Marking & Coding Solutions

# Inkjet Printer



For over 45 years, Hitachi has developed and produced **high-performance inkjet printers** based on the **well-proven Continuous Inkjet (CIJ)** principle for **industrial marking**.

Hitachi Industrial IJ printers are high-speed printers adopting a non-contact printing method, ideal for a wide range of applications. They are capable of applying best-before dates, logos, barcodes, lot numbers and data matrix codes, which makes the new UX2 Series the perfect solution for both complex and standard applications.

### Highly Reliable

Hitachi products are renowned for being extremely reliable in harsh environments. All functionally critical parts are manufactured in-house. The use of Hitachi's own components reinforces the high quality levels, reliability and excellent value for money.

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#### Cost-Effective

The new, economical ink recovery technique achieves industry-leading levels of solvent consumption and the very low maintenance costs minimize the total cost of ownership.

#### Global Sales & Service Network

Are you looking for a global company that can work with you at a local level? Hitachi offers a global sales and service network when marking, coding and traceability challenges demand a coordinated answer. For each of your locations, and across your entire organization, we will champion your goals by providing international consistency, a global perspective, broad expertise and coordinated services provided by dedicated contacts. Our global team applies its worldwide technical expertise to your unique challenges in a consistent way. Tangible deliverables and proven solutions are the results of our business analysis and project implementation. In addition, we offer cross-border project management and coordination between suppliers, OEMs and end-users. You gain more visibility and save time and money.

## Overview of UX2



## Prints 3 Times Longer

## Newly designed to stay cleaner, longer

#### Conventional Printers

With conventional print heads, ink mists\*1 are deposited onto components that control the inkjet. Over time, the build-up of ink can result in downtime leading to lost production.

#### Prints 3 Times Longer with Ink Guard

UX2 printers can print for 3 times longer than previous generations\*2 due to a unique print head design. The ink guard feature attracts the ink mist to a collection area away from the sensitive printing components. The result is fewer print quality issues and less frequent print head cleaning. Keeping your production running while maintaining a clean production environment.

#### Increased Production - Less Downtime



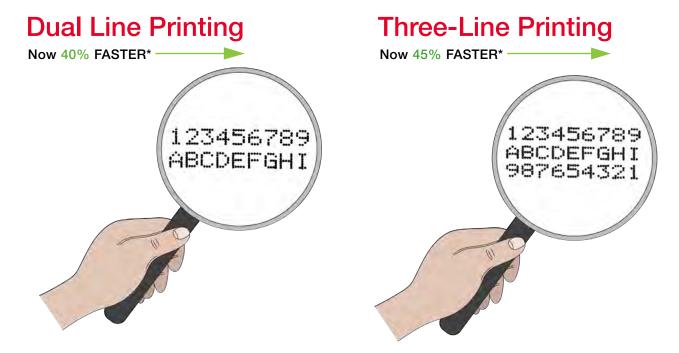
<sup>\*1</sup> Ink mist build-up may vary depending on operating conditions.

<sup>\*2</sup> Results refer to the same test environment and test conditions compared with UX Standard.

## Clearer Codes

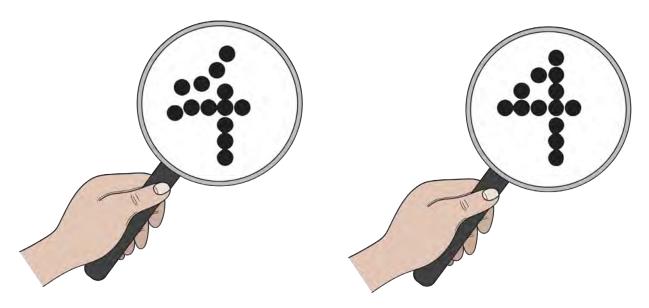
### Clear, Precise Codes at the Most Demanding Speeds

Using improved dot control algorithms, our newly designed UX2 printer is capable of producing clearly legible codes at the most demanding production speeds.



### Available with Two Head Sizes to Optimize Print Quality

Our standard head produces crisp code quality from 1 to 6 lines of print. A field configurable "short" print head option focuses on the most demanding print speed applications that require 1 or 2 lines of print.\*\*



<sup>\*</sup> with high frequency compatible inks

<sup>\*\*</sup> only 2-line printing possible

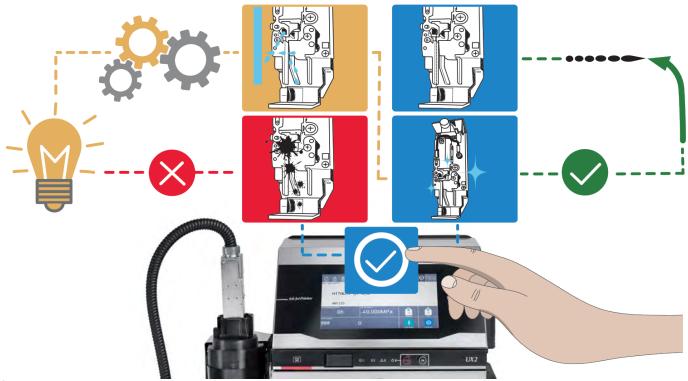
# Safe-Cleaning Printhead

### Added Convenience and Safety

The sealed Safe-Clean Station thoroughly cleans and dries in one simple operation. Eliminate the need for open solvents when cleaning the print head. As the solvent volatilized during drying is sucked out by the air pump and discharged through the exhaust duct, the operator is not exposed to the solvent gas. All used make-up cleaning solvent is captured in a sealed reservoir - for safe disposal.

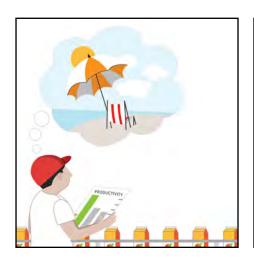


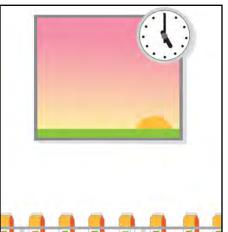
Most of the downtime associated with inkjet printers is a result of a dirty nozzle. The self-diagnosis start-up with Safe clean station can be used to automatically clean the nozzle by reversing the flow of solvent when necessary, which helps ensure that IJP restarts smoothly.



## Always ready to print

Even after long periods of inactivity, the cleaning station eliminates build-up of dried ink by periodically running an automatic nozzle-rinse according to a pre-programmed schedule. This means that the printer is always ready to print and will not need any manual cleaning at start of production.





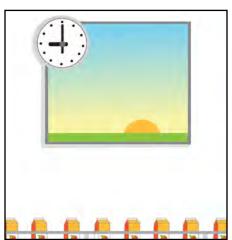


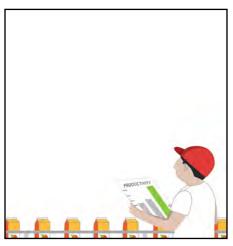












## **Built-In Troubleshooting**

#### Video on Board, for Preventative Maintenance and Recovery

An interactive video on the printer screen guides users to carry out routine tasks, preventative maintenance activities and even recover the printer from a fault condition. It's so intuitive, even untrained users can easily follow the on board video guidance.

As a result, daily interaction with the UX2 is instinctive with no surprises. When needed, users will be guided by the video to clean the print head and add fluids.



## Intuitive Display & Simplified Printer Setup

#### Flexibility to **Meet Your Needs**

The printer screen is designed with **flexibility in mind**. With a **configurable home screen**, you can choose what information is critical to display to operators.

Choose the information critical to your production needs.

### **Icon-Based** Display

An intuitive screen with icon based indicators allowing users to quickly identify machine status, and ink levels.



Familiar tablet-style touch screen allows swipe functionality similar to smartphones and tablets.

# Printer Specifications

		UX2
		UX2-D160W
Nozzle size		65µm
Max. number of print lines		up to 6 lines
Max. number of print characters		240 characters (option: up to 1,000 characters)
Font (Horizontal × Vertical)	4x5	1 to 6 lines (Short printhead option : up to 2 lines)
	5x5	1 to 6 lines (Short printhead option : up to 2 lines)
	5x8 or 5x7	1 to 4 lines (Short printhead option : up to 2 lines)
	9x8 or 9x7	1 to 4 lines (Short printhead option : up to 2 lines)
	7x10	1 to 3 lines (Short printhead option : 1 line)
	10x12	1 to 2 lines (Short printhead option : 1 line)
	12x16	1 to 2 lines (Short printhead option : 1 line)
	18x24	1 line
	24x32	1 line
	30x40	1 line
	36x48	1 line
Character height		2-10mm (optional short print head: 2.0-6.5mm)
Input device & display		WYSWYG design Display: 10.1" color TFT LCD, WSVGA(1024×600) Input device: Touch panel, input sound provided
Maximum print rate (character per second) (Font 4x5, space 1 dot, 1 line, 76.9kHz)		Up to 1,538 (option: up to 3,076)
Standard characters		Alphanumeric(A~Z, a-z,0~9), symbols(27) and space: Total 90
User pattern		200 patterns each for dot matrix (50 patterns for Free size)
Barcode print		code39, ITF, NW-7, JAN-13, JAN-8, code128/EAN128, UPC-A, UPC-E, GS-1 Databar
2D code printing		Data Matrix (Alphabet: 49 characters/Numericals: 98 characters), QR code (Alphabetical characters only: 61, Numbers only: 101), Micro-QR code (Alphabetical characters only: 11, Numbers only: 18)
Print functions		Calendar, Count, (Option: Shift code)
Message storage capacity		300 messages (option: up to 2000 messages)
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)
Customizable screen		✓
Animation guidance		✓
Safe-Clean-Station		Optional
Data interface		USB/RS-232 Converters at baud rates selectable up to 115,200bps
Ethernet communication		Modbus, EtherNet/IP, OPC-UA
Print head cable length / angle		4m (in-line/90 degrees)
Operating temperature range		0~50°C (1067K lnk)
Operating humidity range		30~90%RH (no condensation)
International protection		IP65
Power supply (Automatic voltage selection)		AC100~120/200~240V±10%, 50/60Hz
Dimension		460×425×534mm (Width×Depth×Height)
Approximate weight		27 kg (60 lbs)







Font (horizontal x vertical)	
5 x 5	0123456789ABCDEFGH
5 x 7	0123456789ABC
7 x10	0123456789 P 01234567 0123456789013456 ABCDEFGH TUVWXYZABCDEGHIJ
10 x 12	0123456789ABC 2 0123456789ABC 0123456789ABC 0123456789ABC
12 x 16	0123456789ABC 0123456 01 @ O12 ABC
18 x 24	0123456789 0123456ABC
24 x 32	012345ABCD
30 x 40	012345ABCDEF
36 x 48	12345ABCD



