

== *PRINTER INTERFACE TYPE 50*

***OPERATOR'S MANUAL
BEDIENUNGSANLEITUNG
MANUALE OPERATIVO
MANUAL DE INSTRUCCIONES
MANUEL OPERATEUR
BRUNKSANVISNING***

This printer interface can only be installed in models of the H504 series. Before installation, please make sure that the rating plate on the rear of the machine contains "H504".

Diese Druckerschnittstelle kann nur in Faxmodellen der Serie H504 verwendet werden. Vor der Installation überprüfen Sie bitte, ob an der Rückseite des Geräts auf dem Typenschild "H504" steht.

Questa interfaccia per stampante può venire installata solo nei modelli della serie H504. Prima dell'installazione, accertarsi che la targhetta dei dati, situata nella parte posteriore della macchina, contenga la sigla "H504".

Este interface sólo puede instalarse en los modelos de la serie H504. Antes de proceder a su instalación, por favor asegúrese de que la chapa metálica de identificación en la parte trasera de su máquina tiene escrito el código "H504".

Cette interface ne peut être installée que sur les modèles de la série H504. Avant l'installation, soyez bien certain que la plaque d'identité à l'arrière de l'appareil porte bien "H504".

Detta skrivar-interface kan endast installeras på modeller i H504-serien. Före installation, kontrollera att plattan bak på maskinen innehåller "H504".

Epson® LQ™ -510
IBM® Proprinter™ X24E
Canon® BJ®-10ex
Microsoft® Windows™

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FUNCTION LIST

PRINTER CONTROLS AT A GLANCE

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INTRODUCTION

About the Printer Interface

After you have installed the printer interface card in your fax machine, you will be able to use the machine as a desktop printer for your IBM or compatible personal computer.

It will print text files at between 1 and 2 pages per minute, but documents including graphics may take up to 3 minutes for a page. Therefore, the best use of this printer is for printing letters or short documents.

To ensure that the printer meets the requirements of your application programs, emulation modes for three different printers have been provided. These emulation modes are for:

- Canon BJ-10ex
- Epson LQ-510
- IBM Proprinter X24E

When you wish to change the emulation mode, you can only do so from the fax machine's operation panel. You cannot change settings from the computer.

In many cases, the settings will appear on the display as a row of digits; a typical example is shown below.

```
Note: Bit# 9 8 7 6 5 4 3 2 1 0
           ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
BITSWP1:  0 0 1 0 0 0 1 0 1 0
PRESS  9...0          OK
```

This row of digits is known as a Bit Switch. Each of the digits corresponds to a setting. In the above example, there are ten digits, numbered from 0 to 9; 9 is at the left and 0 is at the right. Each digit is like a switch; it can have one of two settings, 0 or 1. The value of the digit determines the position of the setting.

You can change the value of the digits at the operation panel. For example, to change the value of bit 7, press **[7]** and watch the value change from 0 to 1 or from 1 to 0. In the above example display, the name of the bit switch is BITSWP1 (Bit Switch, Printer, 1). Digits 7, 3, and 1 are set to 1, and the others are at 0.

While the printer is being used, you can store, transmit, and receive fax messages. However, any fax messages received will go into memory and will not be printed until the printer stops. Also, copying is impossible when the printer is on line. While you are making a copy, or receiving a fax message, you cannot use the printer. If you send a file to the printer while a fax message is being received, the file will not be printed; you must wait until receiving has finished, then try again. See the tables on the next page for more information about contention between features.

Use of the Fax and Printer at the Same Time

In some cases, the machine can handle two tasks at the same time. The following tables show how to operate the machine while a job is currently in progress.

1. If you wish to print a file from the computer while the fax machine is busy

Current Task	Printing a File from the PC
Immediate Transmission	Possible; you can print your file immediately if you wish.
Memory Transmission	
Scanning a document and storing it to memory	
Receiving a fax message	Not possible; wait until the machine has finished the current task.
Printing a fax message from memory	
Making a copy	

2. If you wish to use the fax machine (or if someone tries to send you a fax message) while you are printing a file from the computer

Desired Use of the Fax Machine	Whether Possible or Not
Immediate Transmission	Possible; you can start immediately, even though the machine is printing a file from the computer.
Memory Transmission	
Scanning a document and storing it to memory	
Receiving a fax message	Possible; the machine receives the message into memory (using Substitute Reception; see the fax machine's Operator's Manual).
Printing a fax message from memory	Not possible; wait until the machine has finished printing.
Making a copy	

About this Manual

Installation

This section shows you how to install your printer interface and check that it is working properly.

Basic Operation

This section tells you how to operate the printer. For example, you can see how to do form feeds, switch the printer on line or off line, and so on.

Selecting the Emulation Mode

This section tells you how to select one of the three emulation modes.

Adjusting the Printer Settings

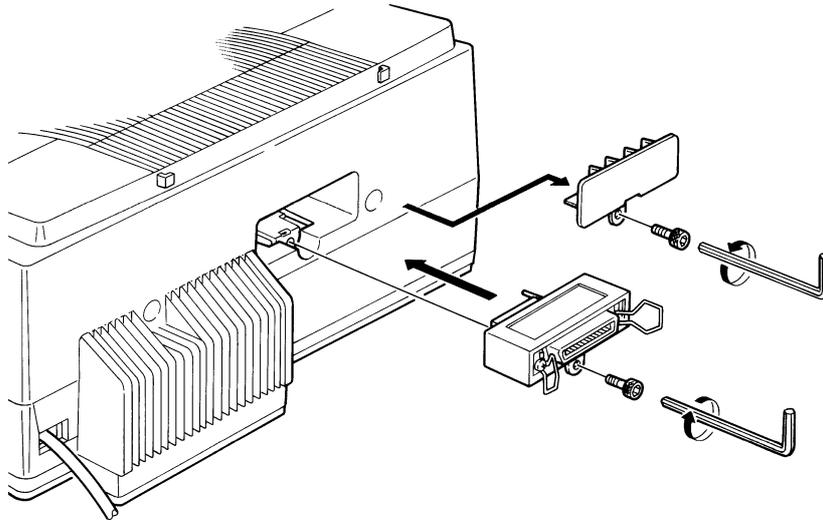
This section shows you how to modify the machine's settings to adjust the appearance of your printer's output.

Troubleshooting

This section explains any error messages that may appear on the screen while you are using your fax machine as a printer.

INSTALLATION

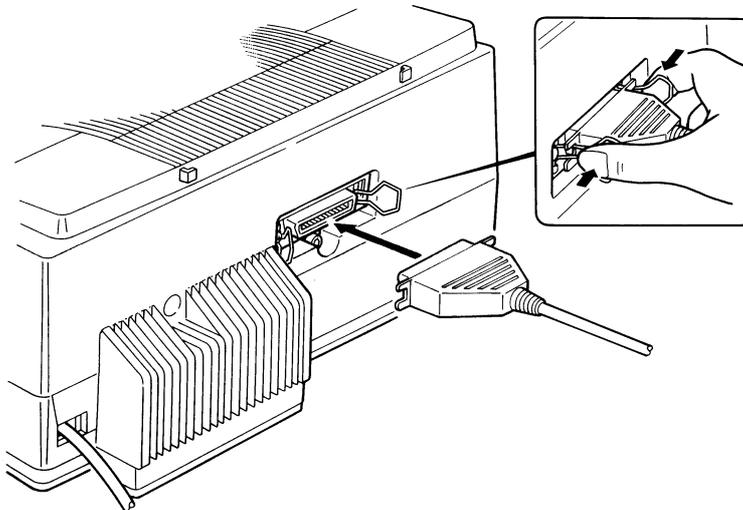
Installing the Interface Port



Make sure that the machine is unplugged before you install the interface port.

Caution: Check the Receive File indicator before unplugging. If the indicator is lit, a received fax message is in the memory. This message will be erased if you unplug the machine.

Connection to the Computer



There is no cable provided with the printer interface kit. To connect the printer to your computer, you will need a cable for a parallel interface, also known as a Centronics cable.

Make sure that the computer and the printer are both switched off and unplugged before connecting or disconnecting the cable or the interface port.

Self Test

This test helps you to check that your printer is working properly. To make a self test, make sure that the machine is in standby mode and has paper and ink supplied, then do the following at the fax machine.

1. **Function** **4** **4**
44 SELF TEST
REVIEW PRINT EXIT
2. **PRINT**
PRINTING...

The machine prints a test pattern. The type of pattern printed depends on the emulation mode that you selected.

Epson LQ-510 Emulation Mode

- Character Pattern -

The machine prints a continuous stream of characters.

Canon BJ-10ex or IBM X24E Emulation Mode

- Character Pattern -

The machine prints a continuous stream of characters.

- All Modes Test Pattern -

If you wish, you can set up the Canon and IBM emulation modes to print out an All Modes Test Pattern instead of the ripple pattern. See page 13 for how to do this. In the All Modes test pattern, all the characters are printed out in each of the typefaces described below.

- 1) High Quality, proportional spacing
- 2) High Quality, elite (12 cpi)
- 3) High Quality, pica (10 cpi)
- 4) High Quality, double-height
- 5) Economy, elite (12 cpi)
- 6) Economy, pica (10 cpi)
- 7) High Quality, double-width
- 8) Economy, condensed (17 cpi)
- 9) Economy, condensed subscript
- 10) High Quality, boldface elite (12 cpi)
- 11) High Quality, boldface pica (10 cpi)

The fonts in items 2 and 10 depend on the emulation mode. In IBM mode, the Prestige font is used, and in Canon mode, the Elite font is used.

To stop the printing, press the  key.

BASIC OPERATION

Turning the Printer On Line and Off Line

The printer must be on line before it can receive data from the computer. When the printer is off line, it ignores the computer.

1. **Function** **4** **0**

```
40 PRINTER CONTROL
REVIEW  SET  EXIT
```

2. **SET**

```
PRINTER:  ON LINE
REVIEW ON/OFF EXIT
```

In Epson LQ-510 emulation mode, REVIEW is not displayed if the printer is on line.

Current Setting:
On Line

3. Either:

- If the current setting is correct: **EXIT**
- To change the current setting: **ON/OFF** **EXIT**

The machine returns to standby mode.

Line Feed and Form Feed

- A line feed (LF) moves the paper forward one line.
- A form feed (FF) ejects the sheet of paper in the printer, or feeds a new sheet of paper to the top of the page.

If the computer does not send an end-of-page signal to the printer, a sheet of paper may be fed half-way into the printer at the end of printing, and it will remain inside the printer. If you do a form feed, this sheet of paper will be fed out.

1. **Function** **4** **0**

```
40 PRINTER CONTROL
REVIEW  SET  EXIT
```

2. **SET**

```
PRINTER:  OFF LINE
REVIEW ON/OFF EXIT
```

Note: If the printer is currently on line, switch it off line: press **ON/OFF** .

3. **REVIEW**

```
PRINTER:  LF
REVIEW  SET  EXIT
```

4. Either:

- To make a line feed: **SET**
- To make a form feed: **REVIEW SET**

Note: You can do more than one line feed or form feed by pressing **SET** more than once.

5. When you have finished, either:

- If you wish to switch the printer on line again: **REVIEW** until the display is as shown. Then press **ON/OFF EXIT**

```
PRINTER:    OFF LINE
REVIEW ON/OFF EXIT
```

- If you do not wish to switch the printer on line: **EXIT** x 2.

The machine returns to standby mode.

Resetting the Printer

If you need to reset the printer for any reason, do the following procedure.

1. Hold down the **R** key for about 5 seconds, until the machine starts to beep.
2. Release the **R** key.
3. If necessary, cancel the printing operation at the computer. (For example, click on "Cancel".)
4. Hold down the **R** key again for about 5 seconds, until the machine starts to beep.
5. Release the **R** key. The printer initializes itself.

Note: All settings return to the factory settings, including the emulation mode. So, before you print again, make sure that you set up the printer correctly.

6. You can now continue printing.

Note

When printing using an application software package:

- Select only A4 or Letter size. Do not select Legal size.
- Do not select manual feed mode.

SELECTING THE EMULATION MODE

Note: The emulation mode must be set up at the fax machine's operation panel. It cannot be set up from the computer.

1. **Function** **4** **3**

```
43 EMULATION MODE
REVIEW  SET  EXIT
```

2. **SET**

3. Select the required mode:

- To select IBM Proprinter X24E emulation mode, BITSWP1 should be at 00xxxxxxxx
- To select Canon BJ-10ex emulation mode, BITSWP1 should be at 01xxxxxxxx
- To select Epson LQ-510 emulation mode, BITSWP1 should be at 1xxxxxxxx

A digit marked "x" means that the digit can be either 0 or 1.

```
BITSWP1: 0000000000
PRESS 9...0 OK
```

In our example, all digits in BITSWP1 are now at 0. If you wish to enter Epson LQ-510 mode: **9**

```
BITSWP1: 1000000000
PRESS 9...0 OK
```

4. **OK**

```
SETTING...
```

The machine sets up the selected emulation mode, then returns to standby mode.

Note: If the printer drivers available with your software do not include the Epson LQ-510, select the Epson printer with the model number that is closest to LQ-510.

Which emulation is the best to use?

For graphics and for Microsoft Windows 3.1 applications, BJ-10ex mode gives the best results.

For quick printout of text files, use Epson LQ-510 mode.

For applications that only support IBM printer compatibility, use IBM Proprinter X24E mode.

Each emulation mode has a few settings that you can adjust to control the appearance of the printer's output.

ADJUSTING THE PRINTER SETTINGS

Print Quality

There are two modes: HQ (High Quality) mode, and Economy mode. The printing speed is the same for each mode, but the Economy mode uses less ink.

1. Make sure that the printer is on line, then:

Function **4** **1**

```
41 CHANGE HQ/ECONOMY
REVIEW SET EXIT
```

2. **SET**

```
CHANGE HQ/ECONOMY
CHANGE EXIT
```

3. Either:

- Change the current mode: **CHANGE**
- Keep the current mode: **EXIT**

The print quality will return to the default setting if the power cord is disconnected, if the cassette is taken out, if the machine starts to receive, if you make a copy, or if the printer is jammed.

Adjusting the Bit Switches

Bit switches are explained in the introduction to this manual. The following indicates what can be adjusted using bit switches, and how to adjust them.

The tables starting on page 11 explain the purpose of each bit. The bits allow you to customize the printer for your needs and applications. Please refer to the tables before changing any of the bits. There are three bit switches:

- BITSWP1: Adjust using Function 43
- BITSWP2: Adjust using Function 40
- BITSWP3 (Canon and IBM emulation modes only) : Adjust using Function 40

Adjustment Procedures

- BITSWP1: Function 43 -

BITSWP1 is used to select the emulation mode, to enable special character sets, and to customize other features of the printer to meet your requirements.

1. **Function** **4** **3** **SET**

```
BITSWP1: 0000000000
PRESS 9...0 OK
```

2. Change the required setting. Press a number from 0 to 9, corresponding to the digit that you wish to change.

Example: To change digit 7: **7**

BITSWP1: 0010000000
PRESS 9...0 OK

3. When you have finished: **OK**

SETTING...

The machine resets itself then returns to standby mode.

- BITSWP2: Function 40 -

The bits in BITSWP2 are mainly used to set character pitch sizes.

1. **Function** **4** **0** **SET**

PRINTER: ON LINE
ON/OFF EXIT

2. If the printer is on line, turn it off line (the machine must be off line): **ON/OFF**

PRINTER: OFF LINE
REVIEW ON/OFF EXIT

3. Press **REVIEW** three times.

SET BITSWP2
REVIEW SET EXIT

4. **SET**

BITSWP2: 000
PRESS 2.1.0 OK

5. Change the required setting. Press a number from 0 to 2, corresponding to the digit that you wish to change.

Example: To change digit 2: **2**

BITSWP2: 100
PRESS 2.1.0 OK

6. When you have finished: **OK**

SETTING...

The machine resets itself, then the display changes as shown on the right.

PRINTER: OFF LINE
REVIEW ON/OFF EXIT

7. Either:

- Switch the printer on line: **ON/OFF** **EXIT**
- Keep the printer off line: **EXIT**

The machine returns to standby mode.

- BITSWP3: Function 40 -

The bits in BITSWP3 are used to set special width and height modes, and a few other features.

BITSWP3 is available for Canon BJ-10ex and IBM X24E emulation modes only.

1. **Function** **4** **0** **SET** PRINTER: OFF LINE
REVIEW ON/OFF EXIT

2. If the printer is off line, turn it on line (the machine must be on line): **ON/OFF** PRINTER: ON LINE
REVIEW ON/OFF EXIT

3. **REVIEW** SET BITSWP3
REVIEW SET EXIT

4. **SET** BITSWP3: 0000
PRESS 3.2.1.0 OK

5. Change the required setting. Press a number from 0 to 3, corresponding to the digit that you wish to change.

Example: To change digit 2: **2** BITSWP3: 0100
PRESS 3.2.1.0 OK

6. When you have finished: **OK** SETTING...

The machine resets itself, then the display changes as shown on the right. PRINTER: ON LINE
REVIEW ON/OFF EXIT

7. Either:

- Switch the printer off line: **ON/OFF** **EXIT**
- Keep the printer on line: **EXIT**

The machine returns to standby mode.

Note: Do not adjust BITSWP2 and BITSWP3 during printing. Otherwise, the printer will stop then reset.

Bit Switch Definitions

- BITSWP1 -

Canon BJ-10ex and IBM X24E emulation modes

Digit	Purpose	Meaning
0	Graphics image density 0: High, 1: Normal	If this digit is set at 0, the page is printed as a full bit-mapped print. If this digit is at 1, the printer will omit every other dot.
1	Automatic line feed 0: CR only, 1: CR with LF	If this digit is at 1, the printer makes an automatic line feed (LF) whenever it receives a carriage return (CR) command.
2	Page length 0: 279 mm (11") 1: 305 mm (12")	If the data at the bottom of the page is not printed, try setting this digit to 1.
3	Character set 0: Set 1, 1: Set 2	Within each of the possible code pages (see digit 7 below), there is a choice of character sets. The setting of this digit determines which of the character sets will be used.
4	Automatic carriage return 0: LF only, 1: LF with CR	If this digit is at 1, the printer makes an automatic carriage return (CR) after a line feed (LF) is performed.
5	Alternate graphics mode 0: Disabled, 1: Enabled	If this feature is enabled, the printer accepts high-resolution 24-dot all point addressable (APA) graphics commands similar to those used with conventional 24-dot printers.
6	Receive buffer/download memory size 0: Receive buffer - 37 kb Download memory - 0 kb 1: Receive buffer - 3 kb Download memory - 34 kb	If your computer program requires the printer to have some download memory, set this digit to 1.
7	Code page 0: USA 437 1: Multilingual 850	The USA 437 code page contains character sets appropriate for use in the USA, and the Multilingual 850 code page contains character sets for use with the different European languages. Use digit 3 (above) to determine which character sets in the code page to use.
8 9	Emulation mode Bit 9 8 Setting 0 0 IBM X24E 0 1 Canon BJ-10ex 1 x Epson LQ-510	Use these two digits to select the emulation mode that you need. For IBM or Canon emulation mode, digit 9 must be at 0. x: This digit can be either 0 or 1.

Epson LQ-510 emulation mode

Digit	Purpose	Meaning
0	Graphics image density 0: High, 1: Normal	If this digit is set at 0, the page is printed as a full bit-mapped print. If this digit is at 1, the printer will omit every other dot.
1	Automatic line feed 0: CR only, 1: CR with LF	If this digit is at 1, the printer makes an automatic line feed (LF) whenever it receives a carriage return (CR) command.
2	Page length 0: 279 mm (11") 1: 305 mm (12")	If the data at the bottom of the page is not printed, try setting this digit to 1.
3	Character set 0: Italics set 1: Graphics set	Use the graphics set if your printer is connected to an IBM PC or compatible computer. This character set contains symbols, lines, and shaded boxes.
4	International character sets Bit 6 5 4 Character Set 0 0 0 USA 1 0 0 France	Select whichever character set you need.
5	0 1 0 Germany 1 1 0 UK	
6	0 0 1 Denmark 1 0 1 Sweden 0 1 1 Italy 1 1 1 Spain	
7	Font Bit 8 7 Font 0 0 High quality Roman	
8	1 0 Sans serif x 1 Draft Roman	Select whichever you need. x: This digit can be either 0 or 1.
9	Emulation mode 0: IBM X24E/Canon BJ-10 1: Epson LQ-510	For Epson LQ-510 emulation, this digit must be set at 1.

- BITSWP2: Function 40 -

Canon BJ-10ex and IBM X24E emulation modes

Digit	Purpose	Meaning
0	Character width (cpi - characters per inch) Bit 1 0 Setting	
1	0 0 10 cpi (pica) 0 1 12 cpi (elite) 1 0 17 cpi (condensed) 1 1 Proportional spacing	
2	Type of self-test pattern 0: Ripple, 1: All Modes	This setting determines what type of pattern will be printed when you make a self-test (see page 4). Select whichever type you prefer.

Epson LQ-510 emulation mode

Digit	Purpose	Meaning
0	Character width (cpi - characters per inch) Bit 2 1 0 Setting	Bit 2 1 0 Setting
1	0 0 0 10 cpi (pica) 0 0 1 12 cpi (elite)	0 1 1 Proportional spacing 1 0 0 17 cpi (condensed)
2	0 1 0 15 cpi (micron)	1 0 1 20 cpi

- BITSWP3: Function 40 -

This is available for Canon BJ-10ex and IBM X24E emulation modes only.

Digit	Purpose	Meaning
0	Character used for zero 0: 0, 1: Ø	Select whichever you prefer.
1	Double-width mode 0: Off, 1: On	If this feature is switched on, characters will be printed at twice their normal width.
2	Double-height mode 0: Off, 1: On	If this feature is switched on, characters will be printed at twice their normal height.
3	Boldface 0: Off, 1: On	If this feature is switched on, characters will be printed in boldface.

Note: The settings of BITSWP2 (except for digit 2) and BITSWP3 will return to their factory settings:

- If the power cord is disconnected
- If the printer is jammed
- If the cassette is taken out
- If you press the **R** key continuously.
- If the machine starts to receive
- If the cover is open
- If you make a copy
- If the machine resets itself (during Functions 42, 43, and 44)

TROUBLESHOOTING

Mechanical problems such as paper jams are dealt with in your fax machine's Operator's Manual.

Printing a Dump List

A dump list is a printout of the code that the computer sends to the printer. If you have a recurrent problem, make a dump list and show it to the service technician, as it may help to solve the problem. Also, you can use the dump list for your own purposes, when you wish to view the code being sent from the computer to the printer. The procedure is as follows.

1. **Function** **4** **2** **SET**

In a few moments, the screen will appear as shown on the right.

```
DUMP MODE ACTIVE
SET           CANCEL
```

2. **SET**

The machine returns to standby mode. However, for the next 30 minutes, the printer will output a dump list of any code that your computer sends to it. This will happen even if you try to print a page; instead of printing the page, the printer will output a list of code. After 30 minutes, the printer will reset itself and from then onwards, it can be used in the normal way.

If you wish to exit dump mode before the 30 minutes has expired, do the following.

1. **Function** **4** **2** **SET**

In a few moments, the screen will appear as shown on the right.

```
DUMP MODE ACTIVE
SET           CANCEL
```

2. **CANCEL**

If a fax message comes in while the machine is printing a dump list, the incoming message is stored in the memory until you exit from dump mode.

If a fax message comes in while the machine is in dump mode but not printing, the machine exits dump mode automatically and prints the incoming fax message.

Error Messages

In addition to the messages explained in your fax machine's Operator's manual, you may see the following while operating the printer.

Display	Required Action
INVALID NOW	Wait until the printer has stopped printing before you try to adjust any of the settings.

Recovering a Fax Message if the Printer Stalls

Occasionally, the computer and printer may lock up during printing. In this case, you may have to switch off both the printer and the computer to reset the system. However, you may have a received fax message stored in the printer's memory, and if you disconnect the power cord, that fax message will be lost.

So, before pulling out the power cord, recover the fax message with either of the following procedures.

- Open and shut the printer cover.
- Press **R** . Printing starts after 15 seconds.

SPECIFICATIONS

Printing Method:	Serial ink jet, ink-on-demand	
Printing Speed:	83 cps in 10 cpi HQ mode, 83 cps in 10 cpi Economy mode	
Printing Direction:	Text mode: Bidirectional Image mode: Unidirectional	
Print Width:	Up to 203 mm [8"]	
Line Feed Pitch:	Epson LQ-510 Mode:	1/8", 1/6", n/60", n/180", and n/360" (n is programmable)
	Canon BJ-10ex/IBM Proprinter X24E Modes:	1/8", 1/6", 7/72", n/180", n/216, and n/360" (n is programmable)
Line Feed Speed:	220 ms/line at 1/6"	
Characters:	Font:	Epson LQ-510 Mode: Roman, Sans Serif, Draft IBM Proprinter X24E Mode: Courier, Prestige Elite Canon BJ-10ex Mode: Courier
	Pitch:	Epson LQ-510 Mode: Four (10, 12, 15, 17, 20 cpi, and PS Canon BJ-10ex/IBM Proprinter X24E Modes: Four (10, 12, 17 cpi, and PS) Economy mode: 18 out of 36 x 48 dot matrix HQ mode: 36 x 48 dot matrix
	Composition:	Epson LQ-510 Mode: Italics and graphics character sets
	Character Set:	Canon BJ-10ex/IBM Proprinter X24E Modes: IBM character sets 1, 2, and 3 (code pages 437 and 850)
Maximum Number of Characters:	Epson LQ-510 Mode	

Mode	Pitch	80-column
Pica	10 cpi	80 cpl
Pica enlarged	5 cpi	40 cpl
Pica condensed	17 cpi	136 cpl
Pica condensed-enlarged	8.5 cpi	68 cpl
Elite	12 cpi	96 cpl
Elite enlarged	6 cpi	48 cpl
Elite condensed	20 cpi	160 cpl
Elite condensed-enlarged	10 cpi	80 cpl
Micron	15 cpi	120 cpl
Micron enlarged	7.5 cpi	60 cpl
Proportional spacing	Varies	Varies

Canon BJ-10ex/IBM Proprinter X24E Modes

Mode	Pitch	80-column
Pica	10 cpi	80 cpl
Pica enlarged	5 cpi	40 cpl
Pica condensed	17 cpi	136 cpl
Pica condensed-enlarged	8.5 cpi	68 cpl
Elite	12 cpi	96 cpl
Elite enlarged	6 cpi	48 cpl
Proportional spacing	Varies	Varies

Graphic Image Print: **Data Format:** Vertical 8, 24, and/or 48-dot format
Resolution: Horizontal 60 dpi
Horizontal 120 dpi
Horizontal 180 dpi
Horizontal 240 dpi
Horizontal 360 dpi

Input Buffer: 20 kb (Epson LQ-510 Mode) or 37 kb (Canon BJ-10ex/IBM Proprinter X24E Modes)

Download Buffer 18 kb (Epson LQ-510 Mode) or up to 34 kb (Canon BJ-10ex/IBM Proprinter X24E Modes)

Interface: 8-bit parallel

CHARACTER SETS

Canon BJ-10ex and IBM Proprinter X24E Modes

USA Code Page 437

Hex No	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	
0	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	0000
1	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	0001
2	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	0010
3	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	0011
4	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	0100
5	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	0101
6	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	0110
7	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	0111
8	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	1000
9	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	1001
A	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	1010
B	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	1011
C	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	1100
D	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	1101
E	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	1110
F	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	1111
	0000	0001	0010	0011	0100	0101	0110	0111	1000	1001	1010	1011	1100	1101	1110	1111	Binary No

Multilingual Code Page 850

Hex No	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	
0	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	0000
1	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	0001
2	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	0010
3	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	0011
4	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	0100
5	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	0101
6	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	0110
7	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	0111
8	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	1000
9	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	1001
A	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	1010
B	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	1011
C	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	1100
D	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	1101
E	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	1110
F	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	1111
	0000	0001	0010	0011	0100	0101	0110	0111	1000	1001	1010	1011	1100	1101	1110	1111	Binary No

Epson LQ-510 Mode

Italics Character Set

Hex No.	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	Binary No.
0	iUL	SP	0	@	P	'	p	NUL	SP	0	@	P	'	p			0000
1	DC1	!	1	A	Q	a	q	DC1	!	1	A	Q	a	q			0001
2	DC2	"	2	B	R	b	r	DC2	"	2	B	R	b	r			0010
3	DC3	#	3	C	S	c	s	DC3	#	3	C	S	c	s			0011
4	DC4	\$	4	D	T	d	t	DC4	\$	4	D	T	d	t			0100
5	%	%	5	E	U	u	U	%	%	5	E	U	u	U			0101
6	&	&	6	F	V	f	v	&	&	6	F	V	f	v			0110
7	BEL		7	G	W	g	w	BEL		7	G	W	g	w			0111
8	BS CAN	(	8	H	X	h	x	BS CAN	(	8	H	X	h	x			1000
9	HT EM	)	9	I	Y	i	y	HT EM	)	9	I	Y	i	y			1001
A	LF	*		J	Z	j	z	LF	*		J	Z	j	z			1010
B	VT ESC	+		K	[	k	{	VT ESC	+		K	[	k	{			1011
C	FF	<		L	\	l	/	FF	<		L	\	l	/			1100
D	CR	=		M	]	m	}	CR	=		M	]	m	}			1101
E	SO	>		N	^	n	^	SO	>		N	^	n	^			1110
F	SI	/		O	_	o	_	DEL SI	/		O	_	o	_			1111
	0000	0001	0010	0011	0100	0101	0110	0111	1000	1001	1010	1011	1100	1101	1110	1111	

Graphics Character Set

Hex No.	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	Binary No.
0	NUL	SP	0	@	P	'	p	C	É	á	l	á	á	á			0000
1	DC1	!	1	A	Q	a	q	ú	ú	ú	ú	ú	ú	ú			0001
2	DC2	"	2	B	R	b	r	é	é	é	é	é	é	é			0010
3	DC3	#	3	C	S	c	s	á	á	á	á	á	á	á			0011
4	DC4	\$	4	D	T	d	t	á	á	á	á	á	á	á			0100
5	%	%	5	E	U	u	U	á	á	á	á	á	á	á			0101
6	&	&	6	F	V	f	v	á	á	á	á	á	á	á			0110
7	BEL		7	G	W	g	w	ç	ç	ç	ç	ç	ç	ç			0111
8	BS CAN	(	8	H	X	h	x	é	é	é	é	é	é	é			1000
9	HT EM	)	9	I	Y	i	y	é	é	é	é	é	é	é			1001
A	LF	*		J	Z	j	z	é	é	é	é	é	é	é			1010
B	VT ESC	+		K	[	k	{	é	é	é	é	é	é	é			1011
C	FF	<		L	\	l	/	é	é	é	é	é	é	é			1100
D	CR	=		M	]	m	}	é	é	é	é	é	é	é			1101
E	SO	>		N	^	n	^	é	é	é	é	é	é	é			1110
F	SI	/		O	_	o	_	é	é	é	é	é	é	é			1111
	0000	0001	0010	0011	0100	0101	0110	0111	1000	1001	1010	1011	1100	1101	1110	1111	

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42	Entering Dump Mode	14
43	Selecting the Emulation Mode/Bit Switch Programming	7, 8
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PRINTER CONTROLS AT A GLANCE

Function 40

Printer On/Off Line

Line Feed

Form Feed

Setting pitch sizes and
various print controls

Function 43

Select IBM X24E Proprinter mode

Select Canon BJ-10ex mode

Select Epson LQ-510 mode

Function 41

HQ/Economy Mode

Function 42

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Function 44

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