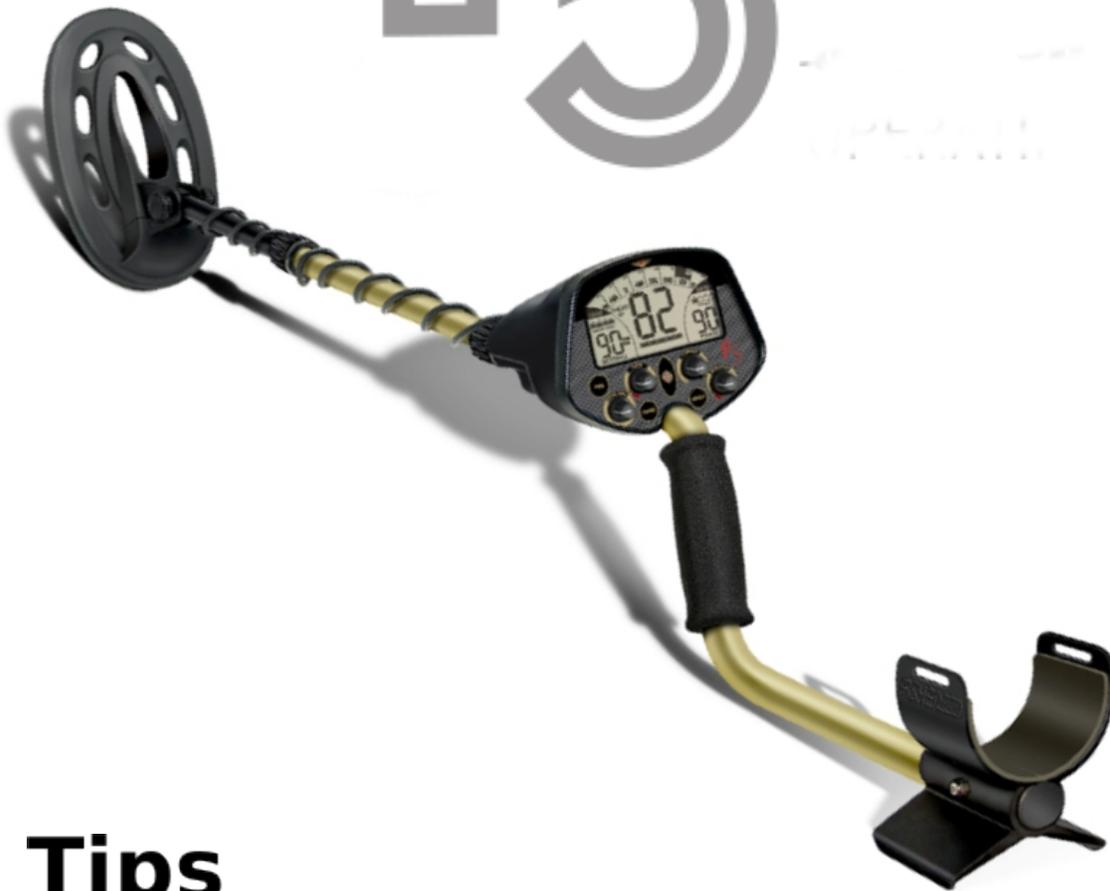




**PROFESSIONAL  
METAL  
DETECTOR**



# Tips and Tricks

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# TIPS and TRICKS

Compiled mainly from Mike Hillis (F5 Guru) postings and from others who have posted their F5 experiences on the various treasure hunting forums.

Mike Hillis :

I find rings on a regular basis in parks, schools, playgrounds and athletic fields. I am very good at it. I'll share a secret or two.

First secret....understand why you find what you find where you found it.

A good inland jewelry hunter starts out a clad hunter. Why? Because clad tells you the story of activity in the area. Clad tells you when folks pull their keys out of their pockets as they approach the parking lots. Clad coin spills tell you where people are sitting and laying around and what type of areas are the most popular. What parks are the most popular, what parks are not. Clad hunting also puts a number of accidental rings in your possession so that you can start trending their loss characteristics. Trending only requires two things.

1st.. Ask yourself this question, "Why was this lost where I found it?" Remember, the object is to understand why you find what you find where you found it.

2nd.. Look for and hunt locations that mimic those same conditions. If there is nothing there, then ask yourself a new question, "what makes this location different from the other locations?" If you do find something, validate your reasoning by asking the 1st question again. Remember, the object is to understand why you find what you find where you find it so that you can find the same type stuff again.

2nd secret....you have to cover a lot of ground.

This isn't old coin hunting where you spend hours in a 10 foot square area trying to paint every inch of the ground with a brush the size of a quarter, twice. Jewelry hunting requires that you cover as much ground as possible in the time you have to hunt it. That means that your machine has to be able to talk to you and tell you whats in the ground without you having to stop and examine every signal. You need to hear it. You need tone id. You need to hear what your coil passes over and be able to call it's conductive range without having to stop and spend a lot of time over a it or look at a meter or thumb a disc dial. When you hear a target you need to be able to call it on the fly. Iron, alum, zinc, high coin.

3rd secret...you play the odds.

You don't dig every signal. You focus. If you trend a location type to girls small gold, you focus on recovering those type of signals. If you trend a area to mens jewelry, you focus on recovering that range of targets. Those people who say you got to dig it all to find gold are

the accidental ring finders. You want to be a on purpose ring finder, and you find rings on purpose because you trend and focus and cover the ground where they are most likely to be found.

4th secret...you return to these trended locations over and over again (not on the original post)

The situations that facilitate the loss of the jewelry items are often static. They don't change. Which means that often jewelry is lost there again and again and again. These site renew themselves. I take my trends and put them into routes. I run them just like paper routes. You are always looking to validate your trends, so you also rate your routes. A, B, C. The A routes are the proven ones. You've validated them over and over. They may not produce every time you hit them but they are consistent enough that you know if you don't find a nice jewelry item this time there will be something there next time. You always come home with nice jewelry when you hit several A route sites. The B routes are more hit and miss. The characteristics that put it on that particular trend list exists but there is something missing that causes a lack of consistency. Doesn't get the right traffic or isn't in the right neighborhood, doesn't have the right medium to hide the losses, etc. But the occasional items shows up if you go there often enough. I'm always hoping to find that right characteristic that can move a B site up into a A route. Everything starts out as a C site/C route. C sites may just be places I haven't trended yet. Or they may be places that only produce clad that I rehunt occasionally to see if anything has changed, or just un-validated trends.

Maybe this will help some increase their ring finds.  
It works for me.

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Silver rings are the easiest to find. Just select the 3 tone mode and only recover the high tones and you will find the silver rings if you happen to pass your coil over them. There is very little trash in this range of targets and the hunting is pleasant and a silver ring is always fun to find.

Gold is a bit different. The little girls and women's gold rings are mostly foil range targets. The men's gold rings are larger and reside throughout the tab range. Lot of trash in those two ranges. If the trash content is not too high, the F5 has a unique nickel tone in the 4 tone mode that I listen for. Anything that causes that tone to sing out stops me in my tracks and gets recovered. Doesn't have to be a solid nickel tone either, if it even bounces into the nickel tone I'll recover it. I have a whopper of a platinum ring that reads a solid nickel tone I found in park location site type I trended.

My best advice is make it fun. Don't dig so much trash that you wear out and wear down while you are learning. There are not really any short cuts. You have to learn to read the sites yourself. The fastest way to do that is to hunt the clad and if you are lucky, perhaps you'll also pick up a gold ring while you are at it. The nickel tone can increase your luck in the places where the trash lets you use it. But your first ring find will put you on the path to others, guaranteed, if you ask that question.

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I know now why the F5 is listed as being a prospector

Besides just the Ground balance resolution.

Was doing some air testing with that little gold chain I found and the F5 hits it really good. My Golden just barely hits it with a maxed out sens and the 4" coil. The Coinstrike doesn't even know its there. My F5 hits it at minimum(05) gain and 0 threshold. Unbelievable

With a setting of 50, +5 I'm getting good audio at 4". Four inches on a small thin gold herringbone chain. Not the clasp, the chain. Not piled up, not doubled, just layed straight out as a single strand. In DISC mode

You get that? 4" on the chain in Disc mode with mid range settings.

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As a inland jewelry hunter I am always trying to improve my odds of locating gold and silver jewelry in the midst of aluminum trash. Trash like foil paper, foil, can slaw, round and square tabs, alum screw caps, etc. The F5 has the heat needed for low conductor searching, and it has a special tone for a certain range of low conductors (25 - 35) in the 4 tone audio mode. Both of which are desirable features for the inland jewelry hunter. It also has the added feature of the ground phase number display. My question was, "Is the Phase number useful for target id for the jewelry hunter?"

So I focused some long overdue attention to the ground phase number.

The ground phase number will measure conductivity in the absence of ground minerals.

Its conductive range is 0 to 50. Zero being the low end and 50 being the high end. It can provide a separate, independent conductive measurement.

I actually went out and detected for several hours using the ground phase number to id targets before I dug them. I was using the new 5x10 DD coil, and when I located a target, I pinpointed and then did the old sovereign wiggle over the target until the phase number stabilized.

For those who have never owned a Minelab Sovereign metal detector, the Sovereign wiggle is wiggling the coil above the target in such a way as to get a nearly continuous audio response. Of course the F5 is not a Sovereign and will not give a nearly continuous tone like you can get out of a Sovereign. Nor will it give you a good TID number in most cases. But it will allow the ground phase number to stabilize. The wiggle did much better at getting a stabilized Phase number than pumping the coil over the target would do. It took a few moments to get the wiggle speed right as the Phase number reads and updates once a second, so I tried to get in at least two wiggles a second. Any faster and it wasnt helpful. Any slower and it wasnt helpful.

I did just as well identifying targets by Phase number as I would have by TID number. It was much like detecting with a Minelab Xterra or a Fisher ID Edge or CoinStrike or any of the Garrett units, or any other TID unit that has a condensed TID range.

But was the Phase helpful? Could I compare the Phase number and the TID number and tell

the difference between gold and aluminum trash? Could I get the Phase number and TID number to correlate on desirable targets vs aluminum trash targets? Would the Phase number allow me to skip over aluminum trash and only recover desirable targets like gold rings and such?

I did some tests that initially showed some promise. However, I am afraid that as I add more aluminum trash into the test I will find that the condensed range of the Phase number will not be able to give me that useful correlation on desirable low conductive targets.

The test you are viewing is an air test. These numbers seemed to hold well in the ground as well. The test setup with the F5 was the 5x10 DD coil, Gain at 70, Threshold at -3, Disc at 8. I tested various targets at various Confidence Bar segment readings rather than distance from the coil. I have it sorted by Phase number.

If you would like the excel spreadsheet for filtering, drop me a pm.

You will note that it seems like it might be useful for deep coins. I haven't done any testing around that.

The phase number I am referring to is the ground balance number. Not the FE304 meter.

Item	Confidence	TID	Phase
earring, large, .5g, 14k	4	20	0
earring, small, .5g, 14K	3	18-20	0
pendant, .5g, 10k	4	20	0
earring, large, .5g, 14k	3	18-20	0-1
earring, small, .5g, 14K	4	19-20	0-1
pendant, .5g, 10k	3	18-20	0-1
foil juice tab	3	20-23	1
foil juice tab	4	22-23	1
foil juice tab	5	22	1
ring, diamond, .8g, 10k	3	21-24	1
ring, diamond, .8g, 10k	4	24	1
ring, diamond, .8g, 10k	5	24	1
wad of foil	5	24	1
ring, .9g, 10k	4	25	1-2
ring, .9g, 10k	5	25	1-2
ring, elephant, 1.3g, 10k	3	22-25	1-2
ring, elephant, 1.3g, 10k	4	25	1-2
wad of foil	3	23-24	1-2
foil juice tab	2	18-24	1-3
ring, .9g, 10k	3	22-25	1-3
can slaw - side of can	2	22-24	2
can slaw - side of can	5	26	2
ring, elephant, 1.3g, 10k	5	25	2
wad of foil	2	20-24	2
wad of foil	4	24	2
can slaw - side of can	3	23-26	2-3
can slaw - side of can	4	25-26	2-3
can slaw - top of can	2	25-27	2-3
can slaw - top of can	4	27	3
Ring, 2.5g, 10K	4	27-28	3
Ring, 2.5g, 10K	5	28	3
ring, engage, 1.4g, 10k	3	25-27	3
ring, engage, 1.4g, 10k	4	27	3
ring, engage, 1.4g, 10k	5	27	3
can slaw - top of can	3	26-27	3-4
can slaw - top of can	5	29	3-4
Ring, 2.5g, 10K	3	25-29	3-4
ring, wide,2.2 g, 10k	3	27	3-4
ring, wide,2.2 g, 10k	5	28-29	3-4
nickel	2	26-28	3-5
Ring, 2.5g, 10K	2	25-29	3-5
modern nickel range tab	2	28-34	3-7
ring, wide,2.2 g, 10k	4	28	4
nickel	3	28-30	4-5
round tab with tail	3	30-32	4-5
nickel	4	30-31	5

Item	Confidence	TID	Phase
nickel	4	30-31	5
nickel	5	30-31	5
round tab - ring only	3	31-38	5
round tab with tail	4	31-32	5
round tab with tail	5	31	5
Ring, mens 5.8 g, 10k	3	29-35	5-6
Ring, mens 5.8 g, 10k	4	33-36	5-6
Ring, mens 5.8 g, 10k	5	34	5-6
round tab - ring only	2	28-36	5-6
round tab with tail	2	25-30	5-8
modern nickel range tab	5	34-35	6
round tab - ring only	5	36	6
modern nickel range tab	4	34	6-7
round tab - ring only	4	35-36	6-7
modern nickel range tab	3	30-34	7-8
Square tab	2	38-46	7-10
Square tab	4	43-44	8-9
Square tab	5	44	8-9
Square tab	3	41-44	9-10
clad dime	5	73	28
Copper cent	4	75	29
clad quarter	5	85-86	42
clad dime	2	67-78	24-26
Copper cent	2	70-77	24-28
clad dime	3	71-73	25-28
Copper cent	3	73-74	26-28
clad dime	4	72-73	27-28
Copper cent	5	75-76	29-30
clad quarter	2	80-86	38-42
clad quarter	4	85-86	39-40
clad quarter	3	85	41-43

And everybody likes an air test:

what is interesting about the this air test is look at the low conductive test targets. Spend a little time reviewing this test and think about the two machines differences, namely F5's 7.8 frequency as compared to the Goldbug's 19kHz frequency. Notice the switch between the two that starts as the low conductive targets get smaller.

The test results are from repeatable ticks at fast sweeps speeds. I'd never get this kind of performance in my mineralized ground. But it is still neat to see how the two units compare. The F5 was set at 0 threshold.

	Fisher GoldBug Gain at 50	11" DD coil Gain at 95	Fisher F5 Gain at 50/0.	11" DD Coil Gain at 95/0
Clad quarter	8	12	11.5	13
Zinc cent	8.5	13	12	13
Nickel	10.5	14	11.5	14
medium Ring	11	15	12	14
tiny 10kt ring	9	13	9.5	10
small 10kt pendant	4.5	7	4.5	5

	Fisher GoldBug Gain at 50	5" DD coil Gain at 95	Fisher F5 Gain at 50/0.	5" DD Coil Gain at 95/0
Clad quarter	6.5	9	8.8	10
Zinc cent	7	9	8.5	9
Nickel	8	11	9	9
medium Ring	8	12	9	9.5
tiny 10kt ring	7	10	7	8
10kt pendant	4	5.5	3	4

Tests Performed indoors.  
 Gold Bug tested in Discrimination mode with 0 disc with normal VCO mode.  
 F5 tested in Discrimination mode with 0 disc, in 1 tone VCO mode.  
 Results are in INCHES  
 Results are the distance at which repeatable ticks could be heard with Koss UR30 headphones and fast sweeps.

Can you pinpoint those vanishing 90+ targets? Those will either be very deep iron or fringe depth targets. Objects at the very end of your detecting depth abilities. The audio will go out because of weak signal strenght or it has wrapped back around into the iron range.

When you get those type, lower your disc to minimum and see if you get any iron grunts. If you can pinpoint it, and it pinpoints small, dig a couple and see what they are.

As far as gain settings, if you have low FE bars and trash content allows it, by all means...crank it up.

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Trouble on pin pointing and false signals fisher f5

Most detectors with an overload alert feature just sound off until you move the coil. The overload on the F5 is somewhat unique. It overloads for about 1 to 2 seconds and then resets. That means you can place the coil on top of or next to something that overloads it. Leave it there until it resets. Then move it away and identify it or things close to the object causing the overload. No one else that I can recall has this feature. It is VERY useful.

You never know about the weak signals. They could be fringe depth targets or they could be micro trash or they could be oxidized iron that got charged up enough to spike a reading. Raising the Gain like you are doing is good, if you investigate them you want to try to get the best signal response you can. You can also try raising the threshold closer to +9 to get a more definitive (sharper) audio response. Typically, if it doesn't pinpoint, or can't pinpoint in one specific location it is trash.

Speaking of fringe depth targets (objects at the limit of the detectors ability to detect them with the current settings), Threshold settings play a big part of how they will sound. Threshold settings closer to 0 will give a "whisper" type response. Threshold settings closer to the ends, either -9 or +9 will give more "ping" type responses. I bring this up so you know what type of audio to expect for the deep objects.

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I'm not laughing at you, I'm remembering some of my early days. I was thinking about my first hunt with a CoinStrike. The ground seemed like it was one big iron target, the thing was beeping all over the place, even when I was waving the coil in the air, and I was doing all this standing in a light drizzling rain. I was looking for a tree to wrap the thing around. Luckily I didn't and got it figured out.

Take a golf ball and put it in the gap of your coil. Roll it back and forth there just a little so that it comes to rest in the center of the coil. That spot is your sweet spot. It is that size and that spot. Memorize it, mark it or something.

Ground balance your detector in the Discrimination mode. Find a clean spot of ground with no metal in it, push and hold the phase lock button and pump the coil over the ground until the phase number and the ground number match and then quit. You are balanced.

The Phase number changes every second. Ignore it unless you are pumping your coil. When you want to check your ground balance, just pump the coil over clean ground and see if the phase number and ground numbers are still the same or close to the same. If you see the numbers have become more than 3 or 4 numbers apart, reground balance by pressing the phase lock button and pumping the coil over the ground again. Then ignore the Phase number until you are ready to check your balance again.

Set your Gain and Threshold so that your detector is stable. You only want it to beep when you are over a metal target. If you have it set to hot you will get a lot of false signals. Set your Gain to somewhere between 65 and 85, and then raise the Threshold up until it starts to chatter, then back it off until it stops chattering. Now it will only beep when you are over or around metal.

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Set your discrimination low (around 8 or 9) unless there are so many targets that you

can't focus. In that case, raise the discrimination until you can handle (read "process") the audio. Use a tone id option that you are comfortable with.

Only recover the repeatable signals. They repeat on both left/right sweeps over the

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target. Pinpoint by setting the coil off the target. Press the pinpoint button, then move the coil over the target (remember where I told you the sweet spot was). Watch the depth reading. It will help you stay over the top of the target. Then turn 90 degrees to the target and do it again. Practice this. You will get good. You will get so good that you'll be able to accurately pinpoint in 2 seconds. Only look at the TID number after you have pinpointed the target and can sweep the sweet spot of the coil over the target. You'll get good reads that way. But don't spend a lot of time with the id number. Left-right-left is enough to give you a good TID.

That is enough to get you started in the right direction. You'll be able to pick up more once you get some time on it.

High minerals can be a problem. When you are in the really bad stuff you have to hold your coil just a little higher off the ground.

and, uh...those historic creek beds...they are full of old iron trash, most of which will want to make a noise. If you hunt in the iron you want to hear it as a low tone so the false high tones don't fool you, so run your disc low (7 or 😊).

The ground balance dial does push in but it does nothing on the F5.

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I can tell you are really into this chain test.

Use the single tone mode. Put your threshold at + 5 or higher, raise your gain to 60 if you can. Put your discrimination at minimum setting (no disc) ignore the numbers. Wave the clasp over the coil and listen for the tone. Test both of them. You will not get much depth on it. Maybe 1-1/5", 2", maybe 3 inches max. Then raise your disc to around 12 and see if you can still hear it. If you can still hear it at a setting of 15, that is very good. You will not get a good TID number on a chain.

Chains are found by two ways.... 1st - you hit the pendant attached to the chain and decided to recover it, or 2) you are actively hunting just for chains at places where you have a good chance of finding chains, which means you are mentally prepared to recover all those tiny signals in a location where you think chains might be found.

At this stage in your learning curve, you might want to save the chain hunting for later

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Just to review....In Discrimination mode.....

The F5 has a Gain control that amplifies a target signal, thereby making the signal look bigger (20 settings)

The F5 has a Threshold control that does two things.... 1st, it changes the signal

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strength limit that a target signal needs to reach in order to be reported (-9 to 0) and, 2nd, at settings above 0 (0 to +9), it amplifies the audio response of the signal. So at a threshold setting of zero, the F5 is wide open to receive the smallest of signals, and at settings above zero, it amplifies the audio response of those smallest of signals. It is extremely versatile, allowing multiple setting combinations to achieve the same outcome as may be needed based upon site requirements.

There are others that do something similar.....such as the F70 which gain/threshold controls is almost identical to the F5, then you have the Coinstrike/Goldstrike that are somewhat similar, but lack the audio amplification of threshold settings above zero. Then there is the V3/V3i which offer a gain and discrimination control (it is a threshold control labeled "discrimination". don't ask me why 🤔 )

The Omega doesn't fit into this category. On the Omega, settings from 1 to 70 control the gain, and settings of 71 and up invoke threshold changes. A setting of 70 is maxed out, and if you are in an environment that allows you to raise the gain to the max setting of 70 and maintain stability, then you may also be able to raise it higher and get some threshold pluses.

On units like Tesoro, we "supertune" by raising the threshold settings to amplify the audio response of signals. Unfortunately at the cost of losing the smallest signals through audio saturation as well as some discrimination ability.

So while the feature can be found on others, it is not as complete, or as easy to use as it is on the F5. Where the F5 really shines is the ability to run it very hot and sensitive to small low conductors at very low gain settings in conjunction with very high threshold settings.

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The stock coil is an exceptional coil design. You can get close to metal like it was a small coil, and it provides better ground coverage at depth than a standard round concentric and better target id. Good sensitivity to small low conductors.

The 11" DD is deeper, provides better ground coverage, loses some sensitivity to small low conductors. works well, but....it changes the balance of the unit and wears on the arm.

The 5" DD will go deeper than the stock coil in mineralized ground, provides exceptional separation and pinpointing, very good sensitivity to small low conductors, and can get close to other metal objects, but lacks ground coverage.

The 5x10" DD goes just as deep in the minerals as the 5"DD, still provides very good target separation, still maintains very good sensitivity to small low conductors and better ground coverage. However it cannot be used close to above ground metal objects like poles, barrels, etc.

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Get it with the stock 10" elliptical concentric, then add the 5x10" DD.

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I really like the stock coil, but I also really like the 5x10. Both of these coils balance out

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really well and compliment each other as to performance and use.

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I'm probably one of the few folks that are more concerned about target separation and ground coverage than I am about depth. Because of that I like the new 5x10 DD coil. I get the target separation of the 5" coil in a 10" footprint along with better ground mineral handling of the DD design. Right now I use the 5x10 as primary and if I need to get close to iron or steel, then I switch back to the stock coil. (the 5x10 isn't the coil for use next to above surface metal)

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The new 10" elliptical DD is, in a nutshell, the 5" coil wearing a 10" shoe that is designed primarily for prospecting. It is less affected by ground minerals than the 11" DD and it is less affected by EMI than the 11" DD, but retains the sensitivity and separation of the 5" coil.

It has a huge outward or side foot print that triples the size of the coil around surface iron like poles and such which makes it impractical for use around large iron that protrudes out of the ground or tot lots, etc, but the downward foot print is nice and tight, just like the 5" coil. Supprisingly that large outsized footprint is not affected by ground level surface trash.

In the ground the target id stayed real close to the stock coil, with only occasional differences, mostly due to target centering under the coil. Nickels still read 30 with an occasional bounce to 31 or 29, Dimes still read as 74 and copper pennies still read 72, quarters still read 84/85.

EMI comparison:

Stock coil - stable with gain at 55, threshold +5

11" DD coil - stable with gain at 60, threshold at -3

new 10"DD coil - stable with gain at 80, threshold at +5, which is quite similar to the 5 incher.

I'll do more coil comparisons later as I have time (time has really been limited this summer).

If you prospect you will need this coil.

If you like to hunt in heavy trash with the 5" incher, you would like this coil.

If you like to hunt small low conductors in open area's in hot ground, you will like this coil.

If you hunt around a lot of protruding, above surface iron you will not like, as in hate this coil. In the ground, ok, above the ground, no - not ok.

The long cord is a topic of conversation and I know it is a personal preference thing, but I like it (been wanting an extension cable for a long time) If you prospect, you like to keep a finger or thumb on the ground balance cause you always like to keep it spot on. It can be tough to do it with the same hand while sweeping but its not so tough if you hip mount and drive the gb with your free hand while sweeping with the other. (If you haven't done it you won't understand). The longer cord gives you that ability.

Also, water hunters have been limited to rod mounting depth. Now you can take the box off and wear it around your neck and get out to at least waist deep water without

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fear of drowning your box. My take on it anyway.

All in all a good coil for certain applications. I don't see it replacing the 11" DD for coin and relic hunters where depth can be the main objective, nor do I see it replacing the stock coil for tot lotting or homesteads, but for prospecting or hunting in high trash where you would normally use the 5" or jewelry hunting sports fields, or shallow water wading where you can now move the control box off the rod, it will make a useful accessory coil.

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Simply put, "loss characteristic" is the answer to the question, "why you found what you found where you found it?"

The particular ring was found in a elementary school playground. It was lost by a child's parent who did a particularly activity at a particular location. I know exactly what they did and why they did it. I know because I have found other rings in the same type of locations. The ring "re-validated" my understanding of the loss characteristics associated with it's loss. A pattern had developed and this ring find fit that pattern. The end result being that I found a nice peice of jewelry where I expected it to be.

TID = 32. Phase = 5/6 (wouldn't lock to one number)

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Hi Ivan,

Hard to make a detail response from work.

The short response is that the F5 is inherently more stable than the F70, has a "gold" tone in the 4 tone audio option, and can be ran stable and super hot at low gain settings. I take the F5 chain hunting in turf sod laid down over black sand minerals. I couldn't take the F70 chain hunting in same location due to the inability to get it quiet AND hot. You can't hunt chains and listen to any type of chatter.

To be honest, the F70 reminded me too much of the F75 and I didn't keep it long.

My setup for jewelry hunting in my turf sites consist of a high positive threshold (+5), gain raised to highest point where EMI is inaudible. Ground balance spot on, then I put a 2MM brass BB on the ground, and then balance out my gain until I can hear it best. Sometimes my ground minerals are so strong that I'm required to lower the gain down into the 30's. But it still runs hot even at that low of a gain setting. So in a nutshell, the F5 gives me a gold tone for rings, runs hot and stable in minerals with low gain settings for chains and open earrings, posts, pendants. And it has a very fixed and reliable ferrous/non ferrous boundary.

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F5 discc question New

Posted by: Turtleman [ [Send a Message](#) ]

Date: July 10, 2011 11:00PM

Registered: 3 years ago

Posts: 79

Hi All

In the manual for the F5 it show's that you can disc out everything including dimes, quarters and fifty cent.

With my disc turned all the way to max mind will not disc 10, 25 or 50, but if I use notch I can disc 50.

Is the manual wrong?

Also in disc mode I find the audio very weak past about 3-4 inches, am I setting it wrong. Usually try to run my sen about 70-80 higher if possible. and threshold +3-+5.

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turtleman,

The manual is wrong in regards to full disc. The highest it will disc is zinc.

Unfortunately, the multi 3 and 4 tone modes go weak pretty fast, especially the high tone. For more depth in disc mode you have to use the single or two tone modes or go to all metal.

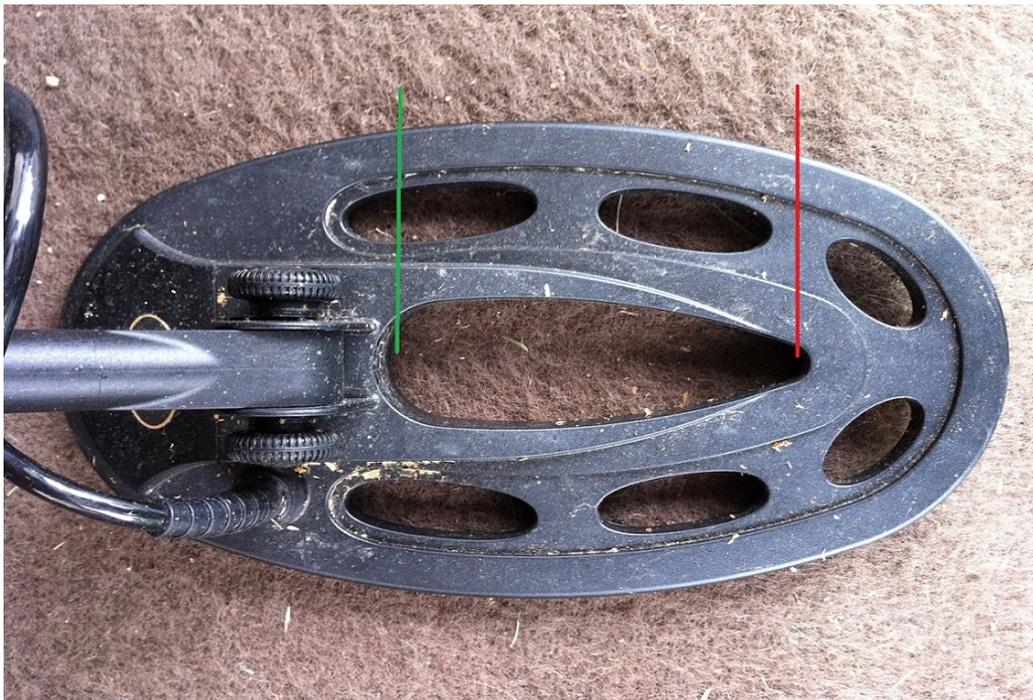
The F5 cannot compete with any of the CZ units for depth.

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Hi all, two questions. First, take a look at the attached picture. When I'm doing pinpointing, where is the target going to be strongest? Is it at the end of the green line, or at the end of the red line?

Second, I saw someone mention new software for the F5, how do I update it? Or do I have to send it back to Fisher?

Thanks all, trying to learn this thing, and am struggling something fierce.



Mezrein,

Take a golf ball and roll it around in the center hole. That's where your pinpoint will be for deeper targets when you use the pinpoint button (about an inch up from the green line on your picture). For shallow targets you can pinpoint off the toe of the coil (red line in your picture) by just wiggling the coil and pulling it back toward you without using the pinpoint feature at all.

There are no upgrades available for software. What you have in your machine when you buy it is what you get. To be honest, they are minor changes and not worth worrying about. My original version 6.1 works just as good as my 6.3. Just enjoy what you got before the buy and try demon gets on your back and starts riding you.

While you are learning and getting used to the elliptical coil, you may want to use the following two ways to pinpoint.

1st, for shallow targets, stay in Disc mode and use the toe of the coil to pinpoint. Just wiggle the coil back and forth over the target while you move the coil back toward you until you lose the target, then move slightly back. You'll get it just under the tip. Practice it a bit and you'll get good at it.

2nd. For deeper objects or if you have trouble pinpointing with the toe of the coil, Press pinpoint and pinpoint the target based upon the best audio, then release and repress the pinpoint button again, and pinpoint the target again. This is called detuning. What happens is that when you pinpoint the target, then release and press the pinpoint button again while over the target, you have detuned the target response, which has made the target response smaller. Because the target response is smaller, you can get your coil better centered over it. You might even have to actually press the coil to the ground like you were trying to mash the target to pick it up again. You can get a very tight pinpoint using the detune process. Again, practice makes you better.

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Hi Turtleman,

There are currently 3 software revisions to the F5.

Version 6.1 which is the original.

Version 6.2 which made a change to the all metal mode. Just took out some machine noise from the all metal mode.

Version 6.3 just out recently which made a change to the Disc mode. Just expanded the end range of high conductors a little more to give the large high conductors a little more room to respond.

I own a version 6.1 and a version 6.3.

I like both but use one vs the other based upon site conditions. Version 6.1/6.2 give you less high tone falsing from larger oxidized pieces of flat iron/steel or deep iron that ring up in the far right 50cent/\$1 category. Version 6.3 has the high end range expanded a little more and allows you to hear more of these type of responses. In a nut shell, version 6.3 will

report longer on very high conductors before wrapping to iron and/or will allow large iron to wrap around sooner to the high conductive range. Version 6.1 will reach a point of silence prior to achieving the wrap to iron or the wrap from iron to high conductor. All version still allow the highest category to be notched out. If there is not a lot of deep iron or tin roofing laying around I like to hunt v6.3. If I'm in areas with lots of deep or flat iron/steel then I prefer v6.1

I'm still comparing models for other changes but my opportunities to get out have been limited due to some family issues (deaths and surgeries) so I haven't been as forthcoming about the changes as may have been expected of me.

Marcomo got all the physical stuff down pat.

QuoteMarcomo : "I'm not clear about the expanded high conductor range with the 6.3 version. Since it is still 99 numbers of resolution, does that mean the resolution was decreased somewhere on the lower conductive range? Or am I totally grasping this wrong?"

No, nothing like that. Think of it more as expanding the high side. Think of it this way:

Version 6.1/6.2 operated as ...95, 96, 97, 98, 99, \_\_, 1, 2, 3, 4,.....etc

Version 6.3 operates as .....95, 96, 97, 98, 99, 99+, 99++, 1, 2, 3, 4, ....etc

Technically, you can never get down to zero (0) so zero doesn't fit in the equation and it is extremely rare to see a one (1) as you have to setup different to get below a Target id number of 2.

Press the pinpoint button when powering on the unit and you see the software version flash briefly above the text SETTING in the left corner of the control panel.

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If you are turf hunting for coins and want to include gold, just put it in the 4 tone mode and recover all the nickel tones as well as the high tone for coins.. The nickel tone includes higher end foil and lower end tabs. Most of your gold rings will fit inside that 10 number segment. If you do that, you'll find many gold rings if they are there to find, without having to dig too much trash.

If you are hunting tot lots (sand or gravel or woodchip playground areas) you recover everything.

Best to start out where you can learn to dig neat holes. Maybe sand or ships for a couple of hunts while you learn how to pinpoint and retrieve.

Use what, sensitivy around 65/70 or so and maybe a -3 or -4 threshold. Use the tone modes you like best. Retrive the solid, repeatable signals for awhile, even the iron, so that you know what it's telling you.

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Hi Bobby,

Pretty normal F5 operation in my opinion. First, when you notched out the trash ranges (foil, tabs, zinc) you also notched out where most of your EMI noise hits on the conductive

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scale. Second, the F5 also uses the ground signal to cancel out EMI noise as you sweep the coil. Your medium ground bar reading tells me that feature is in use and is also using that feature to cancel EMI noise. So between those two functions, you are going to get a pretty stable detector.

Lastly, and Bob, mentioned this, if the Threshold dial is turned too hard into the dial stop, it will also put you into a reduced operating mode, similar to the ground signal effect, and will offer a quieter operation but with reduced performance.

There is a point where the threshold setting stops giving you a depth increase and changes over to a modification of target response. Threshold settings close to 0 make fringe depth targets sound as "whispers". When the threshold is moved out toward the edges (-9 or +9) then the fringe depth targets start to sound more like faint "ticks". Since it is often difficult to get a +9 threshold setting in urban environments it is not general knowledge, and I may be the only person that hunts with a -9 threshold setting on a regular basis and aware of the differences. In fact, although I prefer the audio robustness that positive threshold setting give, at sites where my ground minerals are low enough, I like coin hunting with very low (-9 to -5) threshold settings and very high gain settings. For gold jewelry hunting I use very high (+5 or higher) threshold settings with stable gain settings.

HH

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Have you noticed that when you get an overload signal, it will quit after a second and then you can slowly move the coil away and pick up items that would normally be masked by the overload?

You will also find that you can put the F5 into 2-tone mode and walking parallel to them, drag the tip along foundations and listen for the zip sounds among the reinforcing iron and pick up targets that nobody else can.

=====

The ground numbers are only accurate when you are pumping the coil. Once you ground cancel, you can ignore them until you want to check your balance point again. To check your ground balance point, just bob the coil over the ground and check both numbers again and adjust as necessary if they are off.

In all metal mode, you should hear a threshold buzz at +1. A zero setting can give you a intermediate buzz but a +1 or +2 is usually the best settings.

A -8 or -9 setting shouldn't give you anything. If you get a buzz there, it may be a EMI burst.

Remember in All metal that it is a combination of Gain and Threshold settings that give you the most stable threshold hum.

I think you are balancing ok. Just the changing numbers you see as you sweep the coil is freaking you out.

=====

Hi Skip,

Woodchuck is correct. Those dashed lines and screaming is an overload signal. Doesn't

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necessarily mean you are over trash, just that the target is too big and/or too close to the coil for a target ID. When you get those, just raise your coil a little and recheck. I've found several nice pocket knives checking out those "Overload" signals, so don't just pass them over as trash.

When you are trying to ground balance, your initial ground balance setting may be so far off that all the ground responds as a target. Everywhere you try to bob the coil, you get a tone when the coil approaches the ground or leaves the ground. This will happen a lot if you were hunting a wood chip play ground and then move to the turf. When that happens just go ahead and pinpoint and see if you get a screaming target. If the pinpoint doesn't scream, then go ahead and ground balance in that spot, then double check it by bobbing the coil with the pinpoint activated in another spot.

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With some of the negative posts about the F5 and its depth on coin size targets, I'm going to put aside my jewelry hunting for awhile and go coin hunting, looking specifically for deep coins. I get asked about this all the time and I usually can't answer them very well because that is not what I use the F5 for, nor did I buy the F5 for that purpose.

So I will post under this thread my settings, site conditions and results. For good or for ill.

I'm not going to report depths in this post. I'm reporting on deep coin responses so that you'll know what to listen for. Then you come back and report depths.

The F5 doesn't beep on deep targets. It's not like the CZ that gives a tiny ping. It is not like the CoinStrike that gives its ghostlike beep.

No... the F5, it whispers....It sighs.....It breathes them into your ear through your headphones. EMI and ground chatter will mask them. You won't even hear them without headphones, and you'll easily walk over them if you are not paying careful attention. In the 3 and 4 tone modes, the high tone on deep high conductors is like, what?...how to describe it....a high tone whisper with no definition to it, a sound like a ghost might make if such a thing existed and tried to whistle in your ear, Like a gentle breeze that wafts by your ear for just an instant and is gone.... unsubstantial, like a sigh a deep dime long buried in the earth might make as it dreamed of its days in the hands of men and now mourned in its dark prison....

But yet as unsubstantial as that high tone is, the single and dual tone audio modes will give a definable tone on the same target, more of a beep response than you will hear with the multi-tone high tone responses that will increase potential depth by inches until it too, dissolves away into that unsubstantial whisper of an alert that will faintly caress your ears for that brief instance as the F5 tries to tell you of a secret it discovered deep in the bosom of the earth.

OK..got a little poetic there, but I wanted to describe the deep target responses so they you would know what to listen for.

Got to have a stable detector to hear them. You can't hunt "into the noise" with the F5 and hunt deep targets. The chatter will mask them. It is not a F75 where the real targets will still stand out against the chatter. You have to be stone cold stable or you'll miss them and

a high Gain setting is a must for real depth. 90+ and the threshold as close to 0 as you can get it and still have a stable detector.

This was in Discrimination mode. Most of my targets were fringe depth dimes that wafted high tone whispers that I at first thought were iron falsies until I started checking them out closer. Makes for fun detecting once you tune your ears.

Hi Bill.

Your air tests at those 50% settings are compatible with mine using the 4 tone audio mode and the stock coil. They are better in the single and dual tone audio modes.

In one aspect, the F75 and Delta are simpler machines to setup because you only have one "Sensitivity" control. You set that control to some stable setting and off you go. That single Sensitivity control has the gain and threshold settings combined by the design engineer and you get what you get whenever you set it to a particular setting.

The F5 is different, the Gain and Threshold controls have been separated so that you, the user can combine them to best hunt the site conditions and targets you are after. If you need real depth, you crank the Gain and then set the Threshold to support it. If you need it hot on small low conductors, you set your threshold high and then set your gain to support it. You also have to select the audio id mode to support your targets as well. You can't hunt deep coins with the 3 and 4 tone audio modes. You will get greater depth and better audio responses on deep targets with the 1 and 2 tone audio modes. With the 3 and 4 tone audio modes, the deeper high tones will just wash out beyond your hearing. You will get a high tone whisper that has no definition. No ping, no beep, just that high tone whisper that any instability will mask. However, the single or dual tone audio modes on that same high tone whisper will give you a very definable target tone and add inches to your depth. Add the 11" DD coil and the depth increases by several inches.

This is my setup.

If I am hunting coins at depth, I maximize my Gain then stabilize the detector with the Threshold control with the coil "in motion over the ground" and run the single or dual tone audio mode. I try to keep my Gain as high as possible with the threshold as close to 0 as the ground or EMI will let me. But I try not to go lower than a -5 threshold. I'll lower my gain before I'll drop my threshold below a -5. So some balancing has to take place, and again, I'm looking at detector stability with the coil in motion.

If I am hunting gold jewelry (my primary use of the F5) I maximize my Threshold (+5 or higher) then stabilize the detector with the Gain control settings with the coil held motionless and use the 4 tone audio mode. The joy of the F5 for gold jewelry is that the F5 with high positive threshold settings still has bite with low Gain settings.

*I've have found coins in the 6" - 10" range, but they have been far and few between. This has been with the stock coil and the 5" coil. I've found more with the 5" coil at the 6" - 10" range than I have with the stock coil.*

*My deepest coins have been quarters at the 8" - 10" depth on ball fields, and the coins are modern clad 1970's - 1980's. Also had a Caped Large Cent at the 7" mark from a field that*

*was farm land at one time, this was found with the stock coil.*

*I guess it all depends on the ground where some of these people are that seem to be having depth issues with the F5. It could also be user error, ie, settings incorrect for the ground conditions (gain too high or low along with the threshold).*

*I've found the F5 to be the best metal detector that I've owned so far, not only that, it's the only one that gives me full control of it's settings.*

*The only flaw I've come accross with the F5 is the 5" coil and silver rings, if the ring is on edge, the F5 does not see it in the silver / quarter range or above, it gives off a reading lower down the scale and at times gives an 'iron grunt' sound or no sound / reading at all.*

*Maybe you could test this Mike and see what you discover.*

---

Woodchuck,

I would disagree about the moving up when you are talking about a 305 or even a 505. Its a stretch even saying you made a lateral move. The F5 is hotter at 7.8 kHz than the 305/505 is a 19kHz. The F5 has a better ground balance point, better tones and better iron discrimination. I know all this first hand as I've owned a 305, two 50s, and three 70s.

Enjoy your minelab but don't look down your nose at the F5, claiming you "moved up" when in fact you went "slumming".

Hi Merlin,

Hope you enjoy the F5.

I gave this advice to a person who was brand new to metal detecting.

Set the unit in Dlsc mode, d4 (4 tone mode), Gain on 80, Theshold on -9, and Max out your Discrimination. Only recover repeatable high tones. All you'll be hunting is silver and copper and clad dimes/quarters/ etc. Just get use to doing that for awhile. Then when you are comfortable with both the digging and high tone targets, notch in the Nickel range and hunt that way for awhile until you learn that range of targets. Then as you feel comfortable, add in another segment, like the zinc segment. It has has a different tone and you'll be looking at a completely new range of targets.

It wont take long to learn whats good and whats bad, your recovery method will improve and you'll grow more comfortable with the unit. Then you can raise the threshold setting up to 0 and spend time on the deeper and smaller targets.

Most of all, don't be afraid to limit your audio input with the disc and/or notch settings. Keep the audio feed to your ears understandable. When the trash gets too heavy, raise your disc or notch it out so that you can still hunt the good stuff.

Maybe a few guys will post a picture of their trash next time out so you won't feel so bad about your trash ratio. As a gold jewelry hunter I dig quite a bit of alum trash. Foil and tabs, canslaw, and ring pull tails.

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Hi Towzilla,

Forget your freshly buried coin test. All that told you was that your ground has enough iron mineralization in it to hide the coin at that depth. Really. That is all it told you. That was all it told me when you posted it. I've got ground that when disturbed I will loose a dime at three inches. It is hot ground.

I think you just need to find a deeper coin with the F5 to boost your confidence. Next time you are out with your buddies and you check targets, have them pinpoint the target and mark it. Then you use your pinpoint mode and find it. Once you KNOW exactly where the coin is and you have your coil centered over it, then you can find it in your discrimination mode.

For deeper coins I recommend these settings:

Run the 2 tone audio. I assume you are using decent headphones. If not, you can forget the deeper coins. The 2 tone audio mode gives the low grunt for iron and the VCO modulated audio for non ferrous targets. You want to pay attention to the non-ferrous targets, especially the ones with short responses and weak audio strength.

Disc no higher than about 8 so you can hear when the iron is falsing.

Gain....The FE bargraph is there to tell you how to set your gain. If you have a maxed out FE bargraph, you can't run a 85 gain. In fact, if you have a maxed out FE bargraph, you really need to be in the all metal mode if you are hunting deep targets. Use that graph. If it is one or two bars, then raise the gain as high as you can. (do not peg it out, turn it only far enough to get the number change. You loose depth if you peg it out) 3 bars....you might or might not get away with higher gain settings. You'll have to figure it out. When you get 4 bars, high gain settings are going to kill your depth, drop it down to the middle range, 55 - 75. Pump your coil for FE readings. ( Don't scrub your coil on the ground with high FE readings either)

The VCO audio needs a positive threshold number to enhance the weaker audio of deeper targets. +5 is good if you can get it that high.

You need to GB spot on. You can't get a spot on GB by ground grab. You have to hear it in the all metal mode and do it manually. Check your ground balance often.

EMI may cause you to have to do a balancing act. If so, I recommend keeping a positive threshold number and a lower gain for the vco audio mode.

Another thing to be aware of is that your sweep speed has to change for deeper targets, too. The shallower targets stay in the coil's field much longer and can tolerate a faster sweep. The deeper targets require a slower sweep speed. More deliberate. Remember too, that your coil has a sweet spot. Its about the size of a golf ball and starts a inch or so in front of the coil ears. You can actually use a golf ball to find it. When you are deep target hunting, you aren't sweeping the coil. You are sweeping that sweet spot.

You really need to find one to tune yourself to it. Would probably be worth it to hunt in the

all metal mode for a bit just to find one so you can hear what they sound like and how your settings affect the audio and meter if you can't wait to go hunting with your buddies again.

Yes Nap,

Don't turn the knob until it stops and cannot be turned any further or "pegs out". Just far enough for the digital number to change.

I don't have any info on a SEF coil. I do have the 11" coil but don't use it much as I might like to because I don't like the balance. I was going to spend some time to fix my balance with a little weight behind the elbow but haven't gotten around to it yet. The coil and performance itself is nice, it just doesn't balance out well.

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Learning the F5...

Registered: 2 months

Posted by:

ago

Date: February 03, 2012 10:25PM Posts: 3

I had mentioned in a post that I had compiled bits of information and such from different posts about the F5, mainly from Mike Hillis, and saved them in a notepad file so I could quickly reference them when I needed them without having to go back and search through different posts to find what I needed. Someone asked me to send this to them, but instead I figured I may as well just post it. I hope my little bit of hunting and picking out bits of information may be of help to someone. Of course Mike is really the one to thank, i'm just trying to condense it down so it could be referenced quickly. Btw, Mike if you'd rather I not have this posted, just let me know and i'll get rid of it! 🙏 It is mostly all your information after all.

Learning the F5:

\*\*\*\*"The gain is basically the power, a magnifier of the signals that increases or decreases the strength of those signals.

The threshold controls what size signal the detector will pick up.

Anything below 0 with the threshold and the detector is restricting smaller signals from being detected to some degree.

At 0 the threshold is totally open, above 0 threshold settings will increase the volume of all signals.

Mike H. made an analogy a while back that stuck with me. The threshold is the door that controls what signals get in. At 0 the door is wide open. Below 0 the door is partly shut.

Above 0 threshold does not open the door more, it merely increases the volume.

A higher threshold is usually preferred when you're looking for very small targets, small gold for instance.

Stability aside go with what you can tolerate re: the amount of valid signals coming through which will vary depending on the site conditions (trash ect.). In areas with a lot of small trash you can go with a lower threshold to reduce signals from the tiny stuff and then perhaps up the gain a bit. Of course you could just notch out the foil range for coin hunting but many prefer to hear it all.

Lower threshold settings should not cause much if any loss/depth on coin sized targets however the signal will be audibly weaker."

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\*\*\*\*Some help with your TID....pinpoint the target inside the golf ball size opening in front of the lower rod, then sweep for id. When you look at your TID, also look at the confidence graph. The more confidence bars lit up, the stronger and better the read. Disregard the lower graph readings and just keep the higher graph readings. . If you sweep 4 times and get a 20/4bar, 33/3bar, a 22/4bar, and a 70/2bar, keep the 4 bar readings and ignore the others. This scenario would give you a 20 and 22 reading.....Your intial pinpoint will tell you what to expect to see, confidence bar-wise.

\*\*\*\*The Phase number changes every second. Ignore it unless you are pumping your coil. When you want to check your ground balance, just pump the coil over clean ground and see if the phase number and ground numbers are still the same or close to the same. If you see the numbers have become more than 3 or 4 numbers apart, reground balance by pressing the phase lock button and pumping the coil over the ground again. Then ignore the Phase number until you are ready to check your balance again.

\*\*\*\*Set your Gain and Threshold so that your detector is stable. You only want it to beep when you are over a metal target. If you have it set to hot you will get a lot of false signals. Set your Gain to somewhere between 65 and 85, and then raise the Threshold up until it starts to chatter, then back it off until it stops chattering. Now it will only beep when you are over or around metal.

\*\*\*\*Set your discrimination low (around 8 or 9) unless there are so many targets that you can't focus. In that case, raise the discrimination until you can handle (read "process") the audio. Use a tone id option that you are comfortable with.

\*\*\*\*Only recover the repeatable signals. They repeat on both left/right sweeps over the target.

\*\*\*\*You never know about the weak signals. They could be fringe depth targets or they could be micro trash or they could be oxidized iron that got charged up enough to spike a reading. Raising the Gain like you are doing is good, if you investigate them you want to try to get the best signal response you can. You can also try raising the threshold closer to +9 to get a more definitive (sharper) audio response. Typically, if it doesn't pinpoint, or can't pinpoint in one specific location it is trash.

Speaking of fringe depth targets (objects at the limit of the detectors ability to detect them with the current settings), Threshold settings play a big part of how they will sound. Theshold settings closer to 0 will give a "whisper" type response. Threshold settings closer to the ends, either -9 or +9 will give more "ping" type responses. I bring this up so you know what type of audio to expect for the deep objects.

\*\*\*\*The can slaw is jumping up into the high numbers because your not centered over the target. To get the most accurate TID, pinpoint it to the center of your coil and resweep. The numbers will drop back down where they belong.

\*\*\*\* Normal basic jewelry settings are:'

Threshold - a high positive setting, all the time. I like +5.

Gain - raised until it starts to chatter, then reduced until stable. Gound minerals determine if I do this with the coil held still or with the coil in motion.

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Tones - most of the time I use the 4 tone mode but it really depends on what I'm focused on hunting.

Discrimination - I usually run around 7 or 8. Unless I'm focused into a particular range of targets in which case I'll use the notches to limit the audio as much as possible to just that range.

\*\*\*\*There is a point where the threshold setting stops giving you a depth increase and changes over to a modification of target response. Threshold settings close to 0 make fringe depth targets sound as "whispers". When the threshold is moved out toward the edges (-9 or +9) then the fringe depth targets start to sound more like faint "ticks". Since it is often difficult to get a +9 threshold setting in urban environments it is not general knowledge, and I may be the only person that hunts with a -9 threshold setting on a regular basis and aware of the differences. In fact, although I prefer the audio robustness that positive threshold settings give, at sites where my ground minerals are low enough, I like coin hunting with very low (-9 to -5) threshold settings and very high gain settings. For gold jewelry hunting I use very high (+5 or higher) threshold settings with stable gain settings.

\*\*\*\*You will also find that you can put the F5 into 2-tone mode and walking parallel to them, drag the tip along foundations and listen for the zip sounds among the reinforcing iron and pick up targets that nobody else can.

\*\*\*\*if you are getting chatter with the coil held still, that is EMI. Drop your threshold another number.

\*\*\*\*if you are getting chatter with the coil in motion, that is ground noise, trash and such. Verify your ground balance, and if the trash is too much, notch some of it out.

Pinpointing:

\*\*\*\*1st, for shallow targets, stay in Disc mode and use the toe of the coil to pinpoint. Just wiggle the coil back and forth over the target while you move the coil back toward you until you lose the target, then move slightly back. You'll get it just under the tip. Practice it a bit and you'll get good at.

\*\*\*\*2nd. For deeper objects or if you have trouble pinpointing with the toe of the coil, Press pinpoint and pinpoint the target based upon the best audio, then release and repress the pinpoint button again, and pinpoint the target again. This is called detuning. What happens is that when you pinpoint the target, then release and press the pinpoint button again while over the target, you have detuned the target response, which has made the target response smaller. Because the target response is smaller, you can get your coil better centered over it. You might even have to actually press the coil to the ground like you were trying to mash the target to pick it up again. You can get a very tight pinpoint using the detune process. Again, practice makes you better.

\*\*\*\*I see posts about jumpy target IDs. The coil design will give jumpy IDs for the deeper objects unless you get it pinpointed to the sweet spot of the coil. Use a golf ball to find the sweet spot on the coil by placing it in on the inner loop. Roll it a bit and then let it come to rest. That is the sweet spot on the coil. Mark it, memorize it, something. That golf ball size area is the coil's most sensitive spot. When you get jumpy targets, pinpoint, detune and

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pinpoint and detune again if needed to get the target centered in that spot. Then sweep it. Many times the id will stabilize enough for better decisions. Watch the confidence bar. Works well on iron falses as well.

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That is what the 6.2 software update fixes. The inconsistent threshold in the all metal mode.

The issue is that version 6.1, when in the all metal mode, with 0 and/or some degree of positive threshold settings, the machine will pickup internal circuit noise. This isn't EMI. EMI is different. EMI will vary based upon site conditions. This doesn't vary at all and is fairly light. This would be in addition to any EMI. Fisher will only update the software on repair jobs. Its not a big deal and many won't even notice it much unless they look for it or are prospecting with the F5.

I have the 6.1 version. In the all metal mode I hear the circuit noise (inconsistent threshold tone) at some settings. Hasn't been a real bother to me but to some who are used to detectors that have rock steady thresholds (like the Whites units) it may be hard to get used to. Particularly for the "run it wide open regardless of site condition" crowd.

I listen to my detector. If I want a 0 threshold setting and the F5 tells me that, at this site, a 35 gain setting is all I'm going to get with a 0 threshold setting, guess what, I set my gain at 35 and start swinging. If the low gain setting freaks me out, I raise the gain and lower the threshold. The F5 has many gain/threshold combinations to achieve the same result, but bottom line, the site conditions, not you, determine what kind of performance you are going to get out the machine. It does no good to crank the thing to max and 1) not hear good targets over the EMI responses, and 2) have the ground hide targets because you are overdriving the gain.

Regarding maxed out threshold settings, yes, if you turn the threshold pass the 9 setting ( you turn the knob to the stop) you enter into a area of performance loss. I don't know if it was done on purpose for the the newbies or if it is just a side effect of the type of pot being used 🤔. Knocks close to 3" off your max depth if I remember correctly.

The best thing about the F5 is that the separate gain and threshold settings allow for multiple combinations to achieve the same result. All these things are discovered by bench testing and validated in the ground.

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Bobby,

Silver rings are the easiest to find. Just select the 3 tone mode and only recover the high tones and you will find the silver rings if you happen to pass your coil over them. There is very little trash in this range of targets and the hunting is pleasant and a silver ring is always fun to find.

Gold is a bit different. The little girls and women's gold rings are mostly foil range targets. The men's gold rings are larger and reside throughout the tab range. Lot of trash in those two ranges. If the trash content is not too high, the F5 has a unique nickel tone in the 4 tone mode that I listen for. Anything that causes that tone to sing out stops me in my tracks and gets recovered. Doesn't have to be a solid nickel tone either, if it even bounces into the nickel tone I'll recover it. I have a whopper of a platinum ring that reads a solid nickel tone

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I found in park location site type I trended.

My best advice is make it fun. Don't dig so much trash that you wear out and wear down while you are learning. There are not really any short cuts. You have to learn to read the sites yourself. The fastest way to do that is to hunt the clad and if you are lucky, perhaps you'll also pick up a gold ring while you are at it. The nickel tone can increase your luck in the places where the trash lets you use it. But your first ring find will put you on the path to others, guaranteed, if you ask that question.

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Hi Bob,

I looked real hard at the new Gold Bug and had originally planned on buying one but I grew tired of waiting and have moved on.

The F5 may not hit the tiniest of chains but it still does a very good job on small targets; BBs, small silver and gold clasps that were broken off tiny chains, tiny trash targets, 5mm ball earrings, earring backs, etc.

6-7 inches on small lead with the 5" DD is very good. What are your ground FE readings there?

=====

i hunt with the gain at 60 and thresh at +2 .....and 4 tones ...and have no bars showing on the scale to the right .....what setting will get me deeper .....

If your FE304 graph says you can, and it sounds like yours does, you can increase the gain.

In disc mode you would use single or dual tone mode, raise your gain, and see how close to 0 you can keep your threshold.

The next step is to use the all metal mode.

When that isn't enough, then you switch coils.

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Hi Jimmyboy,

Think of Gain as a magnifier. The higher you raise it, the more it magnifies target signals, making them appear larger.

The Threshold is split into two features:

From settings of -9 to 0, think of the threshold control as a door. The door is shut at -9 and the door is fully open at 0.

From settings of +1 to +9, think of the threshold control as a volume control that makes all the signals that got into the wide open door louder and easier to hear.

That's kind of an over-simplified description of the controls but pretty accurate nonetheless. The combination of the three features give the user a lot of control over the detector. Add the 4 different tone modes to it and the F5 has a lot going on with the audio.

When setting up the detector, think, "how big do I want the signal to be (GAIN) and, how large of a signal do I want coming through the door (THRESHOLD)" and if you have the door

wide open (threshold at 0), then how loud do I want the tiniest signals (threshold above 0)

Then of course, the actual site conditions laugh at you and say, "sorry buddy, but you're going to have to make the signals smaller or close the door a little." And then the two of you work out the best compromise for the targets you are after

Yep... pretty much normal. Especially at 0 threshold settings. A zero setting is wide open. Lets everything in. A gain setting of 70 made everything coming in bigger. Kind of like opening the barn door wide open so the cows can come in and also magnifyng the flies that come in with them to the size of pigs

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Got to crawl before you walk and walk before you run, right?

So try this for a while.

Set the unit in Disc mode, d4 (4 tone mode), Gain on 80, Theshold on -9, and Max out your Discrimination. Only recover repeatable high tones. All you'll be hunting is silver and copper and clad dimes/quarters/ etc. Just get use to doing that for awhile. Your treasure to trash ratio will immediately improve. Then when you are comfortable with both the digging and high tone targets, notch in the Nickel range and hunt that way for awhile until you learn that range of targets. Then as you feel comfortable, add in another segment, like the zinc segment. It has has a different tone and you'll be looking at a completely new range of targets.

It wont take long to learn whats good and whats bad, your recovery method will improve and you'll grow more comfortable with the unit. Then you can raise the threshold setting up to 0 and spend time on the deeper and smaller targets.

Most of all, don't be afraid to limit your audio input with the disc and/or notch settings. Keep the audio feed to your ears understandable. When the trash gets too heavy, raise your disc or notch it out so that you can still hunt the good stuff.

Maybe a few guys will post a picture of their trash next time out so you won't feel so bad about your trash ratio. As a gold jewelry hunting I dig quite a bit of alum trash. Foil and tabs, canslaw, and ring pull tails.

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Hi Miles

Have you used a metal detector before?

The deep grunt tones will be iron objects, usually heavily oxidized. Depending on where you have your discrimination set at, these will either repeat or, as you are discovering, will hit once and then go quiet as the discriminator kicks in and silences them.

Regarding the 30 + signal...if you have a good clean, repeatable audio, you had a good target that you lost while trying to recover it. 😊 You may want to get a electronic pinpointer to help recover targets. You can get a cheap one if needed. I used a \$20 Little Wizzard II for a couple of years before I upgraded to something different. Remember that with postive threshold numbers, the F5 will pickup very small targets that could be hard to locate if you are expecting to see a nickel or tab, and in reality are chasing a tiny rivet.

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If it was just a non-repeatable chirp, that would most likely be an iron false, or, if your settings are too high for the site, EMI.

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I don't live near any beaches but I like to hunt jewelry in turf, sand and the chips. The F5 has been the best jewelry hunter I have ever used. It has the sensitivity needed for hunting small low conductors, great ferrous/non ferrous discrimination, and I really like it's ground handling ability. The feature set and controls are just right for me.

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I have tried some higher freq units for micro jewelry hunting, like the GoldStrike, the Xterra 70 with the HF coil, the DFX, Tesoro units, but the F5 with the high positive threshold settings and the 5" DD coil will find the same stuff even in the discrimination mode. Its wild. I can hunt bb and smaller size targets all day long with the stock coil, but the 5" coil excels. A chain hunter extraordinaire.

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Don't tell my wife but I could probably be happy with the F5 as my only unit. Especially if I had a Cleansweep or Bigfoot type coil for it. Those type of coils are just so much more efficient at ground coverage. But since I don't, yet, I'll always have to keep a unit with that type of coil on it. Yesterday it was a Golden/Cleansweep combo. Today its another DFX/Bigfoot combo.

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I haven't posted much about the F5 lately as I've been putting in time with the Omega. Thats what it has felt like too, putting in time, as I'd rather be hunting with the F5.

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What differences can I expect with the 11" DD coil over the stock coil on a F5?

You will see increased target separation and increased ground coverage. If your ground is mellow enough you will also see a little more depth, but the main characteristics are separation and ground coverage. It has its place but I don't think it is a coil that you replace the stock coil with. I prefer the stock coil and use the 11" in places where I can use it's specific characteristics the best.

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F5 threshold

David,

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I assume you are in all metal mode.

The threshold and gain controls work together. Set your threshold where you want it and then adjust the gain to where the threshold hum is steady. You may not be able to turn the gain up very high. I turn my gain up to about 30 or 35 with a nice steady threshold hum at +1 +2. If you want high gain settings in all metal you may have to run the threshold at 0 or slightly into the negative numbers.

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What are you going to be hunting for, J? I do well in my ground with a disc setting of 8, 4 tone mode, gain anywhere from 50 to 55 and threshold at a +5. Hunting sports fields, parks and schools where the targets I'm after are in the top 6" of the ground.

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Hey Marcomo, I don't know about the professor stuff but I would have liked being marooned with MaryAnn I don't know if its the optimum setting or not but I run my disc mostly on 8 in the 4 tone audio mode. It cuts out a lot of the tiny stuff but still lets me hear the normal nails, hairpins, chains, and other junk and tell iron false from partially masked. I believe, if I recall correctly,

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My ground is probably different than most. My FE304 graph is nearly always at a full 4 bars and my phase readings are most often in the high seventies, like 78, 79 and the occasional 80. The fill dirt we bring in to grow grass on depends on how deep I get stable id numbers. When I get a deeper signal with jumpy numbers I'll make several sweeps looking to see what numbers will display with the higher bar readings. If I can see some consistency in the higher bar numbers, then I'll recover it cause it will be something worthwhile more often than not. Other wise I'll pass it by. Falses will waste tons of your time and you'll have to teach yourself to let them be. We all had to learn what good targets sound like and the quicker you learn the difference the less time you'll waste on them.

I don't beach hunt very often but I hunt turf for jewelry. Remember threshold is a two fold setting. -9 to 0 is trigger point settings. +1 to +9 is audio control settings. I like setting my Threshold at a +5 due to what it does to the audio. Then I set the Gain to what ever setting the site will let me be stable at. This is one of the reasons I like the F5 so much. I can't get this type of audio control on other units.

Don't be afraid to use your disc and notch settings to help you focus on good target ranges. The more focused you are the more ground you can cover. The more ground covered equates to more good targets in your pouch.

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Hi Steve,

I hope you will enjoy your F5 as much as I enjoy mine. I can't imaging not having one and I've rebuilt my whole detector arsenal around it.

A susgestion for hunting your folks house, you could use the 2 tone mode and notch out the foil, nickel, tab, and 50 cent segments. That will leave you with a low tone for the iron and the higher VCO tone for the rest. That will cut out a bunch of trash and allow you to focus on finding good targets while you are learning how it works. Set your threshold on 0 and raise your sensitivity until it starts to chatter in the air. It should be quiet when sweeping the ground. Anything that isn't the Low tone should be a non-ferrous target at this setting. The VCO tone will tell you how deep the item is by how it sounds.

Use a 1 second sweep (onethousand-one) for a 4 feet sweep pattern.

Share your ground phase and FE304 graph reading.

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Hi Kos,

I don't know which is worse, very wet ground or very dry ground 🤔

Very wet ground just enhances the conductive properties of everything and it can get really noisy if there are many targets close together. Considering the F5 will pick up BB's, small foil bits as well as the normal larger trash items like tabs, crown caps and all that other metallic junk that winds up on the ground, plus add in any EMI floating through the ether around you and it can get a bit crazy at times.

Just remember that the site conditions determine how hot you can set the machine. You basically have to ignore how anyone else can set their detector for their site and just focus on how best to set up for your location. Sometimes you can hunt with high settings, sometimes you can only hunt with low settings. The site conditions always have the last word.

First thing is to determine if its EMI or ground noise causing your problems. Hold your detector up in the air. Are you getting chirps and jumping numbers on your display? If so, thats EMI and you need to turn your Gain or Threshold levels down. Once you get it stable in the air, then sweep it over the ground. Now all that noise and jumping number are ground related. Here you can do several things. One is that now you can set your disc or notch to eliminate some of that noise and numbers. Raising the disc to the top of foil will help a lot, notching out tabs will help alot, and if you have a lot of large rusty iron like the bolt you mentioned, notching out the 50c segment will help a lot. The key to happiness is to limit the audio to a comfortable level your brain can process. As you get more accustomed to the detector you can let in more objects.

Key thing about the Gain and Threshold controls. The Gain makes the signals bigger or smaller. Like a . vs a 0. But remember it affects all signals, good and bad. The Threshold control does two things. From -9 to 0, it raises or lowers a internal trigger point or threshold. Turning the Threshold down to -9 raises the trigger point so that only signals of a certain strength can be heard. Raising the threshold towards a 0 setting lowers the trigger point, making it possible to hear the weakest of signals. Another words, the threshold settings from -9 to 0 are a form of signal strength discrimination. Lower settings toward -9 require a stronger signal in order to be heard, higher settings toward 0 require a weaker signal strength to be heard. Threshold settings from +1 to +9 enhance the volume of the signals. Another words it makes weak signals louder.

So at your setting of 50 and +1. You have multiple the signal strength of all targets relative to the 50 gain setting, have lowered the threshold trigger point to 0 so that even the weakest signals can be heard, plus increased their audio loudness with the +1, and doing it in really wet ground which in itself is enhancing the signals. Add in the actual ground content and yep, it could be noisy.

That knowledge should help you figure out the right settings for your different ground conditions.

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F5 discc question New

Posted by: Turtleman [ [Send a Message](#) ]

Date: July 10, 2011 11:00PM

Registered: 3 years ago

Posts: 79

Hi All

In the manual for the F5 it show's that you can disc out everything including dimes, quarters and fifty cent.

With my disc turned all the way to max mind will not disc 10, 25 or 50, but if I use notch I can disc 50.

Is the manual wrong?

Also in disc mode I find the audio very weak past about 3-4 inches, am I setting it wrong. Usually try to run my sen about 70-80 higher if possible. and threshold +3-+5.

\*\*\*\*\*

turtleman,

The manual is wrong in regards to full disc. The highest it will disc is zinc.

Unfortunatly, the multi 3 and 4 tone modes go weak pretty fast, especially the high tone. For more depth in disc mode you have to use the single or two tone modes or go to all metal.

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The F5 Gain and Threshold are truly separated. So they do different things. Gain is an amplifier with 20 steps. Threshold is a signal gate with 10 steps (-9 to 0)

Regardless of Gain setting, a Threshold setting of 0 is a wide open detector. You control signal amplification with the Gain setting, You control the signal gate (how large a signal needs to be to be reported) with the Threshold. These two controls operated independantly of each other allow a lot of control over site conditions.

The Threshold has another setting range, +1 to +9 that amplifies the audio of the tiny signals let in by the 0 threshold setting. Actually all the signals are affected. The audio is more 'robust' with positive threshold settings. I find this additional audio robustness of positive Threshold settings rather addicting so I always try to run with a positive Threshold setting. Just my personal preference.

There is another Threshold setting I call ++9. It is easy to find. You turn your Gain to Max. All the way to the dial stop. Then turn your Threshold to +9. The F5 should be chattering like crazy. Then take your threshold control, rotate it counter clockwise a quarter of a turn or so, then turn it clockwise just a tiny bit hard into the dial stop (the place where the dial stops moving) If you did it right, your chattering will stop or if not stopped completely, it will greatly diminish. If it didn't, try again. You can tell when you get into the ++9 setting because the detector will go stable or at least quit chattering. Mine always goes stable.

When you are in the ++9 Threshold setting, you get the benefits of Max Gain, the benefits of the positive Threshold audio settings, and the benefits of a stable detector. But you loose the Threshold gate setting of 0. It behaves more like a -2.

That is your coin setting you want to use unless you have a lot of surface trash and the Max Gain setting makes the coil foot print to large. If you need to reduce your coil foot print due to trash, or what ever, then take it out of ++9 and set up with more conservative Gain settings.

When hunting tiny targets, the tiny target are shallow. You don't want to mask the tiny targets with deeper trash targets so you use lower Gain settings and very high positive threshold settings. The low Gain settings manage your coil footprint, and the amplification of the underlying trash objects. The

very high, positive threshold settings open the signal gate wide open to all the tiny signals, and add the audio amplification you want for those.

There is still a frequency limitation to how small a signal you can detect, but you would be amazed at how small you can go in target size with a small coil and high threshold settings. The F5 may not pick up the really fine chain links, but it will pick up and respond to the round links of the clasp and the clasp itself. Even the stock coil operates well for small gold this way.

Last thing before I have to run off. The F5 uses the ground signal to help mitigate EMI noise. Don't ask me how cause I don't know how, but it does. You can set up stable with the coil held still, or if your ground has any mineral content, you can setup with higher Gain and threshold settings with the coil in motion. A motion setup will give you stable operation while the coil is in motion but will chatter when the coil is held still or layed down when retrieving a target.

Hope that helps.

HH

Mike