Product Support Bulletin

Subject: Epson LQ Color Driver for Microsoft Windows 3.0 and 3.1

Date: 4/3/92   PSB No: P-0087
Page(s): 1 of 3   Originator: RSS

The purpose of this bulletin is to announce the availability of an additional color driver for the LQ-860, LQ-2500, and LQ-2550 for the Microsoft Windows 3.0 and 3.1 environments. This driver is primarily intended to provide Device Independent Bitmap (DIB) support for Windows based application software. The most popular of these is Paintbrush which is included with Windows 3.0 and 3.1.

When upgrading to Microsoft Windows version 3.1, it is recommended to use the Epson driver that is included with that version of Windows. The Microsoft Windows version 3.1 drivers have DIB support built-in, in addition to new enhancements.

This bulletin also contains information regarding how the driver is being distributed. In addition, specifications on the color driver and instructions on how to install the driver into your Windows Package are included.

DISTRIBUTION

The Microsoft Windows LQ Color Driver is available from the following sources:

1) The driver can be ordered from Accessory Marketing. The part number is WINCOLOR. To place an order with Accessory Marketing call (800) 922-8911. For a limited time the driver is being distributed free of charge.

2) The driver is available from CompuServe. After logging into CompuServe, to access the Epson Forum, type 'GO EPSON" at the prompt.

3) The Epson Bulletin Board is the final means for accessing the driver. The Epson BBS number for consumers is (310) 782-4531.

SPECIFICATIONS

The driver consists of 3 files: GENDRV.DLL, EPSON24C.DRV, and OEMSETUP.INF.

The fonts supported are: Courier, Roman, San Serif, Prestige, Script, OCR-A, OCR-B, Orator, Orator-S.

Graphic densities supported: 360 x 180, 180 x 180, 120 x 180.
(Horizontal x Vertical)

Paper Sources: Tractor, Bin 1, Bin 2, Manual.

Cartridge or Optional Fonts: Multi-font Cartridge

Paper Size: Letter, 8 1/2 x 11 in.
Letter, 11 x 8 1/2 in.
Legal, 8 1/2 x 14 in.
Fanfold, 14 7/8 x 11 in.
Tabloid, 11 x 17 in.
A4, 210 x 297 mm
A3, 297 x 420 mm
Fanfold, 210 x 305 mm
Fanfold, 358 x 305 mm
#6 envelope, 6 1/2 x 3 5/8 in.
#10 envelope, 9 1/2 x 4 1/8 in.

INSTALLATION INSTRUCTIONS

1)   Choose Control Panel from the Main Group window in Program Manager. The Control Panel window appears.

2)   Choose the Printers icon. The Printers dialogue box appears.

3)   Choose the Add Printer button. The dialogue box expands to display a list of printer-driver files.

4)   Select 'Unlisted Printer" at the end of the display.

5)   Choose Install.

6)   Select the correct drive and path to find the Windows driver.

7)   Select the 'EPSON LQ COLOR" and choose OK.

8) Define the new driver as ACTIVE to begin using it immediately.

Refer to the MS Windows User's Manual for further information about printer-driver installation.

NOTES

The LQ-2500 is only supported with tractor paper. This is because in single sheet mode or CSF mode the printer has a large top and bottom non-printable area.

For best results you should print at 360 x 180 DPI for normal printing and 180 x 180 DPI for draft printing.

Product Support Bulletin

Subject: 24 Pin Printer Error and Beep Codes

Date: 4/3/91   PSB No: P-0076
Page(s): 1 of 4   Originator JV

Epson printers issue beep tones when certain error conditions exist. Those beeps can assist you in locating and repairing customer's printers. The following error codes are listed by product name.

NOTE: Most of the beeps issued by the printers are of **.1** second duration with a **.1** second pause between beeps. Where the beeps or the pauses are longer, it has been noted in the text. The description **"3 Beeps x 2"** means two sets of three beeps.

LQ-200/AP-3000

1 beep:	BEL code
1 beep:	A Control Panel setting is accepted.
3 beeps:	Paper End detected
5 beeps:	Abnormal carriage movement
On-Line light is flashing:	Printhead is over heated. Carriage will stop until the printhead cools down.

LQ-500, LQ-510, LQ-1010. LQ-850, LQ-950. LQ-1050, L1 000. AP-4000. AP-4500

1 beep:	BEL code (**.5 sec** beep)
1 beep:	A Control Panel setting is accepted
3 beeps:	Paper End detected
5 beeps:	Abnormal carriage movement

LQ-800, LQ-1 000, L750

1 beep:	BEL code
1 beep:	A Control Panel setting is accepted
3 beeps:	Paper End detected
5 beeps:	Abnormal carriage movement (.5 sec. pause between beeps)
5 beeps:	+35V supply is abnormal

LQ-860

1 beep:	BEL code (.5 sec. beep)
1 beep:	A Control Panel setting is accepted
3 beeps:	Paper End detected
5 beeps:	Color select mechanism error (.5 sec. beep, .5 sec between beeps)
5 beeps:	Abnormal carriage movement (.5 sec. beep, .5 sec between beeps)
5 beeps:	CG ROM failure (.5 sec. beep, .5 sec between beeps)

LQ-1500

1 beep:	BEL code
5 beeps:	Paper End detected
5 beeps:	Abnormal carriage movement (.5 sec. pause between beeps)

LQ-2500

NOTE: Printers with LCD displays use error messages along with beeps to inform the user of problems. The following messages will help you to troubleshoot problems.

A blank LCD screen with the Power-on LED lit can be caused by a bent pin on one of the **PROMs** or jumper **J1** may be set incorrectly.

1 beep:	BEL code
5 beeps:	Abnormal **voltage** -
5 beeps:	Abnormal carriage movement (**.5** sec. pause between beeps)

LQ-2500 LCD Codes:

00	Invalid ID request to CGROM
03	EEROM read/write error
10	Abnormal carriage movement

LQ-2550

1 beep:	BEL code
3 beeps:	Paper End detected
5 beeps:	Abnormal carriage movement (**.5** sec. pause between **beeps)**
5 beeps:	Platen Gap adjustment error (**.5** sec. pause between beeps)
5 beeps:	Case open

LQ-2550 LCD Codes:

00   (1)   The font could not be found. The printer's internal program could not find the target font.
     (2)   Missing or damaged 7A ROM

02   Internal ROM check does not match. The versions may have been mixed.

LQ-2550 cont.

03   A 'Verify After Write" check to the SRAM has failed. The SRAM could be bad.

10   This is a motor control error. Four possible areas of failure are:
       a. CR home condition not detected at power up
       b. Platen gap motor HP not detected correctly
       c. Friction/Tractor feed switching error
       d. Physical obstruction such as a jammed ribbon

11   Skewed paper detect error. Since the initial reading upon loading a single sheet paper, the paper has skewed. This is a printhead wire protection feature.

12   Illegal paper positioning.
       (1) If the paper is loaded using the knob instead of the LOAD/EJECT switch, this error condition will occur. This is a printhead wire protection feature.
       (2) PE sensor may have failed or is not connected.

20   CPU error. An undefined op-code was detected.

NOTES: Error codes 11 and 12 are usually caused by new operators who are un-familiar with the machine. Both of these errors are corrected by turning the printer off, taking out the paper and turning the printer back on. Both features were added to ensure proper paper handling and prevent paper jams, which can result in printhead failures.

              Incorrect jumper settings on the ROMA board may cause errors 10 or 20. The correct settings are documented in the Service Manual (page A-54, figure A-52) and on TIB **LQ2550-005.**

              Errors 0, 2, 3, 10, and 20 may require a repair, adjustment or replacement.

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INFORMATION

Product Support Bulletin

Subject :   LQ - 2550 Error Codes 11 and 12

Date: 4/11/90   PSB No: P-0064
Page: 1 of 1   Originator: ASB

There are two new error codes which can occur in printers with ROM version 022287 or higher.   They are error 11 and error 12.

Error 11 indicates that the paper is not straight.

Error 12 indicates that the paper was loaded using the platen knob instead of the LOAD/EJECT button.

When these errors occur, the printer stops, the audible alarm sounds, and one of these two error messages will appear on the front panel.

The solution to both of these errors is the same. Follow the steps below:

1. Turn the printer off.
2. Remove the paper. (Use the platen knob if necessary.)
3. Turn the printer back on.
4. Load the paper using the LOAD/EJECT button as described in the manual.
                                     OR
4.   If you are using a sheet feeder, begin printing again. The printer automatically loads the paper.

NOTE: Use the platen knob only for removing jammed paper. Never use it when you are loading paper. Use the LOAD/EJECT button for loading the paper.

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INFORMATION

Product Support Bulletin

Subject: Power Specifications

Date: 2/7/90
Page: 1 of 2

PSB No: P-0060
Originator: RFB

The following information is a list of the power requirements for
the Epson 9 and 24 pin printers and laser printers.

Product	Voltage	Max. Current Consumption	Power Consumption	BTU/HR
Apex80	120V	.7 Amp	84 VA maximum	286.69
DFX5000	120V	5.0 Amp	600 VA maximum	2047.80
DFX5000	220V	3.0 Amp	660 VA maximum	2252.58
EPL6000	120V	6.0 Amp	720 VA maximum	2457.36
EX800/1000	120V	1.0 Amp	120 VA maximum	409.56
FX850/1050	120V	1.5 Amp	180 VA maximum	614.34
FX86e/286e	120V	1.0 Amp	120 VA maximum	409.56
GQ3500	120V	6.0 Amp	720 VA maximum	2457.36
L1000	120V	1.8 Amp	216 VA maximum	737.20
LQ500	120V	1.8 Amp	216 VA maximum	737.20
LQ510	120V	1.8 Amp	216 VA maximum	737.20
LQ1010	120V	1.8 Amp	220 VA maximum	750.86
LQ850/1050	120V	2.0 Amp	240 VA maximum	819.12
LQ2550	120V	4.2 Amp	504 VA maximum	1720.15
LX800	120V	.7 Amp	84 VA maximum	286.69

Product	Voltage	Max. Current Consumption	Power Consumption	BTU/HR
LX810	120V	.7 Amp	84 VA maximum	286.69
T750	120v	1.0 Amp	120 VA maximum	409.56
T1000	120v	.7 Amp	84 VA maximum	286.69

If the power requirements of a particular Epson printer is not listed please refer to the appropriate User's Manual for the electrical specifications. In the event that the User's Manual is not available, locate the silver label on the back of the Epson printer. This is a reliable source for the electrical requirements. The following formula is used to calculate the electrical power requirements:

VOLTAMPS is equivalent to WATTS
VOLTAMPS = Volts * Amps
AMPS   = Voltamps/Volts
BTU/HR   = Watts * 3.413

Example:

120V * 1A   = 120VA
120VA/120V   = 1A
120VA is equivalent to 120W
120W * 3.413 = 409.56 BTU/HR

Heat output is rated in BTU/HR.

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INFORMATION

Product Support Bulletin

Subject: LQ - 2550 Selectype Functions

Date: 9/12/89   PSB No: P-0050
Page: 1 of 2   Originator: ML

This describes the Selectype functions in detail.   Macros and defaults are
changed in the same manner.   This subject is also covered in the User's
Manual on pages 3 - 12 through 3 - 29 and in the Technical Manual on pages
1 - 30 through 1 - 33.

Selectype Functions
 1 Press the "Selectype" button on the front panel.
 2 The arrows will be flashing and the LCD panel will read "Selectype
    Mode".
 3. The LCD panel changes to read: "Load Macro".
 4. Press the Line Feed Button (the flashing down arrow) to reveal on
    the LCD panel, "Change Macro".
 5. To change the macro, press the Load/Eject button to enter the "Change
    Macro" mode.
 6. Use the tine Feed button (the flashing down arrow) to select the
    function to be changed.
 7. To change the desired function, such as font, pitch, country, etc...,
    within the "Change Macro" mode, press the Load/Eject button.
 8. To change the selection of the function, use the Form Feed button (the
    flashing up arrow) or the tine Feed button (the flashing down arrow).
 9. Once the desired functions within "Change Macro" are selected, press
    the On - tine button.
10. Press the On - tine button a second time to save the macro.
11. Wait for the LCD panel to read "Save Macro".
12. Press the Load/Eject button to select save.
13. The LCD panel will then read "Macro #X Saved" momentarily and then
    will read "Change Macro".
14. Press the "Selectype" button to exit Selectype.

Tips for other Selectype uses

1. When changing the defaults, reset the printer by cycling the
    Power switch.

2. Use the above directions for both the "Change Macro" and "Change
   Defaults" modes.
3. Use Macro #1 for the settings that are used most often.
4. Set Macros #2- #4 for other needed settings.
5. When a different macro is needed, enter the Selectype and choose
   "Load Macro" with the Load/Eject button.
6. Press the tine Feed button (the flashing down arrow) to change the
   macro number to load.

Subject: CENTRONICS PARALLEL REQUIREMENTS TO ELIMINATE RANDOM

Date: 7/24/89   PSB No: P-0048
Page: 1 of 1   Originator: ML

The self test can be run in draft mode or Letter Quality mode, depending on which button is held down as the printer is turned on. With the color ribbon cartridge installed, the self test prints in seven colors (black, magenta, cyan, violet, yellow, red, and green).   Some colors require two passes, such as yellow and blue combined to make green.

When a black ribbon is installed in the LQ-2550 and the self test is run, some lines of the self test are printed in double-strike mode. The printer is making the double passes for the color test, leaving a light and dark appearance to the printout.   The self test cannot detect whether a black or color ribbon is installed before printing is executed.

The self test can be performed using paper that is at least 8 – 1/2 inches wide, but wide carriage paper is recommended.

To perform the self test, follow the instructions below:

1. The power cable is connected to a properly grounded electrical outlet.
2. The printer is turned off and the ribbon is installed.
3. While holding down the LINE FEED button (draft mode) or the FORM FEED button (Letter Quality mode), turn on the printer. The printer will beep three times and the POWER and PAPER OUT lights will turn on, if paper is not installed in the printer,
4. Press the PAPER SELECT button until the type of paper desired is selected.
5. Adjust the tractors or the paper guides to accommodate the size of the paper being using.
6. Press the LOAD/EJECT button once, to automatically load the paper.
7. Press the ON LINE button, to start the self test.
8. A list of the printer's current settings is printed first, followed by a series of characters. The self test continues until the paper runs out or until the printer is reset.
9. Press the LOAD/EJECT button, to eject the paper, and turn the printer off.
10. After the printer is turned off, always wait at least 5 seconds before turning it back on.

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SERVICE

PRODUCT SUPPORT BULLETIN

SUBJECT: THE MOST ASKED LQ-2550 QUESTIONS

Q: Is there an optional color kit?

A: No, color is standard.

Q: How many colors in the ribbon?

A: The four colors combine to print out 7 different colors. Color can be set in the macros and other color selection is software controlled.

Q: Does the color ribbon come with the printer?

A: Yes.

Q: What print driver in my software package, do I choose?

A: LQ-2500 is the most compatible driver to use. If that is not available, any other LQ driver should be compatible. If there is not-an LQ driver available, then an Epson 9 pin will work in most text cases.

Q: If my graphics software package does not support the LQ-2550 or LQ-2500 in color, then which driver should I choose?

A Use a JX driver with LQ Patch (made by MAPP Systems, available through Accessory Marketing) for color graphics.

Q: Does it have foreign characters?

A: It has all the foreign characters that are present in the extended IBM character set.

Q: Does the scanner for the LQ-2500 printer work with the LQ-2550?

A: No.

Q: Can the LQ-2500 ribbons be used in the LQ-2550?

A: No, the LQ-2500 ribbons cannot be used in the LQ-2550, but the LQ-2550 ribbons can be used in the LQ-2500.

Q: How many copies in multi-part forms will it print?

A: 1 original and up to 5 copies, with a maximum paper thickness of 0.46 mm (.018").

Q: How do I set the macro defaults when installing an
     optional serial (or buffer) interface board?

A: Set the macro defaults to the parallel interface. The
     optional interface board is enabled by setting the
     dip switches on the board to their proper configur-
     ations.

Q: How are the macros and defaults set?

A: Use the SelecType functions on the front panel. For
     more detailed instructions, refer to the User's Manual
     (pages 3-8 to 3-41).

Q: Do I need a multi-font cartridge?

A: No, there are 7 fonts + draft built in.

Q: What options are available for the LQ-2550?

A: The following is a list of options for the LQ-2550:

7343-A	Dual Bin Cut Sheet Feeder
7314-A	Pull Tractor
7762	Black Ribbon
7763	Color Ribbon
8148	8k Buffer Serial Interface
8143	Serial Interface
8172	32k Buffer Centronics Interface Board

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SERVICE   PRODUCT SUPPORT BULLETIN

SUBJECT: CENTRONICS PARALLEL REQUIREMENTS TO ELIMINATE RANDOM CHARACTERS USING THE LQ-2500 AND LQ-2550

The purpose of the bulletin is to resolve the problem of random characters generated by the LQ-2500 and the LQ-2550. We have received numerous reports from the field regarding this problem After intensive testing, the problem was isolated to improper Centronics parallel cables. The types of problems encountered were:

(1)   Unsuitable shielding - some cable manufactures neglect to include the twisted pair grounds. The cables without proper shielding allow electronic fields to affect the data transfer, thus causing extraneous characters. Shielded cables encase the data lines to protect against external noise.

(2)   Unacceptable use of parallel communications - The recommended length of a parallel cable is 6 to 10 feet long. When a parallel cable is longer than 10 feet, the flow may become inconsistent causing random characters to be printed. For data transfer over 10 feet in length serial communications is recommended.

If the two issues noted above are corrected, the majority of the problems regarding random characters should be eliminated. Proper shielding should always be verified before any other work is initiated. Many of the older inexpensive cables were manufactured without shielding to help keep production costs down. The length of a Centronic parallel cable should be kept to a maximum of 10 feet for optimum performance. For data transmission over 10 feet in length serial communications is recommended.

EPSON **AMERICA SERVICE, 23610 TELO AVENUE, TORRANCE,** CALIF, 90505

Product Support Bulletin ————————

Subject: Quick Reference for Current Dot-Matrix Printer Print Speeds

Date: 10/9/92   PSB No: P-0030C
Page(s): 1 of 1   Originator: SLS

9-PIN PRINTERS

Model	Draft 10 CPI	Draft 12 CPI	High-Speed Draft 10 CPI	NLQ 10 CPI	NLQ 12 CPI
AP-2250	200 CPS	240 CPS	n/a	40 CPS	48 CPS
LX-81 0	200 CPS	240 CPS	n/a	40 CPS	48 CPS
FX-870/1170	285 CPS	342 CPS	380 CPS	57 CPS	68 CPS
DFX-5000	400 CPS	480 CPS	533 CPS	80 CPS	96 CPS
DFX-8000	800 CPS	960 CPS	1066 CPS	160 CPS	192 CPS

24-PIN PRINTERS

Model	Draft 10 CPI	Draft 12 CPI	High-Speed Draft 10 CPI	LQ 10 CPI	LQ 12 CPI
AP-3250	167 CPS	200 CPS	n/a	60 CPS	72 CPS
LQ-570/1070	210 CPS	252 CPS	225 CPS	70 CPS	84 CPS
LQ-860	246 CPS	295 CPS	300 CPS	82 CPS	98 CPS
LQ-870/1170	275 CPS	330 CPS	300 CPS	92 CPS	110 CPS
LQ-2550	333 CPS	400 CPS	n/a	111 CPS	133 CPS

GLOSSARY OF TERMS
CPI: Characters Per Inch
CPS: Characters Per Second
Draft: Draft uses a minimum number of dots per character for high-speed printing.
Elite: 12 Characters Per Inch (12 CPI)
Pica: 10 Characters Per Inch (10 CPI)
LQ: Letter Quality reduces the print speed and increases the number of dots per character to increase the print quality. (24-pin printers only)
NLQ: Near Letter Quality reduces the print speed and increase the number of dots per character to increase the print quality. NLQ printing requires two passes per character. (9-pin printers only)

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Product Support Bulletin ——————

Subject: Quick Reference for 9/24 Pin Printer Paper Specifications

Date: 10/9/92   PSB No: P-0022D
Page(s): 1 of 1   Originator: SLS

This PSB provides a quick reference for the paper specifications on Epson's current line of 9-pin and 24-pin dot-matrix printers when using continuous paper. The 'Maximum No. of Copies" is the maximum allowable number of copies when using continuous multi-part carbonless paper. The "Total" number is the maximum allowable number of copies including the original. The 'Maximum Total Thickness" is the maximum allowable total thickness including the original plus any copies.

9-PIN PRINTERS

Model	Orig. + Maximum No. of Copies		Total	Maximum Total Thickness
AP-2250 .	1	2	3	0.0098" (0.25mm)
LX-810	1	2	3	0.0098" (0.25mm)
FX-870/1170	1	3	4	0.0126" (0.32mm)
DFX-5000 (Front Tractor) (Rear Tractor)	1 1	5 3	6 4	0.018' (0.46mm) 0.012" (0.30mm)
DFX-8000 (Front Tractor) (Rear Tractor)	1 1	5 3	6 4	0.018" (0.46mm) 0.012" (0.30mm)

24-PIN PRINTERS

Model	Orig. + Maximum No. of Copies		Total	Maximum Total Thickness
AP-3250 *	1	1	2	0.0071" (0.18mm)
LQ-570/1070	1	3	4	0.0126" (0.32mm)
LQ-860	1	3	4	0.0126" (0.32mm)
LQ-870/1170	1	3	4	0.0126" (0.32mm)
LQ-2550	1	5	6	0.018' (0.46mm)

* Note: The AP-2250 and AP-3250 require an optional push tractor to use continuous paper.

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INFORMATION

Product Support Bulletin

Subject: Epson Dot - Matrix Printer Options and Accessories

Date: 8/1/89   PSB No: P-0017B
Page: 1 of 2   Originator: RFA

9 - PIN DOT MATRIX OPTIONS

	U-810	FX-850	FX-1050	DFX-5000
TRACTOR UNITS				
PULL TRACTOR	C800061	7311 -A	7312-A	8309 - A
CUT SHEET FEEDERS				
SINGLE BIN	C806121	7339-A	7340-A	N/A
DOUBLE BIN	N/A	7348-A	7348-A	N/A
RIBBONS				
STANDARD (BLACK)	8750	8750	8755	8786
INTERFACE BOARDS				
SERIAL – OK BUFFER	8143	8143	8143	8143
SERIAL – 8K BUFFER	8148	8148	8148	8148
PARALLEL – 32K BUFFER	8172	8172	8172	8172
IEEE 488 – 8K BUFFER	8165	8165	8165	8165
CABLES				
STANDARD IBM PARALLEL	CI -9E - A	CI -9E-A	CI -9E-A	CI -QE-A
SERIAL DB-25 TO DB-9	C94-9	C94-9	C94-9	C94-9
SERIAL DB-25 TO DB-25	C20-9	C20-9	C20-9	C20-9
MISC. PRINTER ACCESSORIES				
PRINTER STAND	CPD-552	CPD-552	KP - STAND	8501-A

(CONT.)

24 - PIN MATRIX OPTIONS

	LO-510	LO-850	LO-95Q	LO-1050	LO-255Q
TRACTOR UNITS					
PULL TRACTOR	C800061	7311 -A	7313-A	7312-A	7314-A
CUT SHEET FEEDERS					
SINGLE BIN	C806121	7339-A	7345-A	7346-A	N/A
DOUBLE BIN	N/A	7346-A	7347-A	7348-A	7343 - A
RIBBONS					
STANDARD (BLACK)	7753	7753	7767	7754	7762
STANDARD (COLOR)	N/A	N/A	N/A	N/A	7763
FILM (BLACK)	7768	7768	7769	7770	7764
INTERFACE BOARDS					
SERIAL – OK BUFFER	8143	8143	8143	8143	8143
SERIAL – 8K BUFFER	8148	8148	8148	8148	8148
PARALLEL – 32K BUFFER	8172	8172	8172	8172	8172
IEEE 488 – 8K BUFFER	8165	8185	8165	8165	8165
CABLES					
STANDARD IBM PARALLEL	CI -9E - A	C1 -9E - A	CI -QE-A	CI -9E-A	CI -9E-A
SERIAL DB-25 TO DB-9	C94 - 9	C94 - 9	C94 - 9	C94 - 9	C94 - 9
SERIAL DB - 25 TO DB - 25	C20 - 9	C20 - 9	C20 - 9	C20 - 9	C20 - 9
SERIAL DIN-8 TO DB-9	N/A	CA070	CA070	CA070	N/A
SERIAL DIN-6 TO DB-25	N/A	8297	8297	8297	N/A
APPLE][•, DB - 25 TO DIN-6	N/A	8293	8293	8293	N/A
APPLE][c, DIN-6 TO DIN-S	N/A	8239	8239	8239	N/A
FONT MODULES					
COURIER	7400A	7400A	7400A	7400A	7400A
PRESTIGE	7401A	7401A	7401A	7401A	7401A
SCRIPT	7402A	7402A	7402A	7402A	7402A
OCR - 8	7403A	7403A	7403A	7403A	7403A
MULTI	7407-A	7407-A	7407-A	7407-A	7407 - A
MISC. PRINTER ACCESSORIES					
WINDOWS DRIVER SOFTWARE	DCB-LO2	DCB-LO2	DCB - LO2	DCB-LO2	DCB - LQ2
APPLE MAC LO SOFTWARE	C842001	C842001	C842001	C842001	C842001
LQ PATCH SOFTWARE	LQ1	LO1	LQ1	LQ1	LQ1
PRINTER STAND	CPD-552	CPD-552	KP - STAND	KP - STAND	KP – STAND

Product Support Bulletin

Subject: Quick Reference for Printer Acoustic Noise Levels

Date: 6/5/91   PSB No: P-0016D
Page(s): 1 of 2   Originator: SLS

Sound intensity is measured in units called Bels (named after Alexander Graham Bell,) or more commonly in tenths of this fundamental unit: decibels. In making noise measurements a weighting network is applied in an attempt to match the frequency response of the instrument to that of the human ear. The most common is the A weighting network, with resulting measurements expressed in dB(A).

The following is a list of current product's noise levels tested in accordance with standards set by the International Standards Organization (ISO). The acoustic noise levels for the 9 pin printers are averages while printing in Near Letter Quality (NLQ) mode using continuous paper and are not guaranteed figures. The acoustic noise levels for the 24 pin printers are averages while printing in Letter Quality (LQ) mode using continuous paper and are not guaranteed figures. The acoustic noise levels for the laser printers are averages while using single sheet paper and are not guaranteed figures.

9 PIN PRINTERS

MODEL	NOISE LEVEL
IX-81 0	56 dB(A)
FX-850	56 dB(A)
FX-1050	56 dB(A)
DFX-5000	55 dB(A)
DFX-8000	55 dB(A)

24 PIN PRINTERS

MODEL	NOISE LEVEL
LQ-200	55 dB(A)
LQ-510	56 dB(A)
LQ-1010	56 dB(A)
LQ-850	56 dB(A)

MODEL	NOISE LEVEL
LQ-860	55 dB(A)
LQ-1050	55 dB(A)
LQ-2550	55 dB(A)

LASER PRINTERS

MODEL	NOISE LEVEL
EPL-7000	50 dB(A)
EPL-7500	50 dB(A)