



Magstripe Badge Encoding Details

Sept 22, 2005

Magstripe badges for use with ExpoTools Lead Retrieval equipment should be encoded as follows:

Each Track: start sentinel: '%'
end sentinel: '?'
character set: alphanumeric (normal ISO 7-bit format with LRC character)

Maximum # of data characters per track = 77 (not including sentinels)
Field Delimiter = '^'

Procedures for each data record:

1. Ensure fields do not contain quotation mark, comma, carriage return or line feed characters.
2. Separate each field with a '^' character then combine all into one long string.
3. Divide the string into 1 to 3 lines of 77 characters. The last line may contain less than 77 characters.
4. Add a '%' character at the beginning of each line, and a '?' character at the end
5. Encode the lines onto the tracks of the card starting with the line 1 on track 1, then line 2 on track 2 (if required) and finally line 3 on track 3 (if required).
6. Encode all 3 tracks with sentinels even if there is no data.

NOTE: If you cannot encode ISO 7-bit alphanumeric onto Track 2, then encode only the sentinels on track 2. This will reduce the usable number of characters to 154 in total per badge.

Example: The following badge information,

Field 1: Kurt
Field 2: Gehmlich
Field 3: Specialty Sensor Technologies Inc
Field 4: President
Field 5: 4513 Dobrin
Field 6: St. Laurent
Field 7: Quebec
Field 8: H4R2L8
Field 9: Canada
Field 10: 5143374554
Field 11: 5143376006
Field 12: kurt@specialtysensor.com

Would be encoded on the 3 tracks of the badge as:

Track 1: %Kurt^Gehmlich^Specialty Sensor Technologies Inc^President^4513 Dobrin^St. Lau?
Track 2: %rent^Quebec^H4R2L8^Canada^5143374554^5143376006^kurt@specialtysensor.com?
Track 3: %?