

HITACHI
Inspire the Next

Hitachi IJ Printer PXR Series



<http://www.hitachi-ies.co.jp/english/products/ijp/>

Compliance with the RoHS Directive

- With the PXR series, the amount of raw materials that affect the environment have been reduced, and the guidelines as set forth in the RoHS directive as issued by the European Union have been followed.
- * The RoHS Directive stands for "the restriction of the use of certain hazardous substances in electrical and electronic equipment". This Directive bans the placing on the EU market of new electrical and electronic equipment containing more than agreed levels of lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE) flame retardants.

Eco-friendliness and Sanitary

- Varieties of ink types "Chrome-complex dye free ink and ethanol based ink"
- The printer uses the stainless enclosure body that is sanitary, robust and rust resistant, which conforms to the IP55 international safety standards for dust-proof, drip-proof devices.

The world's fastest, most comprehensive top-level high-speed printer.

- Maximum print speed 345 m/min (Font 5x5, 1 Line, Character pitch 1.5mm)

Large Panel

- 10.4-inch large TFT liquid crystal touch-panel display.
- Bright, easy-to-see and wide viewing angle.
- The menu select system offers users exceptional ease and simplicity of use.



Viewing angle is drastically increased

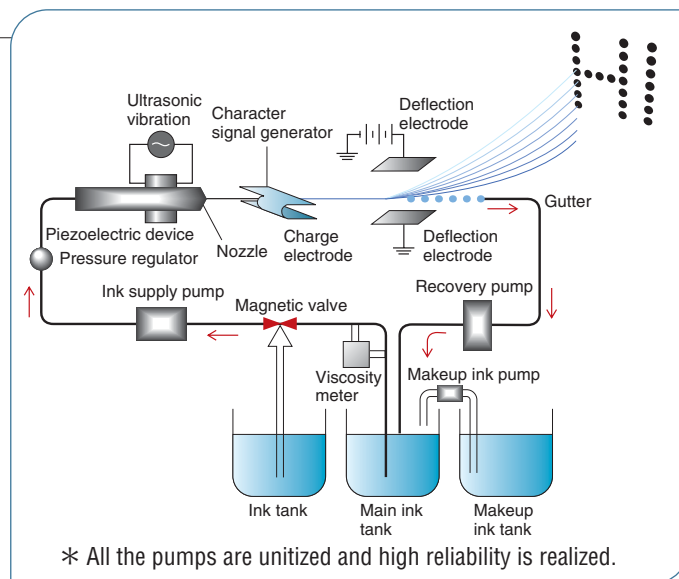
Memory Card

- A commonly available memory card can be used to store the copied "registered character data" and "print data". Uses the PC Card (Flash ATA Type II (8MB or above))

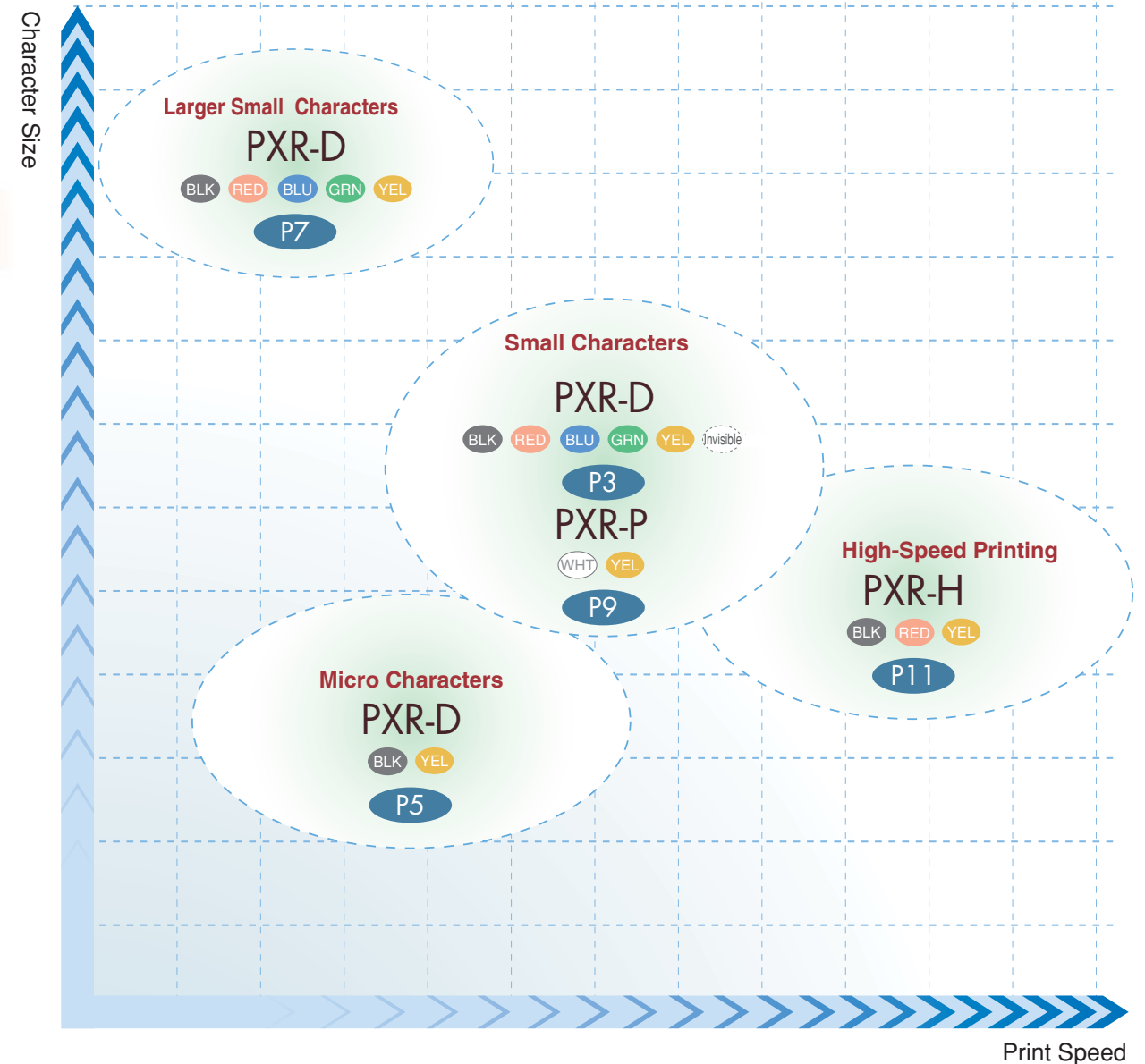


Principles of the Inkjet Printer

- The ink pulled from the ink reservoir by the supply pump is set to specified pressure by a regulator, and supplied to the nozzle.
- The ink is ejected from the nozzle and is subjected to vibrations by the piezoelectric device to create ink droplets.
- The ink droplets are charged at the charge electrode to create pixels.
- When the charged ink droplets pass through the deflection electrode, they will be deflected in the vertical direction in a quantity determined by the traveling speed and amount of charges applied to each droplet. As the object to be printed on moves in horizontal direction by a conveyor, characters will be printed.
- The ink droplets that are not used for printing are caught by the gutter and recovered into the main ink tank by the recovery pump.
- Ink used for printing is supplied from the main ink tank. Makeup ink is also supplied to the main ink tank to keep the fluid density constant. The inkjet printer runs best when maintaining optimum density control.



IJ Printer Selection Guide



Product Lineups



PXR-D
Micro characters
Small characters
Larger Small characters



PXR-H
High-speed printing



PXR-P
For pigmented ink

PXR-D 65 μm
PXR-D 40 μm
PXR-D 100 μm
PXR-P 65 μm
PXR-H 55 μm
Software Options
Application Examples

PXR-D for Small Characters

These models are suitable for wide variety of applications: food, beverage, cosmetics and pharmaceutical products.

Main Features

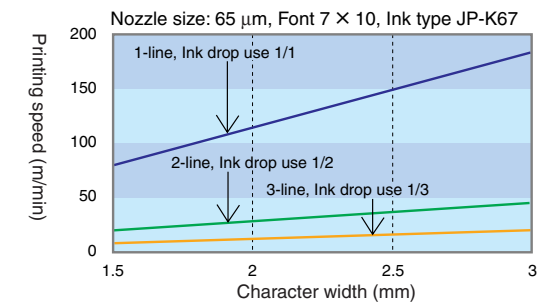
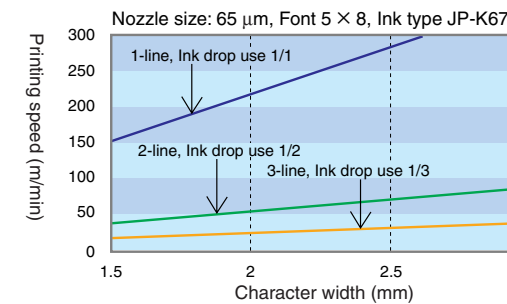
- Various ink types and color inks can be used.
- Wide operating temperature.
0 to 113°F/45 °C (JP-K67 and JP-K69)



Printing Samples (Full Scale)

| Font | | PXR-D260W | | | | PXR-D460W | | | | | |
|-----------|-------|---|----------------------------------|---|--|-----------|---|---|---|--|--|
| PXR-D260W | 5X5 | 1 LINE 0123456789ABCDEF6H 012345678 | 2 LINE 012345678 ABCDEFGHI | 3 LINE 012345678 ABCDEFGHI JKLMNOPQR | 4 LINE 012345678 ABCDEFGHI JKLMNOPQR STUVWXYZA | PXR-D460W | 5X5 | 1 LINE 0123456789ABCDEF6H 012345678 | 2 LINE 012345678 ABCDEFGHI | 3 LINE 012345678 ABCDEFGHI JKLMNOPQR | 4 LINE 012345678 ABCDEFGHI JKLMNOPQR STUVWXYZA |
| | 5X7 | 1 LINE 0123456789ABCDEF6H 012345678 | 2 LINE 012345678 ABCDEFGHI | 3 LINE 012345678 ABCDEFGHI JKLMNOPQR | 4 LINE 012345678 ABCDEFGHI JKLMNOPQR STUVWXYZA | | 5X7 | 1 LINE 0123456789ABCDEF6H 012345678 | 2 LINE 012345678 ABCDEFGHI | 3 LINE 012345678 ABCDEFGHI JKLMNOPQR | 4 LINE 012345678 ABCDEFGHI JKLMNOPQR STUVWXYZA |
| | 7X10 | 1 LINE 0123456789ABCDEF6H 012345678 | 2 LINE 012345678 ABCDEFGHI | 3 LINE 012345678 ABCDEFGHI JKLMNOPQR | 4 LINE 012345678 ABCDEFGHI JKLMNOPQR STUVWXYZA | | 7X10 | 1 LINE 0123456789ABCDEF6H 012345678 | 2 LINE 012345678 ABCDEFGHI | 3 LINE 012345678 ABCDEFGHI JKLMNOPQR | 4 LINE 012345678 ABCDEFGHI JKLMNOPQR STUVWXYZA |
| PXR-D460W | 12X16 | 1 LINE 0123456789ABCDEF6H 012345678 | 2 LINE 012345678 ABCDEFGHI | 3 LINE 012345678 ABCDEFGHI JKLMNOPQR | 4 LINE 012345678 ABCDEFGHI JKLMNOPQR STUVWXYZA | 12X16 | 1 LINE 0123456789ABCDEF6H 012345678 | 2 LINE 012345678 ABCDEFGHI | 3 LINE 012345678 ABCDEFGHI JKLMNOPQR | 4 LINE 012345678 ABCDEFGHI JKLMNOPQR STUVWXYZA | |
| | 18X24 | 1 LINE 0123456789ABCDEF6H 012345678 | 2 LINE 012345678 ABCDEFGHI | 3 LINE 012345678 ABCDEFGHI JKLMNOPQR | 4 LINE 012345678 ABCDEFGHI JKLMNOPQR STUVWXYZA | 18X24 | 1 LINE 0123456789ABCDEF6H 012345678 | 2 LINE 012345678 ABCDEFGHI | 3 LINE 012345678 ABCDEFGHI JKLMNOPQR | 4 LINE 012345678 ABCDEFGHI JKLMNOPQR STUVWXYZA | |
| | 24X32 | 1 LINE 0123456789ABCDEF6H 012345678 | 2 LINE 012345678 ABCDEFGHI | 3 LINE 012345678 ABCDEFGHI JKLMNOPQR | 4 LINE 012345678 ABCDEFGHI JKLMNOPQR STUVWXYZA | 24X32 | 1 LINE 0123456789ABCDEF6H 012345678 | 2 LINE 012345678 ABCDEFGHI | 3 LINE 012345678 ABCDEFGHI JKLMNOPQR | 4 LINE 012345678 ABCDEFGHI JKLMNOPQR STUVWXYZA | |

Printing speed



Standard Specifications

| Printing specifications | |
|--|---|
| Model | PXR-D260W PXR-D260WL |
| Nozzle size | 65 µm |
| Max. print line number | Up to 2 Lines |
| Maximum number of print characters (each line) | 1 Line: Up to 240 characters 2 Line: Up to 120 characters |
| Dot matrix (horizontal × vertical) | 1-2 Line: 5×5, 5×8 (or 5×7), 7×10 (or 9×7, 9×8) 1 Line: 12×16 |
| Character height | 0.08–0.39 inches / 2–10 mm |
| Display & input device | Display: TFT LCD (10.4 inch, color), backlight provided Input Device: Touch panel, input sound provided |
| Screen language 2 language selectable: | English, Chinese, Korean, Thai, Vietnamese, German, French, Dutch, Italian, Spanish, Portuguese, Swedish, Danish, Greek, Russian, Czech, Polish, Arabic, Serbian, Turkish, Hungarian, Bulgarian and Catalan available |
| Maximum print rate (characters / s) (Font 5 × 5, space 1, 1 line) | Up to 2,296 |
| Standard characters | Alphanumeric (A–Z, a–z, 0–9), symbols (27), space: Total 90 |
| Number of user pattern registration | Each dot matrix 128 patterns |
| Print functions | Calendar, Counter, Message storage (150 messages), Font mixture, Passwords security, Bar codes (code39, ITF, NW-7, EAN13/UPC-A, Code128/EAN128), Data Matrix 2-D code (Alphabet : 49 characters, Numerals: 98 characters), Encoder function, Reciprocation printing, etc. |
| Input signal | Print target detection, Printing stop, Reciprocative printing, Rotary encoder pulse |
| Output signal | Print ready, Fault, Warnig, Print in progress or print end, Online |
| Data interface | RS-232C at baud rates selectable up to 38.4 kbps |
| General specifications | |
| Operating temperature range | 32–113 °F / 0–45 °C (JP-K67, K69 Ink) |
| Humidity range | 30–90 % R.H. (no condensation) Note: When humidity is more than 85 %RH, please purge inside of print head by air. |
| Power supply (Automatic voltage selection) | AC 100–120 / 220–240V ±10 % 50/60 Hz 150 VA (AC Inlet) |
| Approval | CE, UL, cUL, C-Tick, FCC, ICES |
| Cabinet | Stainless Steel / IP55 |
| Print head cable length | 13.1 ft / 4 m |
| Overall size (width × depth × height) | 15.7 × 11.4 × 20.3 inches 400 × 290 × 515 mm |
| Approximate weight | 55 lbs / 25 kg |

| Dimensions | | |
|------------|-------------------------|------------------------------------|
| Console | Printhead : PXR - D*60W | 90 Degree Printhead : PXR - D*60WL |
| | | |

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PXR-D 65 µm
PXR-D 40 µm
PXR-D 100 µm
PXR-P 65 µm
PXR-H 55 µm
Software Options
Application Examples

These models are suitable for small markings, such as on small components, wire, etc. in the electric and electronic fields.

Main Features

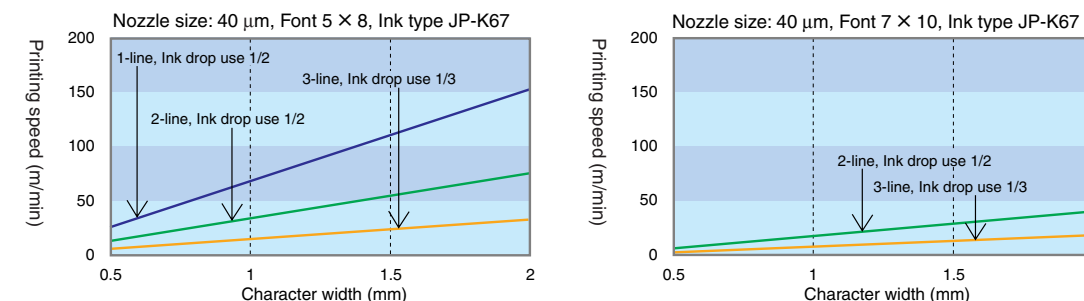
- Printing on products with extremely small marking areas is possible.
- These models are suitable for printing on small components.



Printing Samples (Full Scale)

| Font | PXR-D240W | | | | PXR-D440W | | | | |
|--------------------|------------------------|--|--|---|--------------------------|---------------------|---|--|---|
| | 1 LINE | 2 LINE | 3 LINE | 4 LINE | 1 LINE | 2 LINE | 3 LINE | 4 LINE | |
| PXR-D240W 5X5 | 0123456789ABCDEFGHIJKL | 0123456789ABCDEFGHIJ KLMNOPQRSTUVWXYZABCD | 0123456789ABCDEFGHI IJKLMNOPQRSTUVWXYZ 0123456789ABCDEFGHI | 0123456789ABCDEFGHI IJKLMNOPQRSTUVWXYZ IJKLMNOPQRSTUVWXYZ | PXR-D440W 5X7 | 0123456789ABCDEFGHI | 0123456789ABCDEFGHI IJKLMNOPQRSTUVWXYZ | 0123456789ABCDEFGHI IJKLMNOPQRSTUVWXYZ 0123456789ABCDEFGHI | 0123456789ABCDEFGHI IJKLMNOPQRSTUVWXYZ IJKLMNOPQRSTUVWXYZ |
| | 0123456789ABCD | 0123456789ABCD EFGHIJKLMNOPQR | 012345678901234567890123456789 ABCDEFGHIJKLMN0PQRSTU0VWXYZ ABCDEFGHIJKLMN0PQRSTU0VWXYZ | 0123456789 ABCDEFGHIJ | | | | | |
| | 0123456789ABCDEF | [Barcode] | | | | | | | |
| PXR-D440W 12X16 | 0123456789ABCDEF | | | | 0123456789 ABCDEFGHIJ | | | | |
| | 0123456789ABCDEF | | | | [Barcode] | | | | |
| 18X24 | 0123456789ABCDEF | | | | [Barcode] | | | | |
| | 0123456789A | | | | [Barcode] | | | | |
| 24X32 | 0123456789A | | | | [Barcode] | | | | |

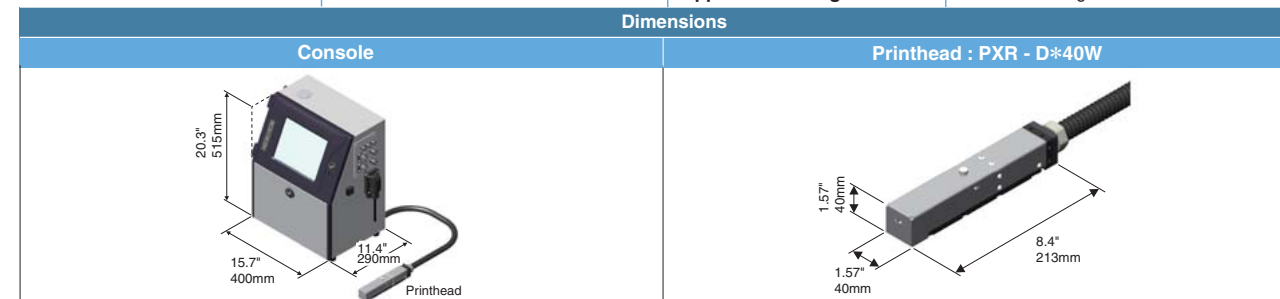
Printing speed



Standard Specifications

| Printing specifications | |
|---|--|
| Model | PXR-D240W / PXR-D440W |
| Nozzle size | 40 µm |
| Max. print line number | Up to 2 Lines / Up to 4 Lines |
| Maximum number of print characters (each line) | 1 Line: Up to 240 characters / 2 Line: Up to 120 characters / 1 Line: Up to 240 characters / 2 Line: Up to 120 characters / 3 Line: Up to 80 characters / 4 Line: Up to 60 characters |
| Dot matrix (horizontal X vertical) | 1-2 Line: 5X5, 5X8 (or 5X7), 7X10 (or 9X7, 9X8) / 1 Line: 12X16 / 1-4 Line: 5X5, 5X8 (or 5X7), 9X8 (or 9X7) / 1-3 Line: 7X10 / 1-2 Line: 12X16, 1 Line: 18X24, 24X32 |
| Character height | 0.04 - 0.12 inches / 1 - 3 mm |
| Display & input device | Display: TFT LCD (10.4 inch, color), backlight provided / Input Device: Touch panel, input sound provided |
| Screen language | English, Chinese, Korean, Thai, Vietnamese, German, French, Dutch, Italian, Spanish, Portuguese, Swedish, Danish, Greek, Russian, Czech, Polish, Arabic, Serbian, Turkish, Hungarian, Bulgarian and Catalan available |
| 2 language selectable: | |
| Maximum print rate (characters / s) (Font 5 X 5, space 1, 1 line) | Up to 1,514 |
| Standard characters | Alphanumeric (A-Z, a-z, 0-9), symbols (27), space: Total 90 |
| Number of user pattern registration | Each dot matrix 128 patterns |
| Print functions | Calendar, Counter, Message storage (150 messages), Font mixture, Passwords security, Bar codes (code39, ITF, NW-7, EAN13/UPC-A, Code128/EAN128), Data Matrix 2-D code (Alphabet: 49 characters, Numerals: 98 characters), Encoder function, Reciprocation printing, etc. |
| Input signal | Print target detection, Printing stop, Reciprocative printing, Rotary encoder pulse |
| Output signal | Print ready, Fault, Warnig, Print in progress or print end, Online |
| Data interface | RS-232C at baud rates selectable up to 38.4 kbps |

| General specifications | |
|--|---|
| Operating temperature range | 32-95 °F / 0-35 °C (JP-K67, K69 Ink) |
| Humidity range | 30-90 % R.H. (no condensation) Note: When humidity is more than 85 %RH, please purge inside of print head by air. |
| Power supply (Automatic voltage selection) | AC 100-120 / 220-240V ±10 % / 50/60 Hz 150 VA (AC Inlet) |
| Approval | CE, UL, cUL, C-Tick, FCC, ICES |
| Cabinet | Stainless Steel / IP55 |
| Print head cable length | 13.1 ft / 4 m |
| Overall size (width X depth X height) | 15.7 X 12.4 X 20.3 inches / 400 X 315 X 515 mm |
| Approximate weight | 55 lbs / 25 kg |



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PXR-D 65 µm
PXR-D 40 µm
PXR-D 100 µm
PXR-P 65 µm
PXR-H 55 µm
Software Options
Application Examples

PXR-D for Larger Small-size Characters

The model is suitable for printing large characters on cartons, woods and buildings.

Main Features

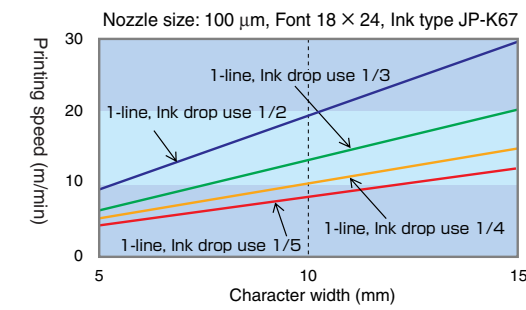
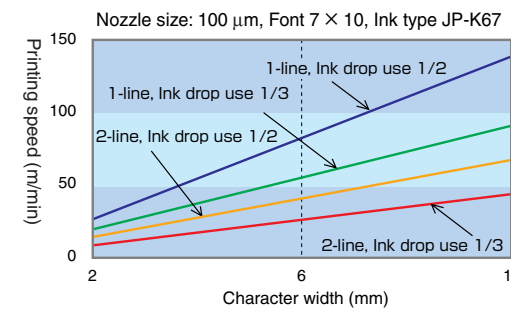
- The largest printing characters and print distance can be made among PXR series.
- Fast dry and high adhesion inks can be used with this model.



Printing Samples (Full Scale)

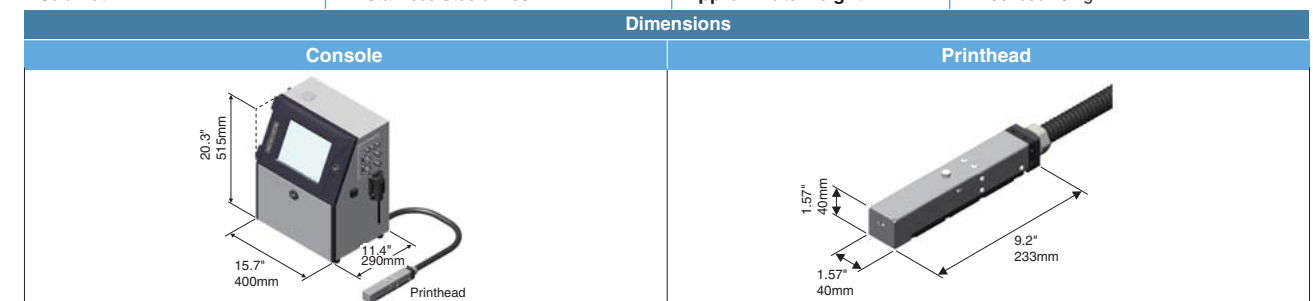
| Font | PXR-D410W | |
|-------|-----------------|-----------------|
| | Standard | Bold |
| 7×10 | 0123456789ABCDE | 0123456789ABCDE |
| | 0123456789ABCDE | 0123456789ABCDE |
| 12×16 | 01234ABCD | 01234ABCD |
| | 012ABC | 012ABC |
| 18×24 | 012ABCD | 012ABCD |
| | 012ABC | 012ABC |
| 24×32 | 012AB | 012AB |
| | 012AB | 012AB |

Printing speed



Standard Specifications

| Printing specifications | |
|---|--|
| Model | PXR-D410W |
| Nozzle size | 100 μm |
| Max. print line number | Up to 4 Lines |
| Maximum number of print characters (each line) | 1 Line: Up to 240 characters 2 Line: Up to 120 characters 3 Line: Up to 80 characters 4 Line: Up to 60 characters |
| Dot matrix (horizontal × vertical) | 1-4 Line: 5×5, 5×8 (or 5×7), 9×8 (or 9×7) 1-3 Line: 7×10 1-2 Line: 12×16, 1 Line: 18×24, 24×32 |
| Character height | 0.12 – 0.59 inches / 3 – 15 mm |
| Display & input device | Display: TFT LCD (10.4 inch, color), backlight provided Input Device: Touch panel, input sound provided |
| Screen language 2 language selectable: | English, Chinese, Korean, Thai, Vietnamese, German, French, Dutch, Italian, Spanish, Portuguese, Swedish, Danish, Greek, Russian, Czech, Polish, Arabic, Serbian, Turkish, Hungarian, Bulgarian and Catalan available |
| Maximum print rate (characters / s) (Font 5 × 5, space 1, 1 line) | Up to 468 |
| Standard characters | Alphanumeric (A-Z, a-z, 0-9), symbols (27), space: Total 90 |
| Number of user pattern registration | Each dot matrix 128 patterns |
| Print functions | Calendar, Counter, Message storage (150 messages), Font mixture, Passwords security, Bar codes (code39, ITF, NW-7, EAN13/UPC-A, Code128/EAN128), Data Matrix 2-D code (Alphabet: 49 characters, Numerals: 98 characters), Encoder function, Reciprocation printing, etc. |
| Input signal | Print target detection, Printing stop, Reciprocative printing, Rotary encoder pulse |
| Output signal | Print ready, Fault, Warnig, Print in progress or print end, Online |
| Data interface | RS-232C at baud rates selectable up to 38.4 kbps |
| General specifications | |
| Operating temperature range | 32–95 °F / 0–35 °C (JP-K67, K69 Ink) |
| Humidity range | 30–90 % R.H. (no condensation) Note: When humidity is more than 85 %RH, please purge inside of print head by air. |
| Power supply (Automatic voltage selection) | AC 100–120 / 220–240V ± 10 % 50/60 Hz 150 VA (AC Inlet) |
| Approval | CE, UL, cUL, C-Tick, FCC, ICES |
| Cabinet | Stainless Steel / IP55 |
| Print head cable length | 13.1 ft / 4 m |
| Overall size (width × depth × height) | 15.7 × 12.4 × 20.3 inches 400 × 315 × 515 mm |
| Approximate weight | 55 lbs / 25 kg |



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PXR-D 65 μm
PXR-D 40 μm
PXR-D 100 μm
PXR-P 65 μm
PXR-H 55 μm
Software Options
Application Examples

PXR-P for Pigmented Ink

The model is suitable for various dark color surfaces.

Main Features

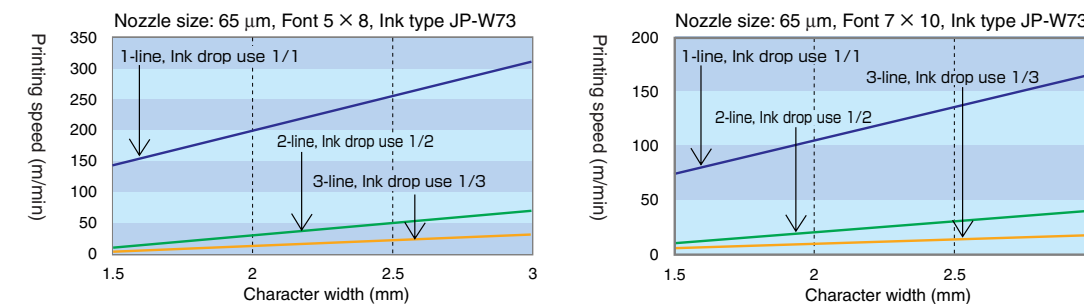
- Whiteness and adhesion strength are improved by newly developed white-pigmented ink.
- New ink circulation system is sure to stir the pigment particles.



Printing Samples (Full Scale)

| Font | PXR-P460W | | | |
|-------|--------------------------------|--------------------------|--|--|
| 5X5 | 1 LINE 0123456789A | 2 LINE 01234 KLMNO | 3 LINE 0123456789 ABCDEFGHIJ KLMNOPQRST | 4 LINE 0123456789 ABCDEFGHIJ KLMNOPQRST UVWXYZ |
| 5X7 | 1 LINE 01234567 | 2 LINE 01234 KLMNO | 3 LINE 0123456789 ABCDEFGHIJ KLMNOPQRST | 4 LINE 0123456789 ABCDEFGHIJ KLMNOPQRST UVWXYZ |
| 7X10 | 1 LINE 012345 | 2 LINE 0123 KLMN | 3 LINE 0123456789 ABCDEFGHIJ KLMNOPQRST | 4 LINE 0123456789 ABCDEFGHIJ KLMNOPQRST UVWXYZ |
| 12X16 | 1 LINE 0123456789ABCDEFGHIJ | 2 LINE 01234 ABCDE | | |
| 18X24 | 1 LINE 0123456789ABCDEFGHIJ | | | |
| 24X32 | 1 LINE 0123456789ABCDEFGHIJ | | | |

Printing speed



Standard Specifications : Nozzle size 65µm

| Printing specifications | |
|---|---|
| Model | PXR-P460W |
| Nozzle size | 65 µm |
| Max. number of lines | Up to 4 Lines |
| Maximum number of Characters per line | 1 Line : Up to 240 characters 2 Line : Up to 120 characters 3 Line : Up to 80 characters 4 Line : Up to 60 characters |
| Dot matrix (Horizontal × vertical) | 1-4 Line : 5 × 5, 5 × 8 (or 5 × 7), 9 × 8 (or 9 × 7) 1-3 Line : 7 × 10 1-2 Line : 12 × 16 1 Line : 18 × 24, 24 × 32 |
| Character height | 0.08 – 0.39 inches / 2–10 mm |
| Display & input device | Display : TFT LCD (10.4 inch, color), backlight provided Input Device : Touch panel, confirmation beep |
| Screen language 2 language selectable | English, Chinese, Korean, Thai, Vietnamese, German, French, Dutch, Italian, Spanish, Portuguese, Swedish, Danish, Greek, Russian, Czech, Polish, Arabic, Serbian, Turkish, Hungarian, Bulgarian and Catalan available |
| Maximum print rate (characters / s) (Font 5 × 5, space 1, 1 line) | Up to 2,083 |
| Standard characters | Alphanumeric (A–Z, a–z, 0–9), symbols (27) space : Total 90 |
| Number of logos / special character storage | Up to 128 |
| Print functions | Calendar, Counter, Message storage (150 messages), Font mixture, Passwords security, Bar codes (Code 39, ITF, NW-7, EAN13 / UPC-A, Code 128 / EAN128), Data Matrix 2-D code (Alphabet : 49 characters, Numerals: 98 characters), Encoder Function, Reciprocation printing, etc. |
| Input signals | Print target detection, Printing stop, Reciprocative printing, Rotary encoder pulse |
| Output signals | Print ready, Fault, Warning, Print in progress or Print completed, Online |
| Serial interface | RS-232C at baud rates selectable up to 38.4 kbps |
| General specifications | |
| Operating temperature range | 32–104°F / 0–40 °C (JP-W73 Ink) |
| Humidity range | 30–90 % R.H.(no condensation) Note: When humidity is more than 85 %RH, please purge inside of print head by air. |
| Power supply (Automatic voltage selection) | AC 100–120 / 200–240 V±10 % 50/60 Hz 150 VA(AC Inlet) |
| Approval | CE, UK, cUL, C-Tick, FCC, ICES |
| Air supply | 0.2–0.4 MPa |
| Cabinet | Stainless Steel / IP55 |
| Print head cable length | 13.1 ft / 4m |
| Overall size (width × depth × height) | 15.7 × 12.4 × 20.3 inches 400 × 315 × 515 mm |
| Approximate weight | 55 lbs / 25 kg |
| Dimensions | |
| Console | Printhead |
| | |

*1. The print samples have been produced under ideal conditions. Print quality depends printing speed.
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PXR-D 65 µm
PXR-D 40 µm
PXR-D 100 µm
PXR-P 65 µm
PXR-H 55 µm
Software Options
Application Examples

PXR-H for High-speed printing

The model meets high-speed printing needs on lines of electric wires, cans, etc.

Main Features

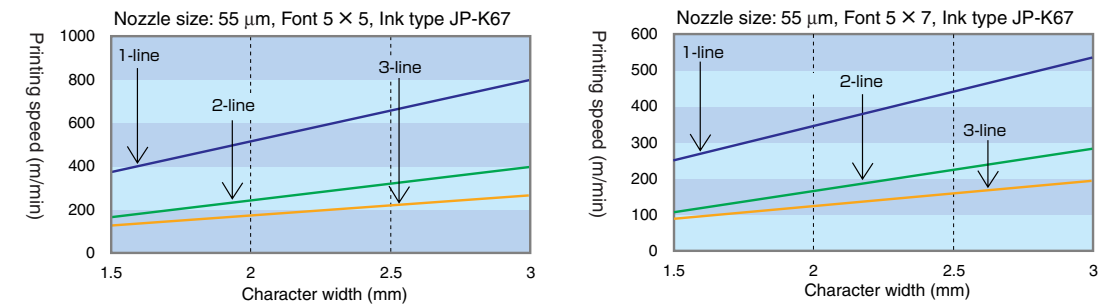
- Print quality has further improved by changes of nozzle control method.
- The world top class high-speed printing is possible



Printing Samples (Full Scale)

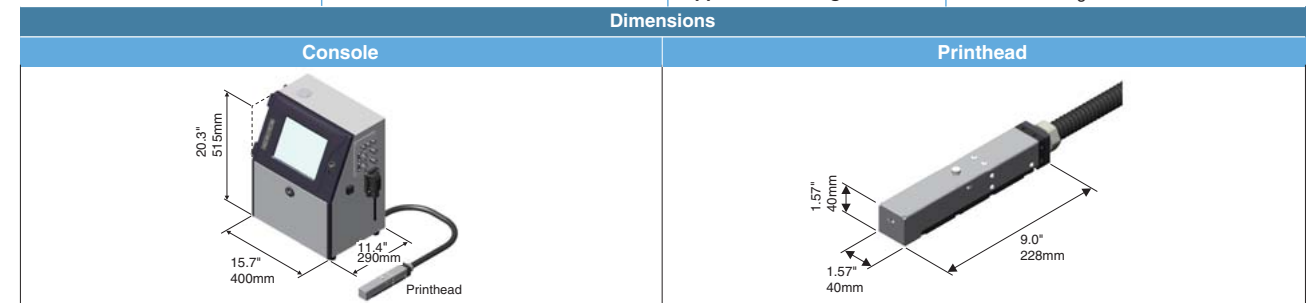
| Font | | PXR-H450W |
|-------|--------|--|
| 5X5 | 1 LINE | 0123456789ABCDEFGHIJKLMN |
| | 2 LINE | 0123456789ABCDEFGHIJKLMN ABCDEFGHIJKLMNOPQRSTUVWXYZ |
| | 3 LINE | 0123456789ABCDEFGHIJKLMN ABCDEFGHIJKLMNOPQRSTUVWXYZ 0123456789ABCDEFGHIJKLMN |
| 5X7 | 1 LINE | 0123456789ABCDEFGHIJKLMN |
| | 2 LINE | 0123456789ABCDEFGHIJKLMN ABCDEFGHIJKLMNOPQRSTUVWXYZ |
| | 3 LINE | 0123456789ABCDEFGHIJKLMN ABCDEFGHIJKLMNOPQRSTUVWXYZ 0123456789ABCDEFGHIJKLMN |
| | 4 LINE | 0123456789ABCDEFGHIJKLMN ABCDEFGHIJKLMNOPQRSTUVWXYZ 0123456789ABCDEFGHIJKLMN ABCDEFGHIJKLMNOPQRSTUVWXYZ |
| 12X16 | 1 LINE | 0123456789 |

Printing speed



Standard Specifications

| Printing specifications | |
|--|---|
| Model | PXR-H450W |
| Nozzle size | 55 µm |
| Max. print line number | Up to 4 Lines |
| Maximum number of print characters (each line) | 1 Line: Up to 240 characters 2 Line: Up to 120 characters 3 Line: Up to 80 characters 4 Line: Up to 60 characters |
| Dot matrix (horizontal × vertical) | 1-4 Line: 5×8 (or 5×7), 9×8 (or 9×7) 1-3 Line: 5×5 1-2 Line: 7×10 1 Line: 12×16 |
| Character height | 0.08 – 0.26 inches / 2 – 6.5 mm |
| Display & input device | Display: TFT LCD (10.4 inch, color), backlight provided Input Device: Touch panel, input sound provided |
| Screen language 2 language selectable: | English, Chinese, Korean, Thai, Vietnamese, German, French, Dutch, Italian, Spanish, Portuguese, Swedish, Danish, Greek, Russian, Czech, Polish, Arabic, Serbian, Turkish, Hungarian, Bulgarian and Catalan available |
| Maximum print rate (characters / s) (Font 5 × 5, space 1, 1 line) | Up to 3,173 |
| Standard characters | Alphanumeric (A–Z, a–z, 0–9), symbols (27), space: Total 90 |
| Number of user pattern registration | Each dot matrix 128 patterns |
| Print functions | Calendar, Counter, Message storage (150 messages), Font mixture, Passwords security, Bar codes (code39, ITF, NW-7, EAN13/UPC-A, Code128/EAN128), Encoder function, Reciprocation printing, etc. |
| Input signal | Print target detection, Printing stop, Reciprocative printing, Rotary encoder pulse |
| Output signal | Print ready, Fault, Warnig, Print in progress or print end, Online |
| Data interface | RS-232C at baud rates selectable up to 38.4 kbps |
| General specifications | |
| Operating temperature range | 32–104 °F / 0–40 °C (JP-K67, K69 Ink) |
| Humidity range | 30–90 % R.H. (no condensation) Note: When humidity is more than 85 %RH, please purge inside of print head by air. |
| Power supply (Automatic voltage selection) | AC 100–120 / 220–240V ± 10 % 50/60 Hz 150 VA (AC Inlet) |
| Approval | CE, UL, cUL, C-Tick, FCC, ICES |
| Cabinet | Stainless Steel / IP55 |
| Print head cable length | 13.1 ft / 4 m |
| Overall size (width × depth × height) | 15.7 × 12.4 × 20.3 inches 400 × 315 × 515 mm |
| Approximate weight | 55 lbs / 25 kg |



*1.Hitachi Industrial Equipment Systems Co.,Ltd. (Hitachi) shall not be liable for any manufacturing loss, or any product damage due to trouble or malfunction of the ink jet printer.
*2.Hitachi continually improves products. The right, therefore, is reserved to alter the design and/or specifications without giving prior notice.

PXR-D 65 µm
PXR-D 40 µm
PXR-D 100 µm
PXR-P 65 µm
PXR-H 55 µm
Software Options
Application Examples

PXR Series Software Options

Addition of print columns (Total 1,000 characters) [SOP-02]

The number of printable characters can be increased from standard 240 characters (24 items) to 1,000 characters (100 items)

| Standard | 240 (characters) | 24 (items) |
|----------|--------------------|-------------|
| Addition | 760 (characters) | 76 (items) |
| Total | 1,000 (characters) | 100 (items) |

Special Communication Function A [SOP-04]

| Function | Content |
|--|---|
| Output of print contents | Print content will be transmitted by serial communication when the printing is completed or on request. |
| Output of print completion code | Print completion code will be transmitted when the printing is completed. |
| Status output | The printer status will be output when any change occurs in status, or an inquiry of status is given from an external device. |
| Transmission of remote operation | Remote operations of start, stop, deflection voltage (ON/OFF) and fault clear are possible. |
| Transmission of clock initialization | Current time, calendar time control, calendar time and clock system (24/12-hour system) can be set. |
| Transmission of print data registration | Print data can be registered in the specified message number, and the registered print data can be recalled. |

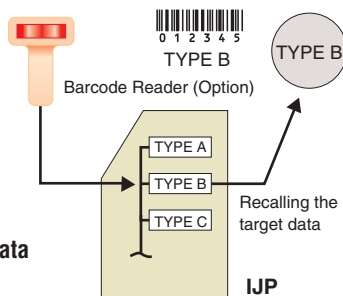
Barcode Reader Connection [SOP-08]

Function for setting print contents

The contents of barcode read by the barcode reader are transmitted to IJ printer as a character string and it is set in the IJP as a print item.

Function for recalling print data

The contents of barcode read by the barcode reader are transmitted to IJP as a recall code and the print data that has been assigned to the code is recalled.

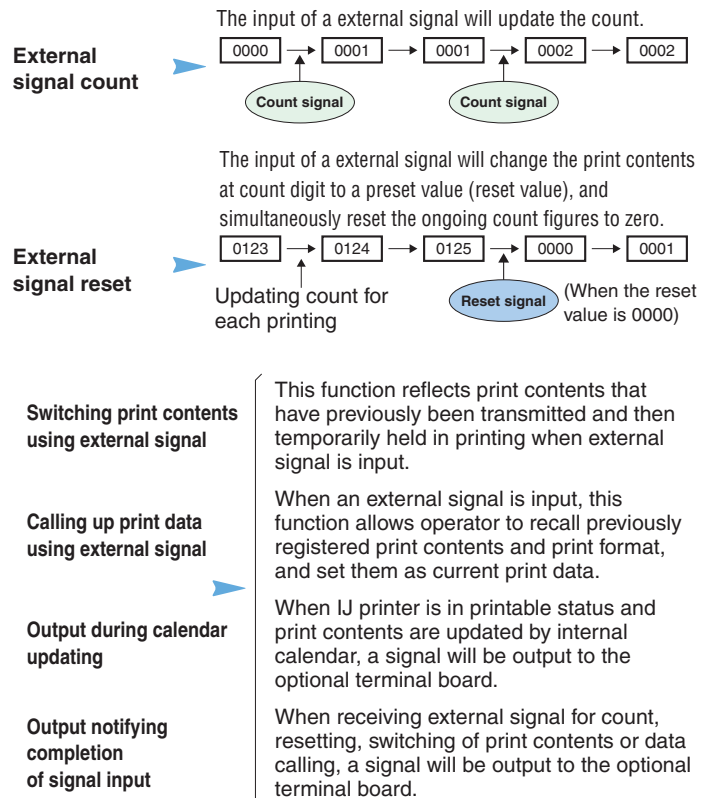


Addition of registered data elements (Total 300 data) [SOP-03]

The number of print data can be increased from standard 150 data to 300 data.

| Standard | 150 data |
|----------|----------|
| Addition | 150 data |
| Total | 300 data |

External Signal Function A [SOP-05]



Switching print contents using external signal

Calling up print data using external signal

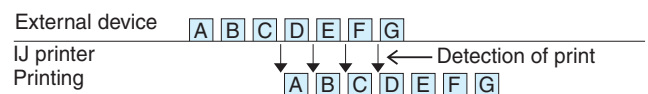
Output during calendar updating

Output notifying completion of signal input

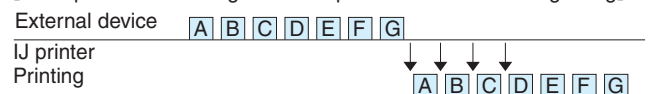
Communication Buffer [SOP-16-03]

The print contents that are temporarily stored in the buffer are retrieved and printed one by one after the print ready status is set. The buffer capacity is 100 print items.

[Example of transmitting print contents constantly during printing]



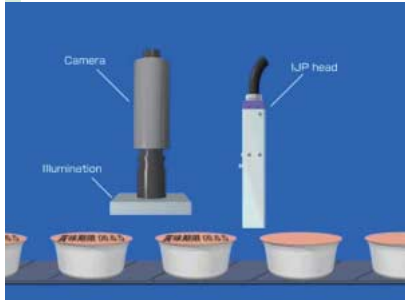
[Example of transmitting collective print contents at the beginning]



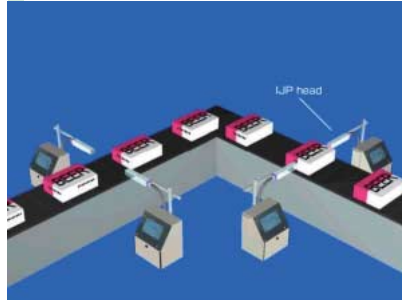
Samples of Application

IJ Printer is Applied for Large Varieties of Printing.

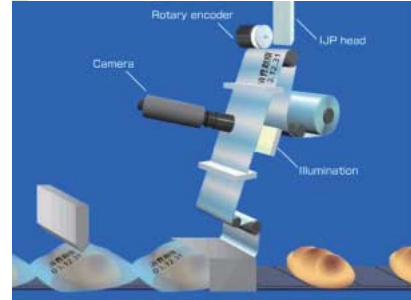
Cap label print inspection



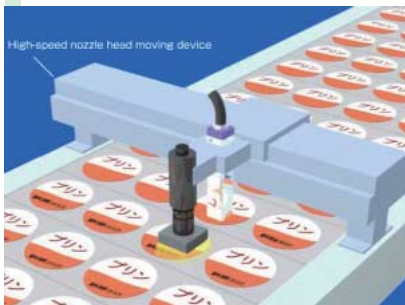
Paper-pack print inspection



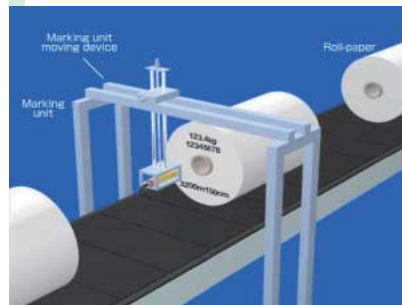
Film package print inspection



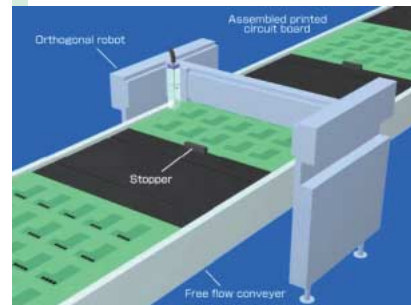
Traversing head automatic cup marking



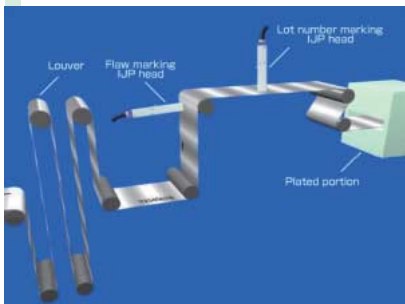
Roll-paper automatic marking



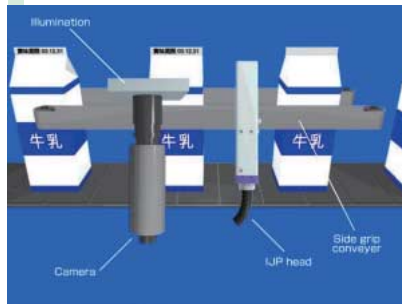
Assembled parts automatic marking



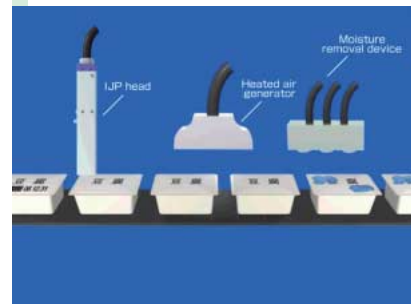
Steel-plate pitch print marking



Carton printing



Moisture/condensation removable printing



PXR-D 65 μm

PXR-D 40 μm

PXR-D 100 μm

PXR-P 65 μm

PXR-H 55 μm

Software Options
Application Examples

Network

Hitachi Industrial Equipment Systems Co., Ltd. meets customers' needs through the total network which can supply speedy design, production, sales, service and engineering for industrial equipment and systems.

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Information in this brochure is subject to change without notice.

Hitachi Industrial Equipment Systems Co., Ltd.

For further information, please contact your nearest sales representative.



Registration number: JACO-EC99J2009
Registration date: July 22, 1996

The Energy Saving Systems Division (Taga Division) of Hitachi Industrial Equipment Systems Co., Ltd. obtained ISO 14001 certification, an international standard for environmental management systems.

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

The Energy Saving Systems Division (Taga Division) of Hitachi Industrial Equipment Systems Co., Ltd. obtained international standard ISO 9001 certification for the quality assurance of the hoist motor block contained in this brochure.

Various ink types and Color inks

All inks are based on  **HS**.

☑ : Adaptable

| Name of ink | Color | Makeup ink | | Adaptable nozzle & applicable ambient temperature | | | | | Drying time at 68°F/ 20°C(s)*2 | Light Stability | | Primary applications (Features) |
|-------------|---------------|------------|--------------------|---|----------------------------|--|----------------------------|-------------------------------|--------------------------------|----------------------------------|------------------------------------|---|
| | | TYPE | Solvent base | PXR-D for Small Characters | PXR-D for Micro Characters | PXR-D for Larger small-size Characters | PXR-P for Pigmented Ink | PXR-H for High-speed printing | | Test conditions | Result | |
| JP-K26 | Black | TH-TYPE B | MEK | 32-95 °F/ 0-35 °C ☑ | | 32-95 °F/ 0-35 °C ☑ | | | 1 to 5 | Same as 1 year in the sunshine | No change | Steel (Alkali soluble ink) |
| JP-R27 | Red | TH-TYPE A | MEK | 32-95 °F/ 0-35 °C ☑ | | 32-95 °F/ 0-35 °C ☑ | | 32-95 °F/ 0-35 °C ☑ | 1 to 5 | Same as 8 months in the sunshine | Discolored but legible | Paper, metals, plastic (Bottle, PCB, Film, etc.) Electronic parts, glass container, etc. |
| JP-B27 | Blue | TH-TYPE C | MEK | 32-95 °F/ 0-35 °C ☑ | | 32-95 °F/ 0-35 °C ☑ | | | 1 to 5 | Same as 1 year in the sunshine | Discolored but legible | |
| JP-G27 | Green | TH-TYPE A | MEK | 32-95 °F/ 0-35 °C ☑ | | 32-95 °F/ 0-35 °C ☑ | | 32-95 °F/ 0-35 °C ☑ | 1 to 5 | Same as 8 months in the sunshine | No change | |
| JP-K28 | Black | TH-TYPE A | MEK | 32-95 °F/ 0-35 °C ☑ | | | | 32-95 °F/ 0-35 °C ☑ | 1 to 5 | Same as 1 year in the sunshine | No change | |
| JP-K67 | Black | TH-TYPE A | MEK | 32-113 °F/ 0-45 °C ☑ | 32-95 °F/ 0-35 °C ☑ | 32-95 °F/ 0-35 °C ☑ | | 32-104 °F/ 0-40 °C ☑ | 1 to 5 | Same as 1 year in the sunshine | No change | Paper, metals, plastic(Bottle, PCB, Film, etc.) Electronic parts, glass container, etc. |
| JP-K68* | Black | TH-TYPE F | Ethanol | 32-95 °F/ 0-35 °C ☑ | 32-95 °F/ 0-35 °C ☑ | 32-95 °F/ 0-35 °C ☑ | | 32-95 °F/ 0-35 °C ☑ | 15 to 30 | Same as 1 year in the sunshine | Discolored but legible | Carton, painted container, metal, etc. (Suitable for applications dislike for odor) |
| JP-K69 | Black | TH-69 | MEK | 32-113 °F/ 0-45 °C ☑ | 32-95 °F/ 0-35 °C ☑ | 32-95 °F/ 0-35 °C ☑ | | 32-104 °F/ 0-40 °C ☑ | 1 to 5 | Same as 1 year in the sunshine | No change | Can, paper, plastic container, pipe, steel plate (Chrome-complex dye free ink) |
| JP-K70 | Black | TH-70 | MEK | 32-95 °F/ 0-35 °C ☑ | | | | 32-95 °F/ 0-35 °C ☑ | 1 to 5 | Same as 6 months in the sunshine | Discolored but legible | Glass bottles, etc. (Alkali soluble ink, Sweating resistance on glass bottle) |
| JP-K72 | Black | TH-18 | MEK | 32-104 °F/ 0-40 °C ☑ | 32-95 °F/ 0-35 °C ☑ | 32-95 °F/ 0-35 °C ☑ | | 32-95 °F/ 0-35 °C ☑ | 1 to 5 | Same as 1 year in the sunshine | Discolored but legible | Plastic container, etc. It is highly adhesive to plastics, especially PP. |
| JP-W73 | White | TH-73 | MEK | 32-104 °F/ 0-40 °C ☑ | | | 32-104 °F/ 0-40 °C ☑ | | 5 to 7 | Same as 1 year in the sunshine | No change | Rubber hoses, plastic pipes, metal, glass, electric/ electronic parts, etc. (White pigment ink) |
| JP-T75 | Black to Blue | TH-75 | 2-Petanone Ethanol | 32-95 °F/ 0-35 °C ☑ | | | | 32-95 °F/ 0-35 °C ☑ | 1 to 5 | Same as 2 weeks in the sunshine | Discolored but legible | Plastic, polypouches, tin-free steel, tin-plate, aluminum, glass, metal closures of various colors (Thermal sensitive ink) |
| JP-R76 | Pink | TH-76 | MEK | 32-95 °F/ 0-35 °C ☑ | | | | | 1 to 3 | Same as 2 weeks in the sunshine | Discolored but legible | Glass, plastics, metals and coated paper. |
| JP-K77 | Black | TH-77 | Acetone | 59-95 °F/ 15-35 °C ☑ | | | | | 1 | Same as 2 weeks in the sunshine | Discolored but legible | For tobacco industry |
| JP-E78* | Pink | TH-78 | Ethanol | 50-95 °F/ 10-35 °C ☑ | | | | | 15 to 30 | Same as 2 weeks in the sunshine | Discolored but legible | Egg shell |
| JP-F80 | Invisible | TH-80 | MEK | 32-95 °F/ 0-35 °C ☑ | | | | | 1 to 3 | Same as 2 weeks in the sunshine | Reduced luminescence but legible** | Glass, plastics, and most metals and coated paper (It is illuminated in ultraviolet rays after printing.) |
| JP-K81 | Black | TH-81 | Acetone | 32-95 °F/ 0-35 °C ☑ | | | | | 1 to 2 | Same as 2 weeks in the sunshine | Discolored but legible | Untreated polyolefins such as polyethylene and polypropylene (No MEK and Methanol contains, contains low % of Volatile Organic Compound (VOC)) |
| JP-B82 | Blue | TH-82 | MEK | 32-95 °F/ 0-35 °C ☑ | | | | 32-95 °F/ 0-35 °C ☑ | 2 to 3 | Same as 2 weeks in the sunshine | Discolored but legible | Returnable bottles during the Cold Fill process (Washable with caustic wash) |

Various ink types and Color inks

All inks are based on  **RHS**.

: Adaptable

| Name of ink | Color | Makeup ink | | Adaptable nozzle & applicable ambient temperature | | | | | Drying time at 68°F/20°C(s) ^{*2} | Light Stability | | Primary applications (Features) |
|----------------------|------------|------------|--------------|--|---|---|--|---|---|---------------------------------------|--|--|
| | | TYPE | Solvent base | PXR-D for Small Characters | PXR-D for Micro Characters | PXR-D for Larger small-size Characters | PXR-P for Pigmented Ink | PXR-H for High-speed printing | | Test conditions | Result | |
| JP-K83 | Black | TH-83 | MEK | 32-95 °F/ 0-35 °C <input checked="" type="checkbox"/> | | | | | *7 | Same as 1 year in the sunshine | Discolored but legible | Glass, plastics, metals and coated paper (Heat curable ink, resistant to certain chemicals) |
| JP-K84 | Black | TH-84 | MEK | 32-95 °F/ 0-35 °C <input checked="" type="checkbox"/> | 32-95 °F/ 0-35 °C <input checked="" type="checkbox"/> | | | 32-95 °F/ 0-35 °C <input checked="" type="checkbox"/> | 1 to 5 | Same as 1 year in the sunshine | No change | Metal, electric wire and film (Non-migration, retort-resistant and alcohol-resistant after printing) |
| JP-B85 ^{*3} | Blue | TH-TYPE C | MEK | 32-95 °F/ 0-35 °C <input checked="" type="checkbox"/> | | | | | 1 to 5 | Same as 1 year in the sunshine | No change | Glass, plastics, metals and coated paper |
| JP-K86 | Black | TH-86 | Acetone | 32-95 °F/ 0-35 °C <input checked="" type="checkbox"/> | 32-95 °F/ 0-35 °C <input checked="" type="checkbox"/> | | | 32-95 °F/ 0-35 °C <input checked="" type="checkbox"/> | 0.3 to 0.6 | Same as 1 year in the sunshine | No change | Glass, plastics, metals and coated paper. |
| JP-K87 | Black | TH-18 | MEK | 32-104 °F/ 0-40 °C <input checked="" type="checkbox"/> | | | | 32-95 °F/ 0-35 °C <input checked="" type="checkbox"/> | 1 to 5 | Same as 1 year in the sunshine | No change | Glass, plastics, metals and coated paper (Resistant to Ethanol) |
| JP-K88 | Black | TH-71 | MEK | 32-95 °F/ 0-35 °C <input checked="" type="checkbox"/> | | | | 32-95 °F/ 0-35 °C <input checked="" type="checkbox"/> | 1 to 5 | Same as 1 year in the sunshine | No change | Container made of PE such as food, the beverage, cosmetics, and the medicines. |
| JP-W89 | White | TH-73 | MEK | 32-104 °F/ 0-40 °C <input checked="" type="checkbox"/> | | | 32-104 °F/ 0-40 °C <input checked="" type="checkbox"/> | | 5 to 7 | Same as 1 year in the sunshine | No change | Rubber hoses, plastic pipes, metal, glass, electric/ electronic parts, etc. (White pigment ink) |
| JP-K90 | Black | TH-TYPE E | MEK | 32-95 °F/ 0-35 °C <input checked="" type="checkbox"/> | 32-95 °F/ 0-35 °C <input checked="" type="checkbox"/> | | | 32-95 °F/ 0-35 °C <input checked="" type="checkbox"/> | 1 to 5 | Same as 1 year in the sunshine | No change | Metal, electric wire and film (Non-migration, retort-resistant and alcohol-resistant after printing) |
| JP-Y91 | Yellow | TH-84 | MEK | 32-95 °F/ 0-35 °C <input checked="" type="checkbox"/> | 32-95 °F/ 0-35 °C <input checked="" type="checkbox"/> | 32-95 °F/ 0-35 °C <input checked="" type="checkbox"/> | 32-95 °F/ 0-35 °C <input checked="" type="checkbox"/> | 32-95 °F/ 0-35 °C <input checked="" type="checkbox"/> | 1 to 5 | Same as 1 year in the sunshine | No change | Rubber hoses, PVC pipes, metal, glass, electric/ electronic parts, etc. |
| JP-F92 | Invisible | TH-18 | MEK | 32-95 °F/ 0-35 °C <input checked="" type="checkbox"/> | | | | | 1 to 3 | Same as 1 month in the sunshine | Reduced luminescence but legible ^{*8} | Paper, plastics, metals, etc. Special marking for production control. (It is illuminated in ultraviolet rays after printing.) Compared with the current JP-F63 ink, it dries fast. It has an excellent retort resistance and high visibility under UV light, also. |
| JP-Y94 | Yellow | TH-TYPE E | MEK | 32-95 °F/ 0-35 °C <input checked="" type="checkbox"/> | 32-95 °F/ 0-35 °C <input checked="" type="checkbox"/> | | | 32-95 °F/ 0-35 °C <input checked="" type="checkbox"/> | 1 to 5 | Same as 1 year in the sunshine | No change | Rubber hoses, PVC pipes, metal, glass, electric/ electronic parts, etc. The visibility improved compared with the current JP-Y91. |
| JP-B95 | Vivid Blue | TH-18 | MEK | 32-95 °F/ 0-35 °C <input checked="" type="checkbox"/> | | | | | 1 to 5 | Same as 1 month in the sunshine | No change | Glass, plastics, metals and coated paper. Chrome substance and methanol are not contained. |
| JP-F97 | Invisible | TH-71 | MEK | 32-95 °F/ 0-35 °C <input checked="" type="checkbox"/> | | | | | 1 to 5 | Same as 5 to 10 hours in the sunshine | Reduced luminescence but legible ^{*8} | Paper, cartons, and books (It is illuminated in red in ultraviolet rays after printing.) |
| JP-K101 | Black | TH-101 | MEK | 32-104 °F/ 0-40 °C <input checked="" type="checkbox"/> | | | | | 2 to 3 | Same as 1 year in the sunshine | Discolored but legible | General purpose. Glass, plastics, metals and coated paper. Superior adhesion to cold-filled(+36°F or +2°C) glass bottles with a very thin layer of condensation. |

*1 MEK: Methyl Ethyl Ketone

*2 Note that the drying speed varies depending on shapes and materials of the printing object, and environment.

*3 Hue and adhesion of the ink should be confirmed by printing samples in advance.

Please ask Hitachi distributor when you need the printing samples.

*4 Please follow the law of the country when you use and dispose of the inks.

*5 Please read the Material Safety Data Sheet (MSDS) before you use the inks.

The MSDS can be obtained from the web site written on cover of this brochure, or inquire the nearest Hitachi distributors.

*6 Please supply clean and dry air from the air purge connection port at the rear of the console because the ink is hygroscopic.

Please refer to the instruction manual for details.

*7 Requires heat curing at 300-350°F /149-177°C between 30-60 minutes to meet the solvent resistance required by the specified Military Standard.

*8 Luminescence will be resumed by painting of the regenerating solution.