

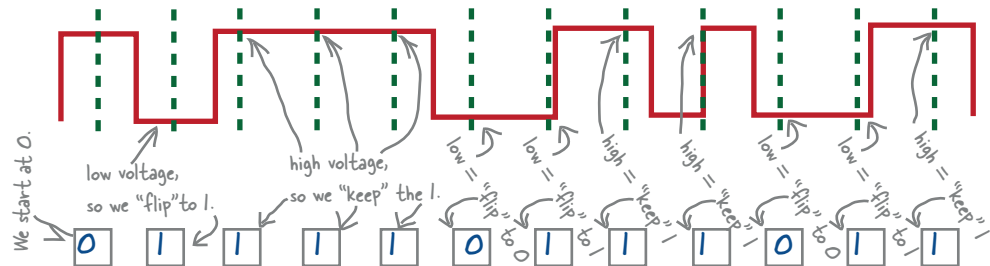


Exercise Solution

Think of three different ways the same signal could be converted into 1's and 0's. It's okay if you don't get them right. We've done the first one for you.

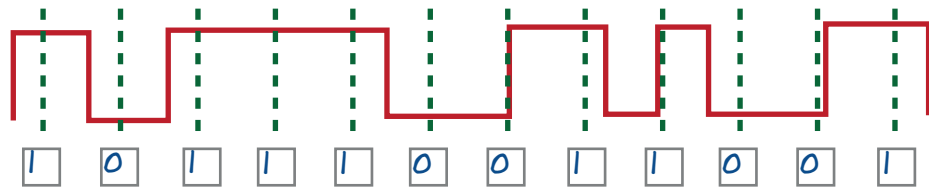
- 1 Start at 0. Where a high horizontal bar meets a vertical dotted line we repeat the last number we got. Where a low horizontal bar meets the vertical dotted line we flip to the opposite number.

This encoding method is known in the industry as Non-Return Zero Inverted (NRZI).



- 2 Where a high horizontal bar meets the vertical dotted line, we get a 1. Where a low horizontal bar meets a vertical dotted line, we get a 0.

This encoding method is known in the industry as Non-Return Zero.



- 3 Whenever the signal changes from high to low, encode a zero. Whenever the signal changes from low to high, encode a one.

This is known as Manchester encoding.

