high achievement worldwide ever since, not to mention the Japanese market, as a reliable and leading brand of coding.

Hitachi industrial IJ printer UX Series is a global model with highly evolved "Reliability", "Simplicity", and even "Eco-friendly" performance.

We will change the coding scene of the world.

**Higher functionality and easier installation for a variety of printing needs.
Its evolution has also realized ease of use and maintainability.**

Hitachi industrial IJ printers are high-speed printers adopting a non-contact type of printing method, in which the drops of ink fly in the air. It can print on a variety of products manufactured on production lines, which are made of metals, plastics, films, papers, etc. Its speed, flexibility, reliability, and durability are really impressive. Durability in harsh environment and ease of use have also been greatly improved. We are bringing excitement to the coding and marking industry.

RELIABILITY

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High reliability,
and reassured maintenance
and service networks

ECOLOGY

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Environmentally friendly while
realizing a low running cost

USABILITY

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Simple touch panel operation and
maintainability

THE WIDE WORLD

ECOLOGY

Environmentally friendly while realizing a low running cost
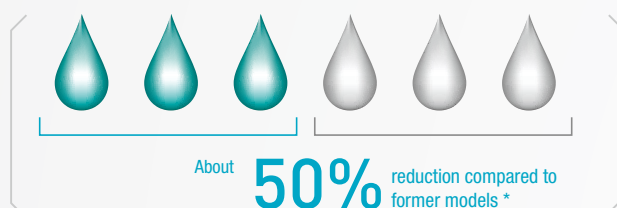
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Hitachi original "Makeup fluid consumption reduction system" has Significantly-reduced running cost.
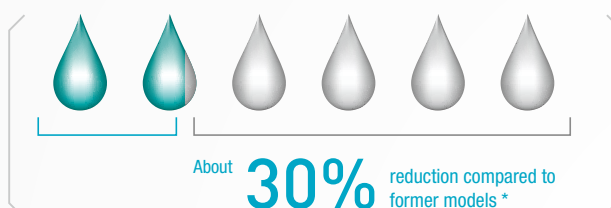
The ink recovery control and device temperature control provided by the new technology of "Makeup fluid consumption reduction system" suppress the amount of makeup vapored and achieve industry-leading levels of makeup consumption.

Reduction of makeup fluid consumption

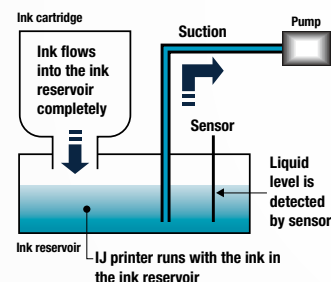* With 1067K ink at 20°C.

■ **UX-E**

About **50%** reduction compared to former models *

■ **UX-B, UX-D**

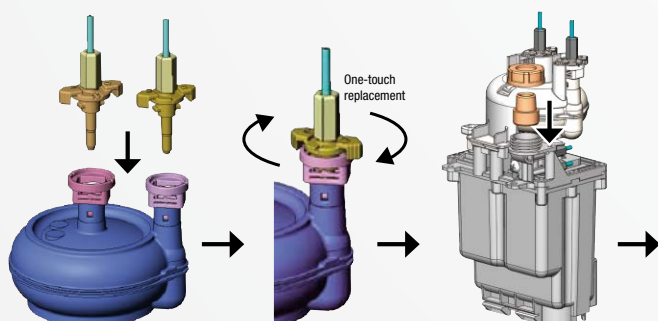About **30%** reduction compared to former models *

Eco-friendly because the ink and the makeup fluid in the cartridge can be consumed right up to the last drop.

It is not necessary to stop the production line to replace the cartridges. An eco-system of a simple cartridge-type bottle can be replaced after the ink or makeup fluid is completely consumed and is also easily disposed of.

Ink cartridge

Ink flows into the ink reservoir completely

Suction

Pump

Sensor

Liquid level is detected by sensor

Ink reservoir

IJ printer runs with the ink in the ink reservoir

Each part can be replaced separately, and filter replacement is also easy.

The IJ printer is so designed that the minimal part or module can be replaced rather than replacing the whole unit. The ink filter can also be removed and replaced easily without any tools just by rotating the joint. It's a one-touch operation.

One-touch replacement

RELIABILITY

High reliability, and reassured maintenance and service networks

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RFID function to prevent installing the wrong cartridge

IC tags are adopted for the ink and makeup fluid cartridges. Installation of the wrong cartridge can be prevented by simply passing the cartridges over the main unit which is equipped with RFID* (Radio Frequency Identification) function. A message appears on the screen if the wrong cartridge is scanned.
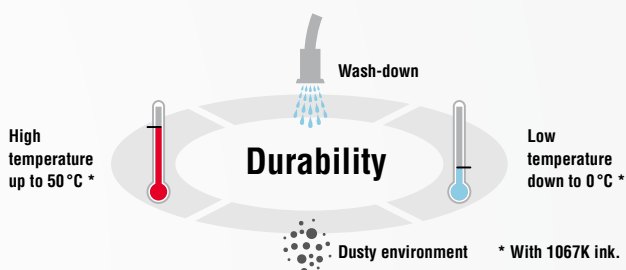
* Some geographic areas are excluded.

> Hitachi Industrial Equipment Systems Co.,Ltd. declares that the IC tag reader is in compliance with the essential requirements and other relevant provisions of the FCC Part15 subpart C, EN 301 489-1/-3, EN 300 330-1/-2.
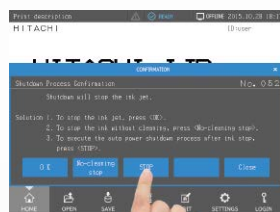
Designed for harsh environments

The stainless steel cabinet offers IP65 and allows a wash-down with pressured water and industrial detergent, to meet any environment and hygiene requests. The UX Series with IP65 protection is the ideal choice for applications in the meat and dairy sectors.

Wash-down

High temperature up to 50 °C *

Durability

Low temperature down to 0 °C *
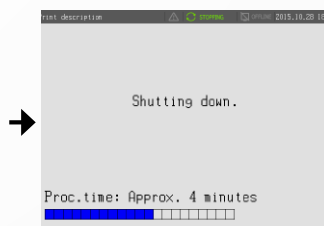
Dusty environment   * With 1067K ink.

Automatic nozzle cleaning / Nozzle backwash

Automatic cleaning starts by one press of a button and there is no need to wait for its completion since the power turns off automatically when it is finished. Even if the nozzle gets clogged, it can be easily recovered by the nozzle backwash function that is opposite of the normal ink ejection, in which the fluid is sucked through the nozzle.
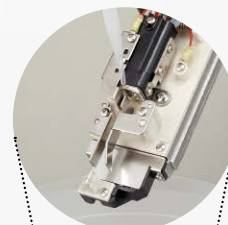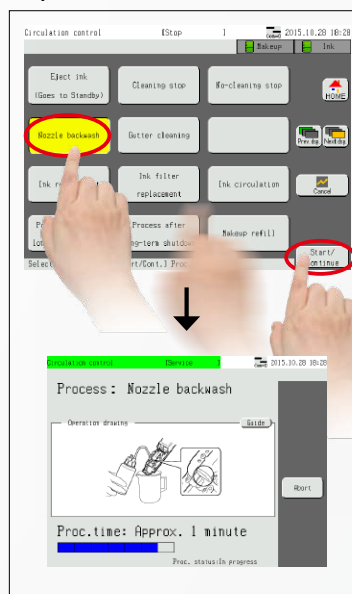
■Operation screen of nozzle backwash

■Automatic nozzle cleaning

Press [STOP]

Shutting down.

Proc.time: Approx. 4 minutes

Automatic cleaning starts and then the power turns off automatically when cleaning completes.

Process: Nozzle backwash

Proc.time: Approx. 1 minute

Made in Japan

Hitachi industrial IJ printers are manufactured with the know-how and technology that have been accumulated since 1975 in Hitachi City where Hitachi was first founded.

After production, all printers have to pass Hitachi's strict quality management before shipment. We provide quality products to our customers worldwide.

HITACHI IJP

Feature [3]

USABILITY

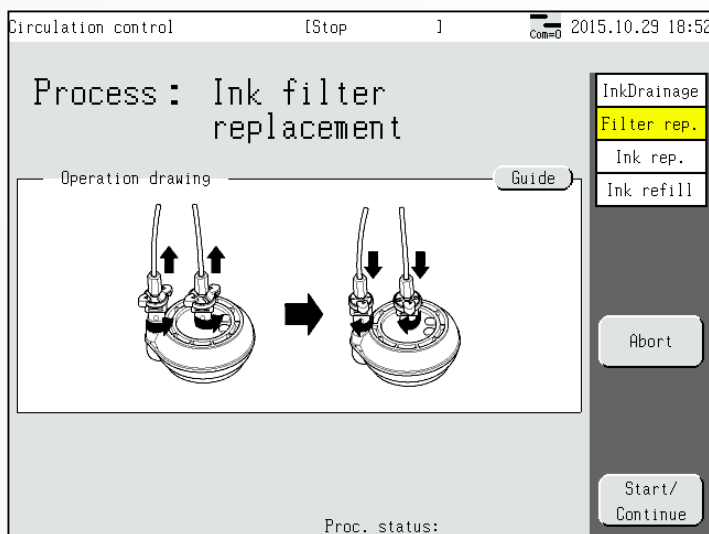## Simple touch panel operation and maintainability

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Totally-new user interface!

Intuitive operations with a new readily-understandable screen design is now adopted. Most of the operations can be completed on one screen with a simplified and well-arranged design. Complicated operations are not required to obtain the necessary information thereby improving usability.

Troubleshooting and maintenance guides using plain illustrations

The necessary operations will be displayed on the screen using illustrations when the ink filter needs replacement or when troubleshooting or maintenance is needed.
Comprehensive illustrations help to maintain the quality.

IC Card* with RFID function

With IC cards, login information and print data can be managed. * Optional

👆 User login
By scanning IC card, only the registered user can log-in and each user operation can also be limited. It prevents any incorrect operation.

👆 Print data selection
By scanning IC card, the registered print data can be accurately called up. It prevents the incorrect data from being called up which may happen with manual operation.
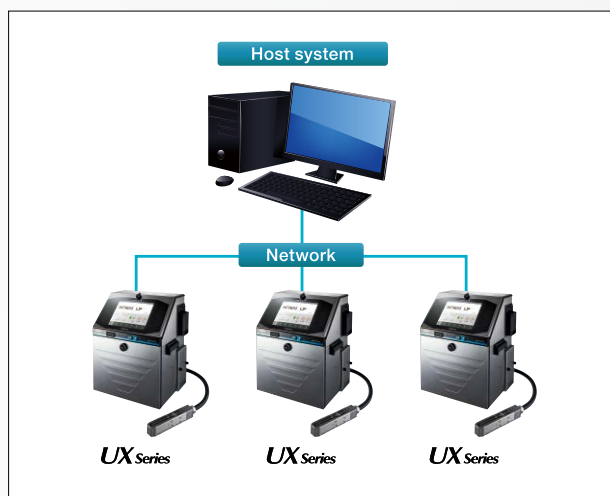
* Use of IC card (RFID function) requires Radio Law approval in each country.

Log-in by passing IC card over RFID reader

Enhanced network functionality by improving compatibility with the host system

Configuration of an IoT* system can be smoothly realized using simple wiring because of the standard Ethernet feature and open network compatibility. By collectively managing multiple devices from the host system, the information gathering and operations become more efficient.
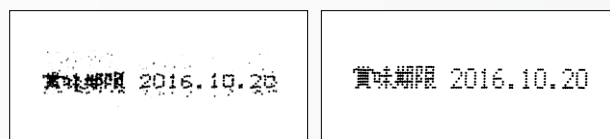
* Internet of Things

Note: UX-B is excluded.

Ink conditioning management to maintain print quality

By monitoring both the ink viscosity and the ink consumption, the ink viscosity is always kept in the best condition.

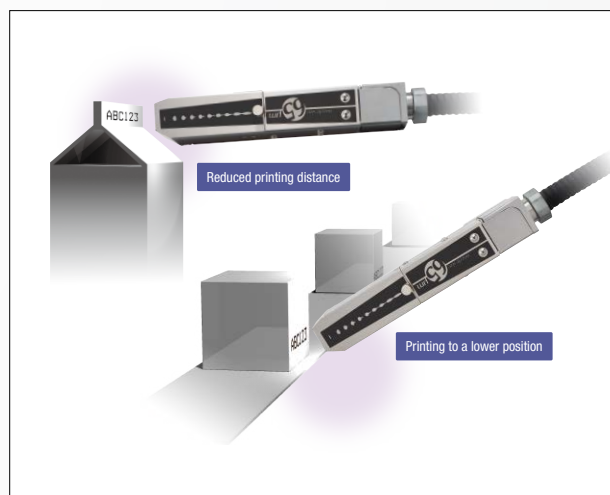Print sample without ink conditioning

Print sample with ink conditioning

Excellent printhead shape

Tapered shape at the tip of the printhead reduces the distance between the work and the printhead. Printing to the lower position is now made possible. The printhead with anti-corrosion plating keeps working in severe environment.

* Corresponding models: For small characters and high-speed printing

Reduced printing distance

Printing to a lower position

New printing technology, "6-line print" compatible for a wider variety of needs

6-line print from one printhead is made possible.

Even with multiple print lines, Hitachi original interlaced-print-control system makes each printed character appear clearly.

For single-line high-speed printing, its print quality is improved with the new print control system.

* Corresponding models: For small characters

Standard print samples (Approx. full scale)

■ Small characters (65μm)

Font (Horizontal x Vertical)			UX-B160W			UX-E160W UX-D160W
UX-B160W	5×5	1LINE	0123456789ABCDEFGH / 012345678	2LINE: 012345678 / ABCDEFGHI	3LINE: 012345678 ABCDEFGHI JKLMNOPQR	6LINE
	5×7	1LINE	0123456789ABCD / 0123456	2LINE: 012345678 / ABCDEFGHI	3LINE: 012345678 ABCDEFGHI JKLMNOPQR	4LINE
	7×10	1LINE	0123456789 / 012345	2LINE: 01234567 / ABCDEFGH	3LINE: 01234567890123456 78 ABCDEFGHIJKLMNOPQRS TUVWXYZABCDEFGHIJKL	
	10×12	1LINE	0123456789ABCD / 0123456789	2LINE: 01234567890 ABCDEFGHIJK		
	12×16	1LINE	0123456789ABCアイウエオカキクケコ / 0123456 01	2LINE: 012 ABC [QR]		
	18×24	1LINE	0123456789 / 0123456ABC	1LINE: 0A [barcode/QR]		
UX-E160W UX-D160W	24×32	1LINE	0123456789ABCDEF / 012345 [barcode] [QR]			
	30×40	1LINE	012345ABCDEF			
	36×48	1LINE	012345ABCD			

■ Print samples

Standard Specification

Item		Small characters		
		UX-B160W	**UX-D160W**	**UX-E160W**
Nozzle size		65μm		
Max. print line number		Up to 3 lines	Up to 6 lines	Up to 6 lines
Maximum number of print characters		Up to 240 characters	Up to 240 characters (Option: Up to 1,000 characters)	Up to 1,000 characters
Font (Horizontal × Vertical)	4 × 5	✓	✓	✓
	5 × 5	✓	✓	✓
	5 × 7(8), 9 × 7(8)	✓	✓	✓
	7 × 10	✓	✓	✓
	11 × 11	✓ (Chinese only)	✓ (Chinese only)	✓ (Chinese only)
	10 × 12	✓	✓	✓
	12 × 16	✓	✓	✓
	18 × 24	✓	✓	✓
	24 × 32	—	✓	✓
	30 × 40	—	✓	✓
	36 × 48	—	✓	✓
Character height		2 - 10 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 (Characters per second) (Font 5x5, space 1, 1 line)		Up to 1,148 (Option: Up to 1,281 *1)	Up to 1,148 (Option: Up to 2,563 *1)	Up to 2,296 (Option: Up to 2,563 *1)
Standard characters		Alphanumeric (A-Z, a-z, 0-9), symbols (27) and space: Total 90		
User pattern		50 patterns each for dot matrix	200 patterns each for dot matrix (50 patterns for 30×40 and 36×48 fonts)	
Print functions		Calendar, Count, Font mixture, Password		
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		150 messages	300 messages [Option: Up to 2,000 messages (Depends on data content)]	2,000 messages (Depends on data content)
Input signal		Print target detection Rotary encoder pulse (NPN/PNP Selectable)	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 ready, Fault, Warning (NPN Only)	Print in progress or Print complete, Online (NPN/PNP Selectable), Print ready, Fault, Warning (NPN Only)	
Data interface		Option (RS-232C at baud rates selectable up to 115,200bps)	RS-232C at baud rates selectable up to 115,200bps	
Ethernet (Modbus communication)		—	IEEE802.3 , 100BASE-T	
External memory		USB for user data storage		
Printhead cable length / angle		4m (in-line/90 degrees)		
Operating temperature range		0-50℃ (1067K Ink)		
Operating humidity range		30-90% RH (no condensation)		
Power supply (Automatic voltage selection)		AC100-120/220-240V±10% 50/60Hz 120VA		
Approval		CE, UL, cUL, C-Tick, FCC, ICES		CE, C-Tick
Dimensions (Width x Depth x Height)		400 x 320 x 527 mm		
International protection		IP55	IP65	
Approximate weight		27kg		

*1 Ink types and temperature are limited.

UX-B160W

UX-D160W

UX-E160W