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Tesco Discount Barcodes, Cracked



Tesco are dumb.

Ok, I'll elaborate. In Tesco on Friday evening I spied a phenomenal bargain. Boost bars with a best before of that day for the measely sum of 7p. Looking at the barcode (isn't that what everyone does?) I noticed something weird.

Boost bar multipack: £1.20

Barcode: 5000221503354

Boost bar multipack on 20th July: 7p Barcode: 971500022150335460000708

Maybe it's a little hard to see, so here it is highlighted.

971 5000221503354 6 00007 0 8

That green number is, actually, the *price*. To show it isn't just a co-incidence, here's the barcode for a fruit snack I bought the next day for 31p.

971 0000010097403 7 00031 0 2

Wait, That Means Free Stuff

So, I guess if you type the barcode into a self-service till rather than scan it, you could just put *00001* and get it for a penny?

Obviously, I wasn't going to leave that question hanging - this was a chance to beat the system, and maybe bag a cheap TV - so I did some digging and eventually managed to dissect the algorithm which produces these discounted barcodes. Almost.

- The first part, *971* means "This is a discounted item".
- The second part is just the product's regular barcode.
- The third digit is red because, well, I'll come back to it.
- The green part is the price in pence.
- Then we have a zero (I think this is a padding character)
- The final digit is a checksum.

So, if we want to make our own barcode to get stuff for a penny (or something less conscipuous like 32p), we need to create a code which conforms to those criteria.

The Checksum

Firstly, we need to know how to calculate the checksum on our barcode. The checksum is a number which is calculated from the sum of the rest of the digits to check if the scanner has scanned it correctly - a rudimentary form of error checking. Calculating it is quite easy:

- Add up the numbers in even positions.
- Add up the numbers in odd positions and multiply it by three.
- Add these two together.
- Take the modulo 10 (the remainder after

dividing by 10), and subtract the result from 10.

Try it yourself next time you're in.

The Red Digit

I'll admit, this has defeated me. My guess is it's just a random number designed to baffle inquisitive people like me trying to find a purpose behind it. But if it has some kind of meaning there are only ten possibilities which means a maximum of ten guesses. Well worth your time if you're making a saving of more than a fiver.

Putting it Together

So to put it all together, we need to take a product's barcode, stick 971 on the front, and after it a random digit (or do ten iterations of 0-9), then the price in pence we want to pay, and then a zero. Then add the numbers up as described above to get the checksum digit and put that on the end.

And there we have it. A hacked barcode for cheap products.

So, Does it Work?

Well, that's the theory at least. There doesn't seem to be any kind of database-based price-checking or authentication of any kind (unless that's what the red digit is, but I doubt it). It seems too easy to be true.

So to find out, I'm teaming up with someone with an iPhone, and we're gonna dress up sophisticated, go when it's busy, and put it to the test this week. I'll keep you

posted.

Note: this is for fulfilling your musing mind only. Please don't actually go round ripping Tesco off then pointing them to me.

Sunday 22nd July