Magtek Card Readers

Q: What is a track?

A: The magnetic stripe found on the back of cards such as credit, ATM, and ID badges has a possibility of up to three "tracks" of data, identified as tracks 1, 2 and 3. Each track has a different encoded (written) format. Track one contains up to 79 alphanumeric characters. Tracks 2 and 3 contain only numeric characters; 40 and 107 characters respectively.

Q: What is high energy Vs. low energy?

A: High energy (coercivity) is a type of magnetic stripe tape made up of magnetic particles that are not easily altered when introduced to a magnetic field. When high energy magnetic stripes come into contact with magnetic fields such as a magnetized screw driver or a magnetic clasp on a wallet, the information on the stripe is not affected, unlike low energy cards which are subject to erasure. Since the two types of stripes are made up of very different material, it is necessary to use an encoder specifically made for the type of stripe you are encoding. MagTek encoders offer the capability of encoding both types of stripes within the same encoder.

Q: Do I need a special reader to read high coercivity cards?

A: No. Any reader will work on both high energy and low energy cards.

Q: When I read credit cards, no alphanumeric data is captured (i.e. names etc.), only the account and other numeric information. Why?

A: You most likely have a track 2 only reader, which reads numeric info only (see the first question in this section). Contact MagTek for information on how to upgrade to a track 1 and 2 reader.

Q: Can I read all 3 tracks on driver's license with a standard credit card reader?

A: No. The driver's license format (AAMVA) is proprietary. Since the license format does not conform to International Standards Organization (ISO) standards, it takes a special reader to read a magnetic stripe license. MagTek has readers that read both standard (ISO) and AAMVA magstripes.

Q: Is there some sort of error checking used when reading or encoding a card?

A: Yes. ISO encoded cards have a parity bit in each data character. Each track of data has character called an LRC. This LRC character is a track checksum that insures all track data bits are correct. Card encoders calculate parity and LRC and encode this error checking information on the tracks along with the encoded data. Most encoders read after they write card data. Most card readers check both parity and LRC before transmitting data.