

Ground Balance

What does Ground Balance do? = It compensates for ground mineralization so that your detector doesn't see the ground as a target. It calculates a VDI for the ground and then ignores that VDI, also known as Ground Exclusion Balance or "GEB".

What does AutoTrac do? = It samples the ground and updates the GEB settings so that your machine is always compensating for the changing soil conditions.

What if my machine won't auto balance? = The machine will use preset factory values and AutoTrac will track the ground from those settings.

Why won't my machine auto balance? = There is not enough difference between air / ground. This is very mild dirt.

My "recommended treatment of choice" for those who don't want to run with AutoTrac = ON is to let the machine "Auto Balance" if it will, then let it "sample the ground" for about 5 minutes of hunting before you turn AT = OFF (Lock Trac). This will have the effect of letting the machine "average" the soil you're hunting in and give you a better overall performance.

Most machines with a "Trac" control continue to track the ground changes with AT=OFF. The updated numbers are just not applied. If you notice that your threshold is no longer smooth, you might consider turning AT=ON temporarily to update the settings. This will help to keep you from missing deeper targets caused by mineralization changes.

If you have AutoTrac = ON, you will "eventually" track to the average VDI value of the ground you are hunting. However - there's some "myth, that your detector will "track to the ground you're hunting" in about 15 seconds of hunting. Field testing the V3, V3i showed, it takes several minutes for the machine to "settle out" near the point where the GB sequence would have set the unit. The worse the soil, the longer it takes. Here's another thing to think about. If you ignore the GB process, all these machines will "remember the program" you were using, including the GEB settings. If you are hunting an iron mine in the morning, turn your machine off, drive to the beach to hunt the low tide line, and start up w/o a GB sequence, your machine has to track from the really high negatives (high ferrous) almost to zero (conductive). How many targets will you miss while you're waiting those several minutes for your machine to "track to the ground"? So - invest the 10 or 15 seconds before each hunt to make sure you have a good GB.

When the v3 to the V3i change occurred the tracking was changed and the instrument does track slower now, hence the increase in the speed setting and the requirement to pump the loop more to achieve a ground balance.