

TimeKeeping Systems

Technical Note

Subject: Wiegand Format

Wiegand format is a 26-bit binary code with two parity bits. It translates into an eight-digit number consisting of two parts — a three-digit site code, and a five-digit user code.

The maximum value for the site code is 255, and the maximum value for the user code is 65,535.

When using bar codes to represent Wiegand values, you simply need to keep in mind the value limitation described above.



In the above example, the site code is 255 and the user code is 00393.

When checking to verify that existing cards will work in a Wiegand system, you should consider the following in addition to the value limitations:

- The ACM will only read the last eight digits in a bar code. For example: if a bar code has 10 digits, the first two are ignored.
- If the bar code value is less than eight digits, the ACM will pad leading zeros. For example, a bar code value of 2883 will be output as 00002883.
- The ACM will ignore any alpha characters in the bar code. For example, a bar code value of 3A45C99 will be output as 00034599 (Note that leading zeros are still added to the output).
- Social Security numbers cannot be used in a Wiegand system.

If you need to read more than eight digits, you should consider using either the ABA Track II mode, or the TTL ASCII mode. You will need to verify that the panel you are using accepts one of those input modes.