

Makro Racer 2 Field Test

By

Bill Paxton



VLF (for “very low frequency”) technology was invented way back in 1974. It was a genuine breakthrough in the field of metal detecting. And you might be surprised to know that it is still the backbone of metal detecting technology today in 2017.

There have been many improvements to metal detectors over that forty plus year span, far too numerous to mention. However, for the better part of the last decade, it appeared that just about everything that could be done with a VLF metal detector in terms of enhancing performance had been done. There have been nice software driven changes, new user features, search coil changes, the list goes on, but actual performance of VLF metal detectors had pretty much plateaued.

Now there isn't anything wrong with that, mind you. If you are new to the hobby there are plenty of wonderful choices, but if you are a veteran, it's a bit of a bummer to have no new machine to aspire to own.

That was my mindset when I was provided a Makro Racer 2 to field test. I read the specs on the detector, liked the features quite a bit as well as the value, but frankly didn't see where this detector was going to be a game changer for me.

And I was dead wrong.

Makro took a look at VLF metal detectors and focused on one particular area that every other manufacturer had accepted as maxed out. And they did something amazing with it. So much so that I will tell you right now, I believe that the Makro Racer 2 is a sleeper, a metal detector that in the right hands will open up performance in a way no other VLF metal detector can.

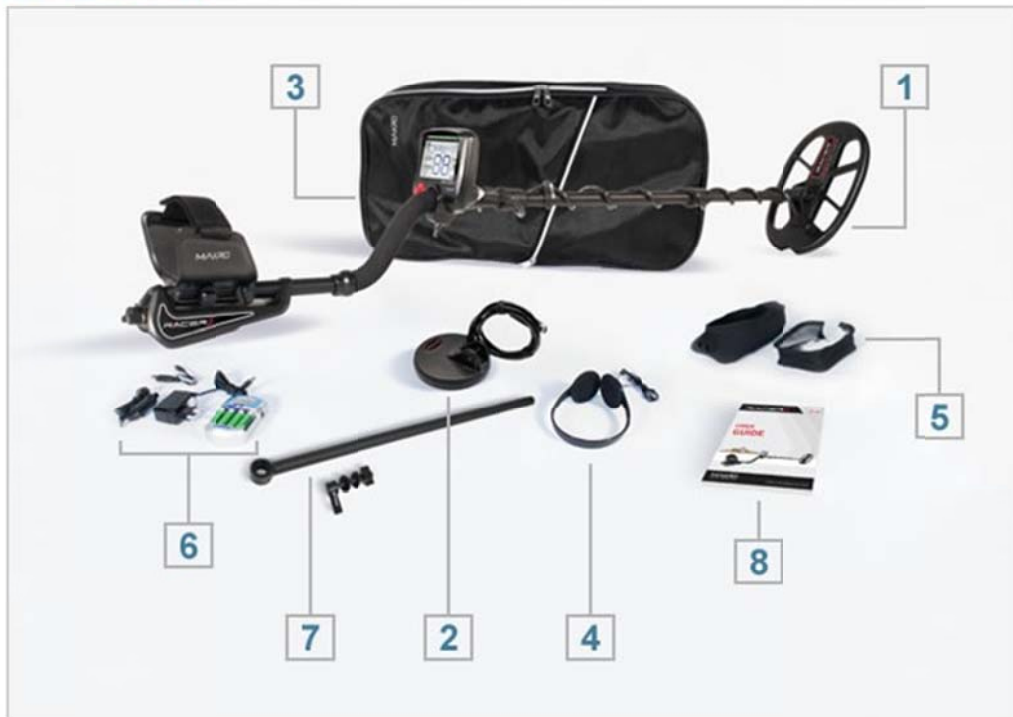
What is that area? I'll get to that in just a minute. But first, let me introduce you to the Makro Racer 2. It is VLF metal detector that operates at 14 kHz, powered by four AA batteries. The Racer 2 sports top-of-the-line features:

- Five search modes: All Metal/Two Tone/Three Tone/Beach/Deep.
- Iron audio
- Tone break
- Notch filter
- Ground balance, auto/tracking/manual
- Pinpointing
- Vibration mode
- Flashlight
- Stock 11" X 7" DD search coil

All of this comes in at three pounds, balanced in such a way that the detector literally floats in your hand.

Makro, like its sister company Nokta, makes value a top priority when it comes to selling metal detectors. The Racer 2 is no exception. I was provided the Pro Package for this field test which includes the following for a suggested retail price of \$949.00:

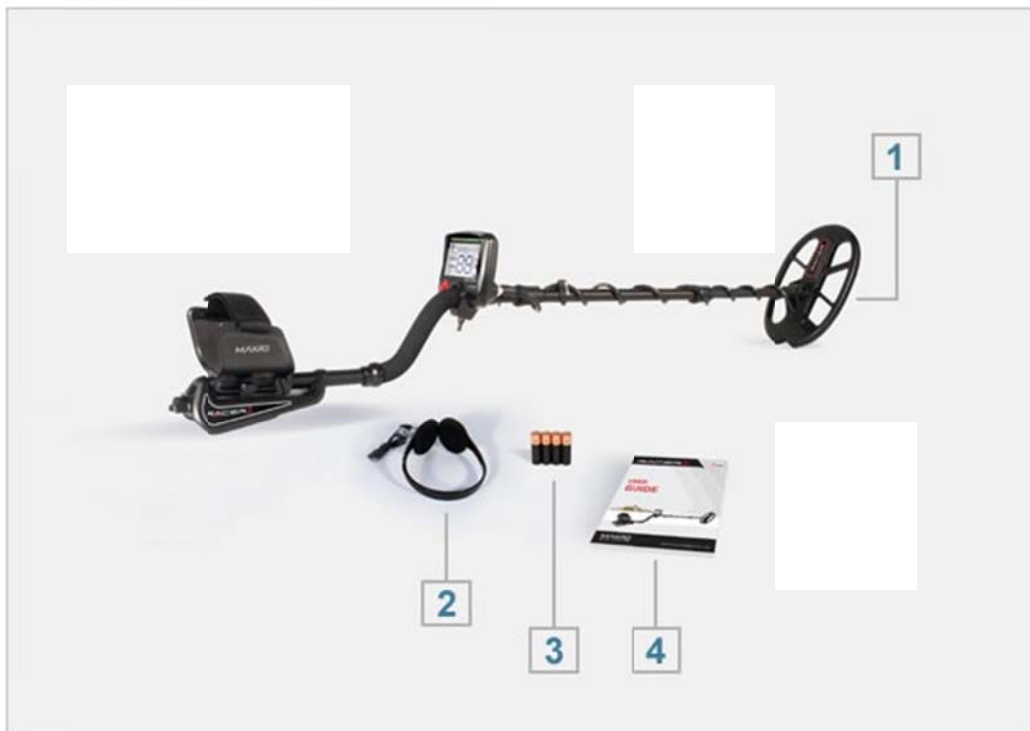
CONTENTS (PRO)



- 1 - RC29V DD Search Coil 28.5 cm x 18 cm (11"x7") & Search Coil Cover
- 2 - RC13E DD Search Coil 13 cm (5") & Search Coil Cover
- 3 - Carrying Bag
- 4 - Headphones
- 5 - Rain Covers
- 6 - AC & Car Charger - 4 x AA Rechargeable Batteries
- 7 - Extra Lower Shaft
- 8 - User Manual & Warranty Certificate

The Standard Package also offers an excellent value at a suggested retail of \$749.00.

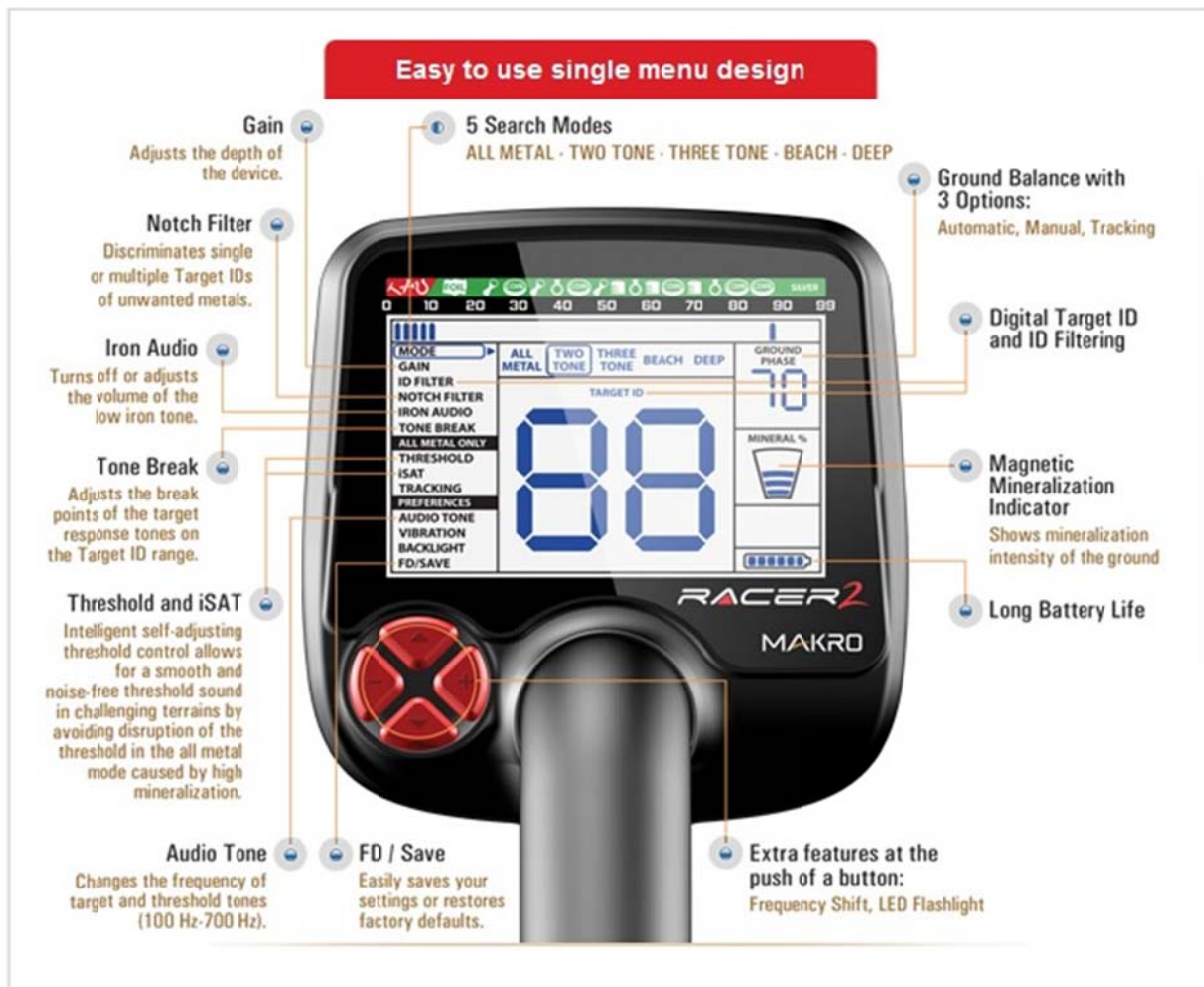
CONTENTS (STD)



- 1 - RC29V DD Search Coil 28.5 cm x 18 cm (11"x7") & Search Coil Cover
- 2 - Headphones
- 3 - 4 x Alkaline Battery
- 4 - User Manual & Warranty Certificate

Simply put, you get everything you need to start hunting immediately in any environment right out of the box with both packages.

Now let's get to that "special area" of the Makro Racer 2 that I mentioned earlier. The one that I believe makes the Racer 2 a true sleeper machine. Here is a picture of that special area:



It is the Racer 2 display screen. Note the red bar at the top of the photo and pay particular attention to what it says: “Easy to use **single menu** design.”

You read it right. **Single menu** design. What does that mean? It means that every setting, every adjustment, every reading is accessible, adjustable and visible via the Racer 2 display screen.

No longer will a metal detectorist have to bring along the owner’s manual so he or she can navigate through a complex menu system to make a change. How many times have you been out in the field, or even at home for that matter, and you can’t figure out how to get to setting to change it on your machine? I swear, sometimes I feel like I need to have a metal detector GPS when I try this on my other detectors. And to be honest, sometimes I get so fed up I just leave the setting as it is.

Makro addressed this frustration brilliantly with the display screen on the Racer 2. Using the four red arrows you simply toggle through the display to change any setting or

mode you wish. Plus you have ground monitoring, depth, target ID and battery life visible as well.

Amazing stuff, wouldn't you agree? It gets even better. While being able to make adjustments or changes on one screen is great when setting up the Racer 2 for hunting, the true power of the single menu design is the ability to use it when hunting. Let's say you are out in the field and you want to quickly switch modes in reaction to a change in hunting conditions. You can do it instantly without checking your notes, rummaging through your finds bag for the owner's manual or fumbling through a series of non-intuitive menus. Toggle, select, change, hunt. That is all there is to it. The same thing goes for any adjustment on the Racer 2. Bump the gain up/down? Toggle, select, change, hunt. Adjust a notch? Toggle, select, change, hunt. During my field testing of the Racer 2 this sequence of toggle, select, change, hunt became second nature to me very quickly. It also made me not want to go back to any of my other metal detectors because it made my hunting not only more productive but also more enjoyable. Try a Racer 2 yourself and I have every confidence you will feel the same way after just a few hours of hunting.

In The Field

Over the course of the past several months I have had the opportunity to use the Racer 2 in a wide variety of hunting environments. It performed very well at land-based sites like parks and home sites and offered acceptable performance at salt water beaches here in Southern California.

Ground balancing the Racer 2, regardless of environment is very easy. You simply push the trigger switch on the handle forward and bob the head a few times until you hear a beep. Then you hunt. The procedure is so quick that I found myself ground balancing on the fly often just to ensure optimal hunting.

Inland the Racer 2 produced excellent results. It has very sharp target separation with both the 5" and 9.5" coils, and depth was quite good with coins recovered at depths up to 9". Target ID, as is typical with VLF detectors, tends to vanish after 6" or so but audio remains strong. Pinpointing is easy and accurate. Just pull the trigger switch on the handle toward you and center the target. Note: my Racer 2 came with the depth measure set for "cm" as opposed to inches, no doubt due to its popularity in Europe. Changing to inches is a snap: with the detector off, press and hold the "+" and "-": simultaneously, then turn it on. "US" is displayed and you now have depth in inches.

Audio response is very nuanced on the Racer 2. I personally liked three tone discriminate and after many hours developed an ear for tabs versus nickels and also bottlecaps versus quarters. Do know that the Racer 2 is a "talkative" detector that will pop and spark at you due to its 14kHz operating frequency. In other words it is silent

search in that there is no threshold tone in discriminate but you will hear some chatter as you hunt. What I liked a lot about the Racer 2 is that when you get a good target there is no doubt about it, the hit is always solid and repeatable even at depth.



A coin sniffed out with the 5" coil



Some nice finds with the stock coil in a trashy, heavily hunted park

One important note: if for any reason you are using the Racer 2 and it seems unduly noisy to the point of falsing, AND you are using the rain cover on the control box, check

the connection of the coil to the control box. I was having this problem and discovered that I had not completely pushed the control box connector to the coil all of the way through the rain cover. The rain cover is a snug fit at this point and it had caught up in the threads of the control box connector, causing the coil side connection to not be fully secure. Once I discovered the problem, I made sure to have the opening where the coil connector fits through the rain cover snug against the control box. The coil connector screwed on securely and the falsing went away.

On saltwater beaches I found the Racer 2 with the stock coil to work pretty much like most VLF detectors. In other words, don't expect the depth of a pulse or multi-frequency machine. In the wet sand it was decent but I had to back off of the gain to about 50 in order to get the detector to operate smoothly. One trick I found that helped was to hunt parallel to the water's edge as opposed to perpendicular (walking away from the water toward the dry sand, then back toward the water again). When using this technique I was able to run at a gain of 70 in the moderately wet sand. I found the characteristics of the large 15.5" X 13" coil that Makro provided me with to be similar to the stock coil with one in major difference. Coverage area. As those of you know who hunt beaches, coverage area is a huge factor when hunting beaches. I loved the fact that I could cover large expanses of the beaches I hunted with the 15.5' X 13" coil, enhancing my chances of finding good targets. On the dry sand, the Racer 2 is a wolf in sheep's clothing. I could run the gain at 99 with the stock and large coils with no problem. To sum up, if you are a dedicated saltwater beach hunter than any VLF metal detector is probably not the choice for you. But for the occasional saltwater beach hunter, or dedicated dry sander, a Racer 2 will perform just fine for you.

One last aspect of the 15.5" X 13" coil that bears mention: it only weighs an astonishing 1 lb. 6.9 oz.! After years of swinging large coils at the beach I had essentially given up using them do to their excessive weight and often times poor balance. The 15.5" X 13" coil has changed my thinking. Featherweight and well-balanced, I was able to hunt with it at the beach for several 3+ hour hunts with none of the wrist/shoulder/back fatigue issues that I have had in the past with other large profile coils.



Hunting with the large coil at Santa Monica Beach

Miscellaneous comments and observations

- Battery life on the Racer 2 is excellent with both the rechargeables and standard alkalines.
- Balance and weight of the detector is on par with the best I have ever used. I just turned 60 in January and despite my attempts to stay fit, fatigue does become a factor at some point. The featherweight design and excellent balance of the Racer 2 allowed me to hunt for many hours without having to take breaks or call it a day.

- The detector has several unique features that I liked such as target vibration, a built-in flashlight, and an excellent backlight for the display.
- The only feature of the Racer 2 that I did not care for was the fact that there was not a detector stand. I am not a big fan of laying a metal detector down on the ground with the control box touching the surface, even if it has a rain cover. The folks at Makro noticed this and now offer a very cool fold out detector stand for those of us who prefer them. It works just like it should.



Universal stand folded up



Universal stand open

Summary

The Makro Racer 2 in either the standard or pro packages presents an exceptional value in a metal detector. Offering excellent performance and a multitude of features found on much more expensive machines, the Racer 2 would be an excellent detector for either the novice or experienced hunter. Thanks to its innovative single menu display, the Racer 2 eliminates the cumbersome and all too familiar task of confusing menu navigation from the metal detecting experience and allows for maximum detecting enjoyment AND success. Having the ability to instantly set up and adjust the detector in any way a user wishes, especially while hunting, both reduces the learning curve and increases the operator's ability to maximize the Racer 2's treasure hunting potential. You may read more about it at <http://www.makrodetector.com/racer-2-metal-detector.html>