

# All-metal mode or not?

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When I go metal detecting, I always detect with the Iron indicators removed. We have lots of trash in the ground here in South Africa, as I am sure many of you also do?

The question is what am I missing by detecting with Iron switched off? So I carried out an experiment with a couple of different objects, looking at how these objects mask each other when there is more than one item in a hole made from different materials. From the results, I hope that some of us including me will change the way in which we detect.

The equipment used for this experiment is very basic. A plastic lid and the different metal objects and the detector, which is an Ace 250.

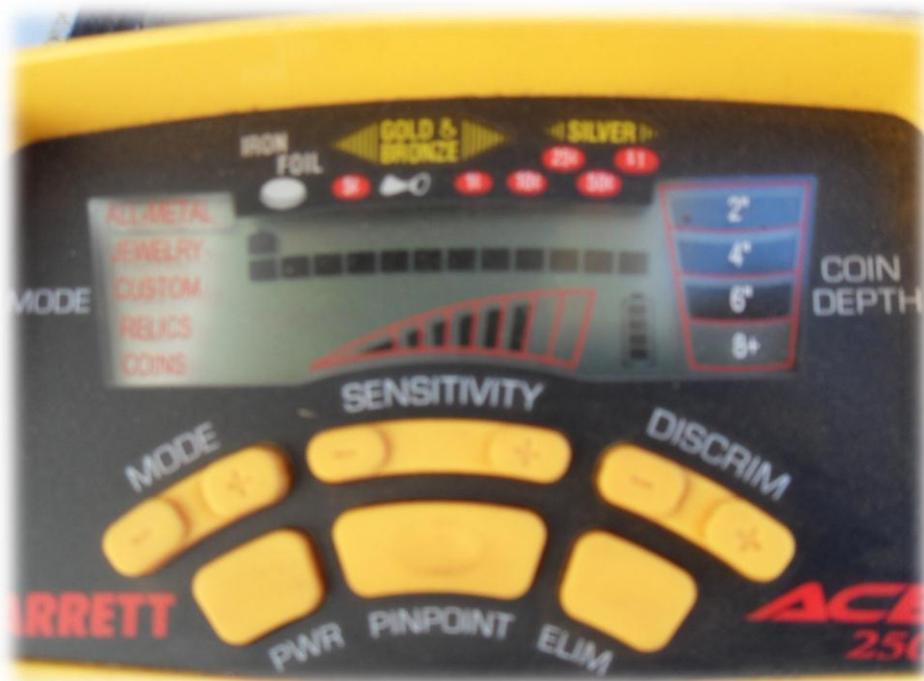


A nail, pull-tab, lead washer, and a bronze penny with the lid on the side

Basically, what I did was to get a reading for each of the items on their own before testing, then placing one item on top of the lid, and the other item beneath the lid, and taking another reading. Then I switched the items around and took another reading.



The coin underneath the lid and the nail on top



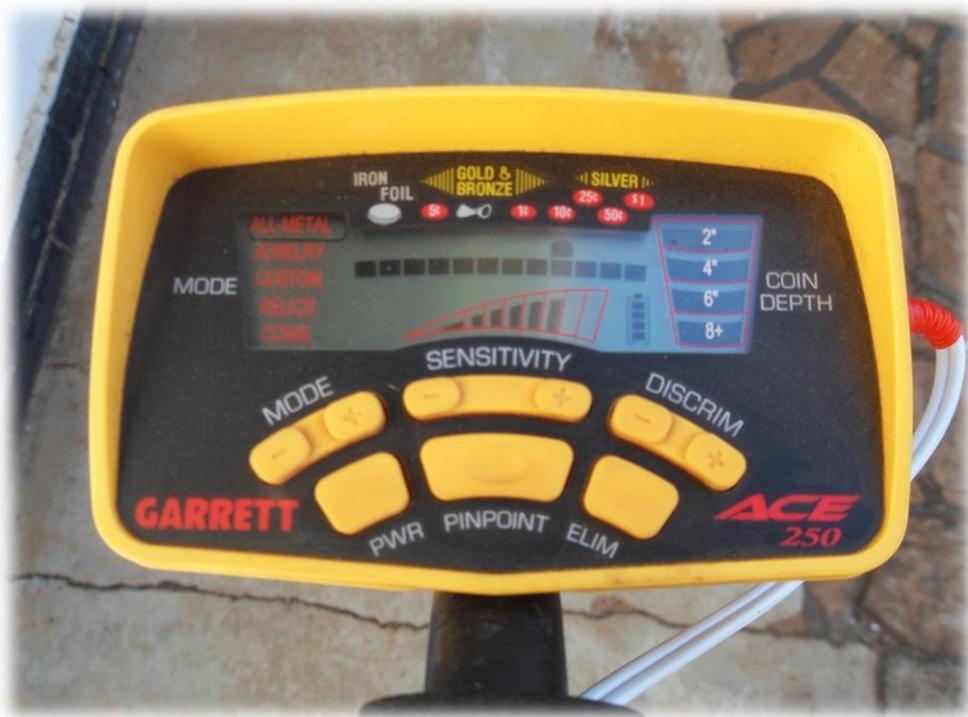
Reading of the nail showing Iron 1<sup>st</sup> segment



Reading of the Bronze Penny



With the nail on top of the coin, the reading is showing iron on the 2<sup>nd</sup> segment. The coin has disappeared which for me is a lost find. What is amazing is that the size of the Penny is just under 1 ¼ inches in diameter / 30mm which is a large object which is lost. With the objects switched around, the Penny is the most dominant item shown



This is the reading of the Penny on top showing the Penny 1 segment higher



An Iron nail with an aluminium pull-tab



The aluminium pull-tab reading



If we remember that small gold rings are recorded the same as a pull-tab, it will now be seen that the pull-tab with the nail is now showing the same as a bronze penny. Switch the items around with the nail on top, the pull-tab will then read in the Iron range (2<sup>nd</sup> segment), which would mean that the gold ring will not be found if we do not dig Iron.

With the lead washer, the readings are exactly the same as the Bronze Penny.

I think the lesson learnt here is that if the ground is full of iron signals due to mineralization, then you need to remove the Iron settings, otherwise detect in all-metal mode so that you do not miss out on some great finds. Two different metals in the same hole, completely confuses the detector.

I know this is not a long article, but I hope that it will be an informative article and will help you to become a better detectorist.

Good luck with your hunts, and find that gold.....