



ImageWriter II





Basics

ImageWriter II





General Information

Paperless Printer Microviewer

This manual contains only the Specifications, Symptom Charts and the Illustrated Parts List chapter for the ImageWriter LQ. The rest of the procedures are in the form of a Paperless Printer file located in the Printables folder.



Troubleshooting



Take Apart



Adjustments





Specifications

ImageWriter II





Interfaces

Type	RS-422/RS-232 (serial)
Buffer	24K
Baud Rate	300, 1200, 2400, or 9600 (user selectable)
Connector	Mini DIN-8





Performance

Print Modes/Speed

Draft: 250 characters per second (cps)

at 10 characters per in. (cpi) (2.5 pages per minute)

Standard: 180 cps (2 pages per minute)

Near-Letter Quality: 45 cps (.5 pages per minute)

Line-Feed Rate

Actual throughput will vary depending on computer and software.

Maximum Copies

Four inches per second (ips)

Original plus three





Character Format

Fixed Alphanumeric Symbols

Draft mode: up to 12 by 8 dot matrix

Standard mode: up to 7 by 8 dots

Near-letter-quality mode: up to 16 by 16 dots

Custom (Downloaded) Characters

Variable width, up to 16 by 8 dots





Character Pitches

**Draft, Standard,
and Near-Letter
Quality**

9–17 cpi (72–136 characters per line), through use of normal
and double-width modes

Proportional Text

144 or 160 dpi





Ribbons

Type

Fabric; continuous loop

Available Colors

Black

(Typical life: two million characters)

Four-color (magenta, cyan, yellow, black)

(Typical life: one million characters per color)





Paper Options

Format

Cut sheet or fanfold continuous

Width

3–10 in. (on pin-feed paper, hole centers must be spaced between 4 and 9.5 in.)

Thickness

.05–.28 mm





Miscellaneous

Print Method

Impact dot matrix

Built-In Character Sets

American, Italian, Danish, British, German, Swedish, French, and Spanish

Selectable by using DIP switches or appropriate software

Line Spacing

6 or 8 lines per in.; user programmable in increments of 1/144 in. (up to 99/144 in.)

Graphic Densities

72, 80, 96, 107, 120, 136, 144, and 160 dpi
(maximum dots per line: 1,280)





Electrical

Voltage

90-132 VAC; 50 or 60 Hz





Physical

Dimensions

Height: 5 in. (12.7 cm)

Width: 17 in. (43.2 cm)

Depth: 12 in. (30.5 cm)

Weight

15 lb. (6.7 kg)





Troubleshooting

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General

The Symptom Charts included in this chapter will help you diagnose specific symptoms related to your product. Because cures are listed on the charts in the order of most likely solution, try the first cure first. Verify whether or not the product continues to exhibit the symptom. If the symptom persists, try the next cure. (Note: If you have replaced a module, reinstall the original module before you proceed to the next cure.)

If you are not sure what the problem is, or if the Symptom Charts do not resolve the problem, refer to the Flowchart for the product family.

For additional assistance, contact Apple Technical Support.





Symptom Charts

Quick Problems

Error light blinks

- 1 Verify that carrier cover is secure.
- 2 Verify that carrier cover magnet is in place.
- 3 Try known-good software.
- 4 Verify that option card dip switch is open/off with no card installed.

Select light off, error light on

- 1 Add paper or reset paper feed tray.
- 2 Check for paper feed problem.

No printing or garbled printing

- 1 Check interface cable connection between printer and computer.
- 2 Verify that DIP switches (2-1 through 2-4) are set correctly.





Software-specific problem	Try known-good software.
Prints ok for a while, then prints garbage	Set DIP switch 2-3 to correct serial protocol.
Overprinting	<ol style="list-style-type: none">1 Verify that program being used is set for correct line spacing and line length.
Light printing	<ol style="list-style-type: none">1 Change ribbon cartridge.2 Adjust impression lever (see Adjustments).
Erratic carrier motion, loud hum	Remove black tube-shaped shipping protection from carrier shaft.





Printing has
squashed lines,
misregistration
problems when using
pin feed paper

- 1 Clear entry and exit path of obstructions.
- 2 Check whether manual paper sensor, paper guide, or paper bail exerts too much pressure on paper.
- 3 Verify that tractor assembly does not let paper slip.
- 4 Check printhead gap (see Additional Procedures).
- 5 Avoid printing in top and bottom one inch of paper.
- 6 Try using 20-pound paper.





Print Quality

Compressed first or second line

Replace main board.

Print is darker or lighter on one side

Remove or install shims. See General Information topic in Basics chapter. Open Additional Procedures document and refer to Shims topic.

Top row of dots missing

Perform ribbon adjustment (refer to Adjustments).

Characters sometimes appear smudged, or top of form gradually creeps down page in one-line increments

Verify that ImageWriter II driver software is most current version.





Power light on, no printing

- 1 Verify that ribbon frame assembly is riding on spiral ridge of color ribbon cam (see Adjustments).
- 2 Remove dot head, and verify that pins in connector on dot head board are not bent.
- 3 Go to Troubleshooting Table 2.

Missing dots

- 1 Check flexible cable connection.
- 2 Remove dot head, and verify that pins in connector on dot head board are not bent.
- 3 Go to Troubleshooting Table 5.





Carriage Movement

Carriage doesn't move; LEDs are not lit

- 1 Replace drive board.
- 2 Replace transformer.
- 3 Replace filter assembly.

Carriage doesn't move; LEDs are lit

- 1 Replace main board.
- 2 Replace drive board.

Carriage assembly moves to left and does not return to center

- 1 Check switch on print head board. If switch is frozen, replace print head board.
- 2 Replace main board.
- 3 Replace print head board.
- 4 Replace flexible ribbon cable.
- 5 Replace drive board.





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|---|---|---|
| Carriage moves to left and hums very loudly | 1 | Check flexible ribbon cable connection between drive board and carriage assembly. |
| | 2 | Replace flexible ribbon cable. |
| | 3 | Replace print head board. |
| Self-test after take-apart produces no carrier movement (panel lights on) | 1 | Remove bottom cover and verify that wires to carrier motor are not pinched. Replace worn wires. |
| | 2 | Replace fuse on drive board. |
| | 3 | Replace drive board. |
| Carriage assembly grinds or is hard to move | 1 | Remove bottom cover and verify that wires to carrier motor are not pinched. Replace worn wires. |
| | 2 | Replace fuse on drive board. |
| | 3 | Replace drive board. |





Paper Feed

Grinding during paper feed

- 1 Remove platen knob and verify that there are no obstructions in gearing beneath knob.
- 2 Adjust paper guide (refer to Adjustments).
- 3 Replace paper feed motor.
- 4 Replace drive board.

Paper-out sensor interferes with paper path; left side of paper fits “tighter” under platen than does right side

- 1 Verify that mechanical paper sensor is properly positioned.

