WHAT IS MICR?

The term "MICR" (Magnetic Ink Character Recognition) refers to the MICR line of 65-character line of numbers and special characters that appear at the bottom of every check. The MICR line is grouped into four fields (from right to left) for dollar amount, On-Us (Account Number), Transit, and auxiliary On-Us fields. These fields are used in the automated check clearing processing by financial institutions. ANSI and ABA standards apply to the MICR line data and field positioning.

WHAT MAKES A MICR LASER PRINTER DIFFERENT FROM A NORMAL LASER PRINTER

Multiple standards are required by the banking industry for MICR printing:

- The MICR laser printer must conform to the ANSI X.9 standards for MICR printing.
- MICR laser printers are either built or general laser printers are modified and adjusted to conform to the six ABA developed standards.
- Normal laser printers conform only to user readability preferences, while MICR laser printers must conform to electronic MICR durability, uniformity, numeric placement and font standards.
- Special removable font cartridges and PCMCIA cards hold the fonts, company logos, signatures and other information needed to print checks.

WHAT IS THE DIFFERENCE BETWEEN LASER TONER AND MICR TONER?

MICR toner contains an iron oxide that permits the "bank line" information of a check to be read by electronic bank processing equipment. MICR toner is similar to standard laser printer toner, but requires a 50% to 60% iron oxide additive content to meet ANSI specifications for readability standards.

WHO SETS MICR STANDARDS

The American National Standards Institute (ANSI), sets very precise standards for the dimensions, location, shape, permanence and signal strength of MICR characters. Companies whose checks do not conform to these standards may be charged fees by their bank if their checks are rejected by poor MICR quality on the check form. (ANSI Standard X9 –3, 7, 13, 18, 27 and TG/2)

SHOULD I BE CONCERNED ABOUT CHECK FRAUD?

Yes! According to the Chief of the FBI's Financial Institution Fraud Unit, "...the serious and growing problem of check fraud has become the crime of the 90's..." and well beyond. According to recent studies, more than 500 million checks are forged annually, with losses totaling more than $10 billion, and growing at a rate of about 2.5% annually.

You pay for "fraud loss" through increased service fees with your bank and through increased prices with your vendors. You can pay significantly more if your company becomes a victim.

Check fraud does not just happen to the "other guy." Businesses, both large and small, have fallen prey to fraud perpetrators. However, prevention safeguards against check fraud can be easily enacted by your firm (see ACOM’s publication entitled “Check Fraud, The UCC, and You”).

WHAT ARE THE COMPONENTS OF A MICR LASER CHECK SYSTEM?

The essential components of a MICR Laser Check System include:

- MICR laser printer that is capable of sustaining a check creation that conforms to the ANSI X.9 standards is required. These standards govern the placement of the MICR line, and stress the consistency and durability conformance that is required for the composition of the MICR font and its application on the check.
- MICR toner that is designed and tested for the printer being used, is a must. All laser printers do not function alike in a MICR environment. The MICR toner must be of sufficient composition to ensure readability of the MICR line, and the printer must be capable of applying the MICR line to withstand the multiple-pass-sort-processing standard of the ABA.
- Security cartridge or PCMCIA port is suggested so that the signature, logo and font information contained on these items which can be removed from the printer and safely stored in a secure environment.
- Blank security-check stock is required (which is blank paper stock with security features). Security paper is fraud resistant to tampering and forgery. The paper is "engineered" with physical printing, features, and fiber composition in the document itself to create a secure check issue document.
Check-creation software is also required. The software should be:

- "Easy to use"
- Able to easily interface with the available hardware and financial application software of the user.
- Highly structured security system to control software access
- Equipped with post-processing features such as positive pay for bank-client fraud prevention processing.
- Modular with the ability to easily add new features when required.

HOW IS A CHECK PRINTED FROM BLANK SECURITY PAPER?

MICR laser printing has the capability to imprint all information on the check, including the MICR line, your digitized signature, and all other variable information. The same stock of blank safety paper can be used for any number of bank accounts. The MICR printer applies the data to the check with magnetic toner that enables the "MICR line" to be read by bank processing equipment.

WHAT ARE THE BENEFITS OF A MICR LASER CHECK SYSTEM?

Most users cite the following as the main benefits of converting to MICR printing:

- MICR Laser check processing provides a much higher level of security than does non-MICR laser processing on impact printer systems.
- Cost reductions, due to the elimination of the inventory and control of pre-printed check stock, and the associated reduction in labor-intensive activities, such as check decollating, bursting, check signing and other post-processing operations.
- A MICR Laser check is created in a single step process. A blank piece of security paper becomes a complete check with variable payee data, signatures and logos, bank identification, and an electronically readable MICR line.
- Increased flexibility to add, change or delete new bank accounts on demand.
- Decreased exposure to check fraud by adding the processing benefits of banking positive pay systems, deemed by experts to be the most effective methods for deterring check fraud.

WHAT DOES ACOM SUPPLY THAT DISTINGUISHES IT FROM OTHER VENDORS?

ACOM is a "Single Source" solution vendor. One call to ACOM can provide you with a complete turnkey solution.

ACOM customers tell us that our "single source" approach saves them time, money and confusion, since they only have to go to one place for:

- Hardware (printers and post-processing equipment)
- Software
- Installation
- Training
- Supplies
- Tech Support

Running host-resident in the Windows or IBM iSeries (AS/400) operating environments, ACOM's EZPayManager Suite is an electronic payments and MICR laser check processing solution that enables users to generate corporate payments from a single software application. Using electronically stored form templates, users can send payments electronically through the banking systems ACH network, or print checks on a MICR-enhanced secure laser printer (a single pass through the printer generates all the corporate information, logos, amounts and signatures).

ACOM's EZPayManager is compatible with all financial management software systems, ranging from legacy and general business systems such as Oracle Financial Applications, and JD Edwards, to specialized vertical packages such as WLT (healthcare) and PDS (payroll).

ACOM's integrated payment solutions provide unprecedented security, efficiency and control in disbursement-processing operations.

Elements of ACOM's Total Solution include:

- **EZPayManager check-creation software**; with add-on modules for:
  - Electronic Payments and Direct Deposit (via ACH)
  - Electronic Remittances (via e-mail, e-fax, F-EDI, and Web Forms)
  - Electronic Archiving of payments and remittances
  - Check Fraud Alert – which enables you to send positive pay files electronically to your bank
- **MICR Laser Printer(s)**
- **Post-processing equipment** for folding and sealing
- **Blank security check stock** (including watermarks, void pantographs, micro-printing, toner grip, and sequential numbering)
ACOM has been in business since 1983, and currently has more than 3,000 active customers.

**HOW CAN I REVIEW ACOM SOFTWARE & ACQUIRE FURTHER INFORMATION ON MICR FOR MY COMPANY?**

ACOM has a unique demonstration capability for prospective clients. We can arrange a remote "on-line" demonstration for you and your staff to review and evaluate our software. Via our remote communications facility you can actually review the software with your staff as it runs. Our staff personnel are "MICR experts" and can provide you with answers to other questions you may have.

We can also provide you with a detailed cost justification analysis specifically for your business operation. The cost justification analysis is developed from a short survey form that is sent to you. When prepared and returned to ACOM, the custom survey will be processed for your site. There is no charge for this service and you can determine a realistic, actual projected return of investment of implementing a MICR laser check system for your company.

For more information about ACOM's solutions, visit our website at [www.acom.com](http://www.acom.com), or contact us at:

- Phone 800-699-5758
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