

## **Magstripe Badge Encoding Details**

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: %?