



# Operating Instructions IPDS Supplement







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# Manuals for the IPDS card

Refer to the manuals that are relevant to what you want to do with the IPDS card.

## ★ Important

- Adobe® Acrobat® Reader®/Adobe Reader must be installed in order to view the manuals as PDF files.

### IPDS Supplement (IPDS.pdf)

Explains how to configure the IPDS card for the machine. It also explains about items selectable from the Web browser.

### IPDS Printing Configuration Guide (IPDS\_CONF.pdf) \*English Only

Explains about the environment necessary for connecting the mainframe to the machine and performing IPDS printing.

### IPDS Technical Reference 1 (IPDS\_TEC1.pdf) \*English Only

Explains about commands and functions for IPDS printing.

### IPDS Technical Reference 2 (IPDS\_TEC2.pdf) \*English Only

Explains about IPDS commands.

## ↓ Note

- For details about the necessary environment and how to install the IPDS card and machine, consult your sales or service representative. For details about the necessary environments and operation of the mainframe, contact IBM.



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# Notice

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## Important

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Contents of this manual are subject to change without prior notice.

In no event will the company be liable for direct, indirect, special, incidental, or consequential damages as a result of handling or operating the machine.



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# How to Read This Manual

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## Symbols

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This manual uses the following symbols:

### **Important**

Indicates points to pay attention to when using the machine, and explanations of likely causes of paper misfeeds, damage to originals, or loss of data. Be sure to read these explanations.

### **Note**

Indicates supplementary explanations of the machine's functions, and instructions on resolving user errors.

### **[ ]**

Indicates the names of keys on the machine's display or control panels.



# 1. Getting Started

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## About IPDS

IPDS (Intelligent Printer Data Stream) is a page printing format for IBM mainframe and client computers. This machine can perform IPDS printing if the IPDS card is installed.







## 2. Using Web Image Monitor

### List of the Setting Items

If you install the IPDS card to the machine, following Web Image Monitor items can be viewed or modified depending on the selected mode on the Web browser.

Select one of the following modes to log on Web Image Monitor:

- User mode: logged on as a user
- Administrator mode: logged on as an administrator

#### ↓ Note

- IPDS cannot use the delete reservation function of Web Image Monitor. After you login to administrator mode in Web Image Monitor, even if you select a currently printing IPDS job at the Current/Waiting Jobs and then click [Delete Reservation], nothing happens.
- For details about Web Image Monitor, see the manual explaining the network functions provided by the supplier or Web Image Monitor Help.

### Configuration

#### Printer

| Menu                 | User mode | Administrator mode |
|----------------------|-----------|--------------------|
| Basic Settings       | Read      | Read/Modify        |
| IPDS Form List       | Read      | Read/Modify        |
| Reset IPDS Resources | None      | Read/Modify        |

#### ↓ Note

- "IPDS Menu" will appear in Basic Settings.
- "Reset IPDS Resources" appears only when the HDD unit is installed.

#### Network

| Menu | User mode | Administrator mode |
|------|-----------|--------------------|
| IPv4 | Read      | Read/Modify        |



**Note**

- "IPDS" and "IPDS Port Number" will be displayed.

**Security**

| Menu             | User mode | Administrator mode |
|------------------|-----------|--------------------|
| Network Security | None      | Read/Modify        |

**Note**

- "IPDS" will be displayed.



# 3. Accessing User Tools

## User Tools Settings

When the IPDS card is installed, IPDS print settings become available and will appear on the control panel.

### Printer Features

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#### List / Test Print

##### IPDS Font List

Prints a list of IPDS-supported fonts.

##### ↓ Note

- The layout of the IPDS Font List produced by the test print is fixed to A4 or 8 1/2 × 11 (letter) size. We recommend you load A4 or 8 1/2 × 11 (letter) size paper (plain or recycled) in one of the paper trays.
- For details about printing lists, see the manual explaining how to print lists provided by the supplier.

#### Data Management

##### Reset IPDS Resources

Delete all IPDS resources that saved on its hard disk.

##### ↓ Note

- Only the Machine Administrator can reset IPDS resources.

#### IPDS Menu

##### Tray Form

Specifies an IPDS form for each paper tray.

- Tray 1
- Tray 2
- Tray 3
- LCT
- Bypass Tray



- Interposer Tray

For each paper tray, select the form you want to allocate to it.

### Emulation Mode

Specifies the emulation mode.

Default: **[Native]**

- Native
- 4028

#### Note

- When you change the settings, make sure to perform one of the following operations to apply the changes:
  - Turn the main power switch of the machine off, and then back on.
  - Turn the main power switch of the machine on, and then connect to a session without connecting to an IPDS session or using the IPDS Font List function.
  - If you are connected to an IPDS session, leave the session, and then connect again.
  - If you are not connected to an IPDS session, connect to a session, leave the session, and then connect again.

### Print Mode

Specifies the print mode.

Default: **[Enhanced]**

- Standard
- Enhanced

#### Note

- When you change the settings, make sure to perform one of the following operations to apply the changes:
  - Turn the main power switch of the machine off, and then back on.
  - Turn the main power switch of the machine on, and then connect to a session without connecting to an IPDS session or using the IPDS Font List function.
  - If you are connected to an IPDS session, leave the session, and then connect again.
  - If you are not connected to an IPDS session, connect to a session, leave the session, and then connect again.

### Default Code Page

Specifies the default code page.

Default: **[037]**

- 037 : US, Canada, Netherlands, Portugal



- 038 : US English ASCII
- 260 : Canadian French
- 273 : Austrian/German
- 274 : Belgium
- 276 : Canadian French
- 277 : Danish/Norwegian
- 278 : Finnish/Swedish
- 280 : Italian
- 281 : Japanese
- 284 : Spanish
- 285 : UK English
- 286 : Austrian/German (alternate)
- 287 : Danish/Norwegian (alternate)
- 288 : Finnish/Swedish (alternate)
- 290 : Japanese/Katakana
- 297 : French
- 420 : Arabic
- 423 : Greek
- 424 : Hebrew
- 500 : Belgium, Switzerland/International
- 870 : Latin 2 Multilingual
- 871 : Icelandic
- 875 : Greek
- 880 : Cyrillic
- 892 : OCR - A
- 893 : OCR - B
- 905 : Turkish
- 1025 : Cyrillic
- 1026 : Turkish

The following code pages include the Euro character:

- 1140 : US, Canada, Netherlands, Brazil, Portugal
- 1141 : Austrian/German
- 1142 : Danish/Norwegian



- 1143 : Finnish/Swedish
- 1144 : Italian
- 1145 : Spanish
- 1146 : UK English
- 1147 : French
- 1148 : Belgium, Switzerland/International
- 1149 : Icelandic

### 3

#### Default FGID

Specifies the default FGID (Font Typeface Global Identifier), which identifies the printer's default resident font.

Default: **[416]** (Courier Roman Medium 10).

To display a list of the fonts and FGIDs that the printer supports, print out the list of IPDS resident fonts. For details about printing lists, see the manual explaining how to print lists provided by the supplier.

- 3 : OCR B
- 11 : Courier 10
- 12 : Prestige Pica
- 18 : Courier Italic 10
- 19 : OCR A
- 46 : Courier Bold 10
- 85 : Courier 12
- 86 : Prestige Elite
- 92 : Courier Italic 12
- 111 : Prestige Elite Bold
- 112 : Prestige Elite Italic
- 159 : Boldface
- 164 : Prestige PSM Roman Medium
- 203 : Gothic Text
- 221 : Prestige 15
- 223 : Courier 15
- 254 : Courier.17 ss
- 256 : Prestige 17
- 281 : Letter Gothic
- 283 : Gothic Text



- 290 : Gothic Text
- 304 : Katakana Gothic
- 305 : OCR A
- 306 : OCR B
- 318 : Prestige Bold
- 319 : Prestige Italic
- 400 : Letter Gothic
- 404 : Letter Gothic Bold
- 416 : Courier Roman Medium 10
- 420 : Courier Roman Bold
- 424 : Courier Italic Medium
- 428 : Courier Italic Bold
- 432 : Prestige
- 2304 : Helvetica Roman Medium
- 2305 : Helvetica Roman Bold
- 2306 : Helvetica Italic Medium
- 2307 : Helvetica Italic Bold
- 2308 : Times New Roman Medium
- 2309 : Times New Roman Bold
- 2310 : Times New Roman Italic Medium
- 2311 : Times New Roman Italic Bold
- 5687 : Times Roman
- 5707 : Times Roman Bold
- 5815 : Times Roman Italic
- 5835 : Times Roman Bold Italic
- 20224 : Boldface

### Characters Per Inch

Specifies the number of characters per inch (pitch) for the default font. Valid values are 5.0 to 30.0 in units of one tenth of an inch.

Default: [10.0]

### Valid Printable Area Check

Specifies whether or not to report the Position check error (NACK 08C1..00) to the host, when valid printable area is checked

Default: [On]



- On

The printer checks for pixels that fall outside the intersection of the logical and physical pages. If there are pixels outside the area and error reporting has been set using the "IPDS Exception Handling Control" command, the printer reports an error to the host.

- Off

The printer does not report pixels outside the valid printable area.

### Edge to Edge

Turns "Edge to Edge" printing on or off.

Default: [On]

- On

The printer allows printing up to the physical page size.

- Off

The printer maintains a border of 4 mm (0.156 inches) on all four edges of the paper.

#### Note

- To prevent toner from accumulating inside the printer, we recommend leaving [Edge to Edge] set to [Off] for IPDS, and setting it to [On] only when necessary.
- The "Edge to Edge" IPDS Menu item affects IPDS data only.
- When using IPDS, the "Edge to Edge" setting on System menu will be invalid.

### Font Substitution

Turns font substitution on or off.

Default: [Off]

- On

If a job requests a font that is not loaded on the printer, the printer uses a substitute font.

- Off

If a job requests a font that is not loaded on the printer, the printer generates an IPDS NACK (Negative Acknowledgement) message and the host holds the job.

### Resource Capture

Sets Resource Capture processing.

Default: [On]

- On

The printer saves downloaded font resources on its hard disk drive for use beyond the duration of the current power cycle. The IPDS host must provide the "Activate Resource" command with the correct resource identifiers before downloading the font resource to be captured.

- Off



The printer stores downloaded font resources for the duration of one power cycle only.

## Resolution

Specifies the resolution reported to the host in the "IPDS XOA-OPC" command for raster coded fonts and IM1 image support. The [Resolution] menu item also helps determine whether or not a printer-resident raster font is used. For example, 240 dpi raster fonts are activated at the [240 dpi] setting, not at [300 dpi] or [600 dpi]. The [Resolution] setting does not affect outline fonts, nor does it determine which raster fonts can be downloaded to the printer as temporary activation fonts.

Default: **[Auto]**

- Auto

Reports to the host that the printer supports raster fonts of any dpi value and IM1 images.

"Resident" or "Captured" raster fonts of other resolutions are not activated unless a matching "Font Resolution" and "Metric Technology Triplet" is provided with the activation request.

- 240 dpi

Reports to the host that the printer supports 240 dpi raster fonts and IM1 images.

"Resident" or "Captured" raster fonts of other resolutions are not activated unless a matching "Font Resolution" and "Metric Technology Triplet" is provided with the activation request.

- 300 dpi

Reports to the host that the printer supports 300 dpi raster fonts and IM1 images.

"Resident" or "Captured" raster fonts of other resolutions are not activated unless a matching "Font Resolution" and "Metric Technology Triplet" is provided with the activation request.

- 600 dpi

Reports to the host that the printer supports 600 dpi raster fonts and IM1 images.

"Resident" or "Captured" raster fonts of other resolutions are not activated unless a matching "Font Resolution" and "Metric Technology Triplet" is provided with the activation request.

### Note

- When you change the settings, make sure to perform one of the following operations to apply the changes:
  - Turn the main power switch of the machine off, and then back on.
  - Turn the main power switch of the machine on, and then connect to a session without connecting to an IPDS session or using the IPDS Font List function.
  - If you are connected to an IPDS session, leave the session, and then connect again.
  - If you are not connected to an IPDS session, connect to a session, leave the session, and then connect again.
- If you select [Standard] for the [Print Mode] setting, the resolution changes to [300 dpi].



- To set the IPDS resolution to [240 dpi], [600 dpi], or [Auto], you must first set [Print Mode] to [Enhanced]. Enhanced print mode produces optimal print quality, but can slow down the printing of complex jobs.

### Graphic Character String

Specifies the Graphic Character String (Graphic Character Sizing) processing method.

Default: **[Auto]**

- Auto  
Applies the value specified by the [Emulation Mode] item ([Native] or [4028]).
- Character Scale  
Applies 4028 IPDS Emulation. Prints graphics and text characters by scaling the characters in a currently activated font. Character cell size is defined in the GOCA data stream. Not available for DBCS.
- Font Activation  
Applies Native IPDS Emulation. Prints graphics and text characters using a currently activated font at the font's activation size, without scaling. GOCA data stream Character cell size information is ignored.

### Bar Code

Specifies the barcode level protocol.

Default: **[Auto]**

- Auto  
Applies the value specified by the [Emulation Mode] item ([Native] or [4028]).
- 4028  
Applies 4028 IPDS Emulation.
- Native  
Applies Native IPDS Emulation.

### Box Draw

Specifies the Box Draw processing.

Default: **[Off]**

- On  
Uses special outline fonts to draw Symbol Set box characters. Select [On] to fill gaps caused by special raster fonts that contain extended length box characters (as found in older applications, for example).
- Off  
Uses Symbol Set outline font characters to draw boxes as the font-defined characters.



## Color Simulation

Allows you to select how color specification controls are processed on a monochromatic printer.

Default: **[Fidelity]**

- Fidelity  
The printer accepts all color specification controls and simulates unique colors with shades of gray.
- Legacy  
The printer accepts all color specification controls, but performs only limited color simulation using black.

## Text Color Simulation

Specifies how text color specification controls are processed on a monochrome laser printer.

Default: **[On]**

- On  
The printer accepts all text color specification controls and simulates the unique colors with shades of gray.
- Off  
The printer accepts all text color specification controls, but performs only limited color simulation using black.

### ↓ Note

- This menu item is available only if [Color Simulation] mode is set to [Fidelity].

## Suppress Staple Count Nacks

Selects whether or not to notify the user when stapling errors occur.

Default: **[Off]**

- On
- Off

### ↓ Note

- This menu appears only if the staple unit is installed.

## Suppress Punch Nacks

Selects whether or not to notify the user when punching errors occur.

Default: **[Off]**

- On
- Off

### ↓ Note

- This menu appears only if the punch unit is installed.



## Tray Mapping

Maps the media source (input tray) to an ID the host uses for the media source.

- Tray 1 Mapping

Default: **[Auto]**

- Auto
- IPDS Tray

- Tray 2 Mapping

Default: **[Auto]**

- Auto
- IPDS Tray

- Tray 3 Mapping

Default: **[Auto]**

- Auto
- IPDS Tray

- LCT Mapping

Default: **[Auto]**

- Auto
- IPDS Tray

- Bypass Tray Mapping

Default: **[Auto]**

- Auto
- IPDS Tray

- Interposer Tray Mapping

Default: **[Auto]**

- Auto
- IPDS Tray

### Note

- When you change the settings, make sure to perform one of the following operations to apply the changes:
  - Turn the main power switch of the machine off, and then back on.
  - Turn the main power switch of the machine on, and then connect to a session without connecting to an IPDS session or using the IPDS Font List function.
  - If you are connected to an IPDS session, leave the session, and then connect again.



- If you are not connected to an IPDS session, connect to a session, leave the session, and then connect again.
- If [IPDS Tray] is selected, enter the tray parameter replacement value for each paper tray, using up to 254 digits.

### Corner Staple Angle

Selects [Vertical] or [Slant] for the angle of stapling.

Default: [Vertical]

- Vertical  
Staples vertically.
- Slant  
Staples diagonally.

#### ↓ Note

- This menu appears only if the staple unit is installed.

### Offset

Specifies whether or not the output is offset (jogged).

Default: [On]

- On  
Output is offset (jogged) when requested by the job.
- Off  
Output is never offset (jogged).

### Default Punch Pattern

Specifies the default number of holes to punch if the punch unit provides a selection (for example, two or four holes).

#### ↓ Note

- This menu appears only if the punch unit is installed.

#### ↓ Note

- [Tray Form] and [Tray Mapping] appear differently depending on the machine type.
- [Tray Form] allocates the form specified using Web Image Monitor's [IPDS Form List] to the installed tray. For details about IPDS Form List, see the Web Image Monitor Help.
- Tray commands of [Tray Form] differ depending on the machine you want to use. For details about selectable tray commands, see "Load Copy Control", IPDS Technical Reference 2.
- For details about the control panel settings, see the manual explaining how to specify the control panel settings, provided by the supplier.







## 4. Appendix

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### Precautions

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#### Limitations

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PCL fonts are not accessible via AFP/IPDS, nor can PCL access AFP/IPDS fonts.

PostScript® fonts are not accessible via AFP/IPDS, nor can PostScript access AFP/IPDS fonts.

The mainframe or host computer will not be notified of errors that happen before this machine establishes connection with them.

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#### About AFP/IPDS Fonts

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The AFP/IPDS Single Byte Character Set (SBCS) font is stored on the hard disk drive.



## Trademarks

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