

Optimized (White) 10x12 SEF Coil

SEF stands for (Symmetric Electromagnetic Field). The SEF coil is a modified DD where the two loops overlap each other in the middle; a DD coil does not overlap its coils. When testing the prototype V3i I experienced less ground noise, slightly better depth and better coverage with the non V rated 12X10 SEF coil that I was using at the time. The canceled ground noise is probably what allows you to hear deeper targets better. The 10X12 is two inches longer than the D2 coil which gives more coverage per swing. They are made in Bulgaria and Kellyco is the only place you can get them in the USA.

The original black coils had some drawbacks and were not optimized for the V3i and VX3. My old (black) SEF, which was suitable for Whites DFX, MXT and M6, did not allow me to get the best efficiency with my Spectra. This was due to the nulling which is not optimized for the 3 frequencies the Spectra uses. It was possible to use the old SEF with a single frequency 2.5 kHz or 7.5 kHz but in multi-frequency and single frequency 22.5 kHz I had to decrease the sensibility considerably. The use of Boost Mode was out of the question. The black coil always overloaded. Many of the coils would be limited to RX 9. Also, the VDI numbers were off on low conductive targets. A nickel would read as a 25 VDI rather than the usual VDI 19.

The white-colored Detech SEF coil is optimized for use with the V3i and VX3. Of course the first thing I noticed was its white color. The white colored coil does not absorb ultra-violet rays as much as black colored coils and subsequently the coil runs at a lower temperature. This reduces the internal coils induction balance drifts which are caused by exposure to direct sunlight. This gives a better stability to the metal detector.

The white 10x12 SEF weighs less than the standard D2. The coil is center mounted so it has excellent balance.



The white SEF solved the null problem and allows high RX settings. My White 10x12 is a good one but still does not have as good a null as my V rated coils. The white SEF doesn't run as low a signal% as my D2 but it is not that much higher. My SEF however will not overload at RX15 with boost on. Some non V rated Whites coils and black SEF coils, by luck, can run boost. I have my doubts about the White SEF tolerances and don't know if the problems have finally been solved. Here are two sets of readings, one with boost and one with boost off. The area that I took the readings at was a high EMI area. I just wanted to show the coil can handle high settings.

So, let's see. Greater ground coverage than my stock coils at no extra weight that I can feel. The coil allows the ability to run high RX settings and TX boost mode at Signal% readings comparable to my D2. It is a coil that can handle bad ground, has about an inch more depth and the same great side by side discrimination as the black SEF. Oh, I almost forgot It ID's nickels correctly. This looks like a winner to me.

One more thing, some people don't actually measure the depth of their finds. The D2 readings are accurate but depending on what coil choice the V3i is set to, the 10x12 can give an inaccurate deeper depth reading. For the guys that are running the black coil, I think if you will check you will see you are running higher signal loss at lower RX settings than the D2.

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