3.2.11 40-bit formats
3.2.11.1 40-bit format (4001)

The 40 bits of transmission consist of two parity bits and 38 code bits. The bits are transmitted in the order described. The first bit transmitted is the first parity bit, P1, it is even parity calculated over the first 20 bits. The last bit transmitted is the second parity bit, P 2 , it is odd parity calculated over the total 40 bits:
Code format:
F = facility code (524,288 possible) 6 digits $N=$ badge number (524,288 possible) 6 digits

Note: These numbers are derived from the 40 bit binary code in the proximity chip. The badge number is comprised of the 19 least significant bits. The facility code is comprised of the next 19 bits. The two most significant bits are dropped (they are always zero).

| 4001 |  |  |  |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { first } \\ & \text { bit } \end{aligned}$ | data | $\begin{aligned} & \text { P1- } \\ & \text { first } \end{aligned}$ | $\begin{array}{\|l\|} \hline \text { P2- } \\ \text { last } \end{array}$ |
| 1 | P1 | E | 0 |
| 2 | F | E | 0 |
| 3 | F | E | 0 |
| 4 | F | E | 0 |
| 5 | F | E | 0 |
| 6 | F | E | 0 |
| 7 | F | E | 0 |
| 8 | F | E | 0 |
| 9 | F | E | 0 |
| 10 | F | E | 0 |
| 11 | F | E | 0 |
| 12 | F | E | 0 |
| 13 | F | E | 0 |
| 14 | F | E | 0 |
| 15 | F | E | 0 |
| 16 | F | E | 0 |
| 17 | F | E | 0 |
| 18 | F | E | 0 |
| 19 | F | E | 0 |
| 20 | F | E | 0 |
| 21 | N |  | 0 |
| 22 | N |  | 0 |
| 23 | N |  | 0 |
| 24 | N |  | 0 |
| 25 | N |  | 0 |
| 26 | N |  | 0 |
| 27 | N |  | 0 |
| 28 | N |  | 0 |
| 29 | N |  | 0 |
| 30 | N |  | 0 |
| 31 | N |  | 0 |
| 32 | N |  | 0 |
| 33 | N |  | 0 |
| 34 | N |  | 0 |
| 35 | N |  | 0 |
| 36 | N |  | 0 |
| 37 | N |  | 0 |
| 38 | N |  | 0 |
| 39 | N |  | 0 |
| 40 | P2 |  | 0 |

