

Ultrasonic Double Feed Detection



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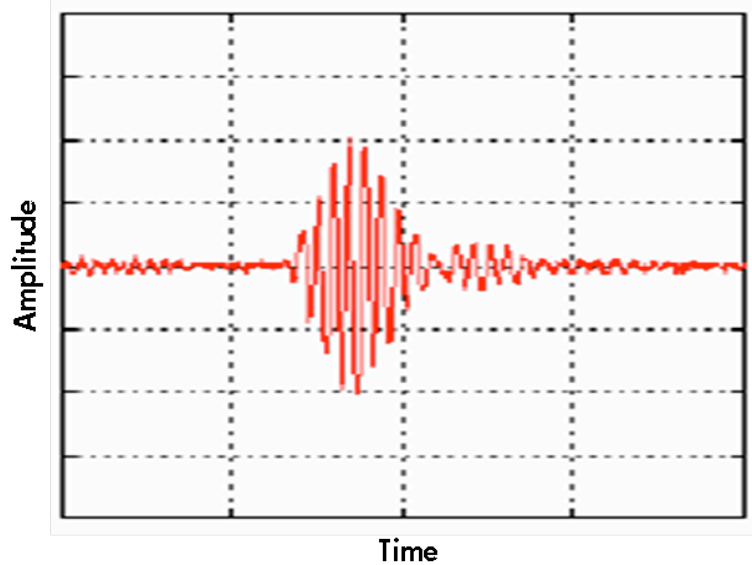
Introduction

Document scanning requires both speed and accuracy. To prevent more than one page from being scanned at a time, HP uses a technology called ultrasonic double feed detection. This allows users of the scanner to be notified if a “multifeed” occurs.

Technology overview

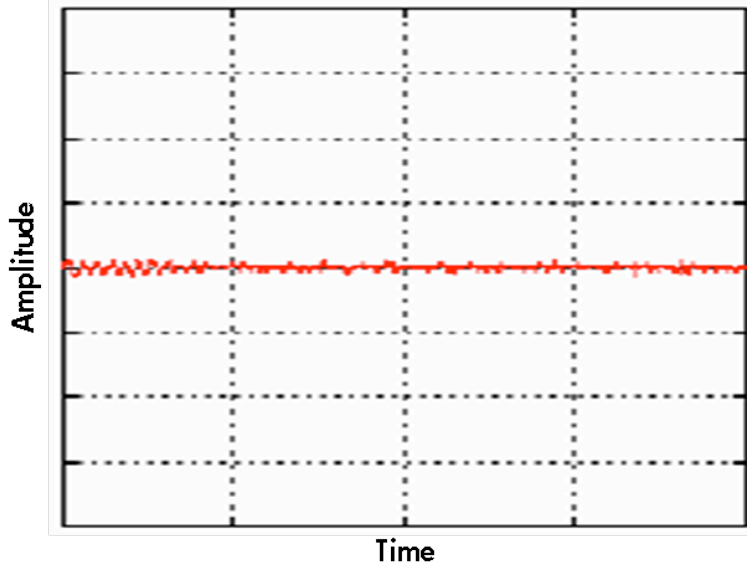
As the paper passes through the scanner, an ultrasonic sound wave is passed through the paper. Because sound travels well through a solid medium (paper) the sound is easily detected by the receiver.

Figure 1 Signal through one sheet of paper



However, when more than one sheet passes through the scanner at a time, the air between the pages, acting as an insulator, diminishes the signal. The scanner can then notify the user that a double feed has occurred and the pages can be rescanned.

Figure 2 Signal through two or more sheets of paper



Customer benefit

Because document scanning is measured both on speed as well as accuracy of the scan, double feed detection is critical. Users of the scanner can be notified immediately when a multifeed occurs so that they can correct the problem. The alternative is corrupted data that results in a rescan and can sometimes be unrecoverable.

Summary

In addition to the easy-to-use HP Smart Document Scan Software, Kofax VRS, and ISIS drivers which ensure fast, accurate scan jobs HP has added ultrasonic double feed detection. This technology gives users peace of mind, knowing that their documents are being scanned optimally the first time, every time.