Tech Info Library

ImageWriter LQ: Description (Discontinued)

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Security:       Everyone
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The ImageWriter LQ is a 27-pin wide-carriage dot-matrix printer that can produce black-and-white or color output in three different levels of print quality. The three printer qualities are draft, near letter quality (NLQ), and letter quality (LQ).

Optional accessories are a sheet feeder (which can have up to three paper bins) and the AppleTalk card.

To choose line feed, form feed, printer select, and printer quality, there are external switches similar to those on the ImageWriter II.

The power outlet and mini-circular-8 RS-422 port (pinouts identical to the ImageWriter II) are on the back of the printer. Three sets of eight DIP switches on the logic board are used to select baud rate, character set, handshaking mode, etc.

There are three ways to feed paper through the ImageWriter LQ: friction feed, pull tractor feed, or push tractor feed. Continuous tractor feed paper can be fed through the back of the printer, using either push or pull tractor feed, or paper can be fed from the bottom of the printer and pulled through by tractors behind the platen. The pull tractor option will help correct the problem seen in the push tractor mode of the ImageWriter II which jammed paper against the printer head and paper bale. The ImageWriter LQ has two paper sensors: an optical sensor is used when paper is fed from the back of the printer, and a mechanical sensor is active when bottom paper feed is used.

While the printer has a 5K print buffer, it can accept a larger buffer either on the logic board or on an option card. However, neither larger buffer is available from Apple at this time.

Wherever possible, the ImageWriter LQ firmware accepts the same commands as the ImageWriter and ImageWriter II. For example, "Escape E" instructs the ImageWriter LQ to use elite type size, just as it does on the ImageWriter II. Other commands for characters, graphics, and color remain the same, and there is still support for half-height text, superscripts, subscripts, and vertical and horizontal platen and printer head movement. Additional printer commands

support the multiple-bin sheet feeder and high-resolution printing. The
ImageWriter LQ does not support downloadable character sets or MouseText,
so those commands have been removed.

ImageWriter LQ firmware contains font definitions in various qualities. Draft
printing can be done in any available ImageWriter LQ size, including both
proportional and non-proportional fonts. Near Letter Quality can also be
obtained in all sizes, either proportional or non-proportional. If Letter
Quality is chosen, the firmware must also be instructed to use one of the two
proportional fonts, since Letter Quality cannot be printed in a
non-proportional size. AppleWorks users must be sure to select "P1" or "P2" as
the character size when using Letter Quality on an ImageWriter LQ; otherwise,
the printer will use Near Letter Quality and its non-proportional font instead.

ImageWriter II graphic modes are referred to as "standard-resolution graphics"
on the ImageWriter LQ. The LQ can print at 72 dpi (dots per inch) in one
pass of the printer head, and at 144 dpi in two passes. A third graphics
mode, "high-resolution graphics," is accomplished in one pass using 24 pins,
and results in 216 dpi both horizontally and vertically. 216 dpi is the maximum
vertical dot resolution, although the printer may achieve up to 320 dpi
horizontally.

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