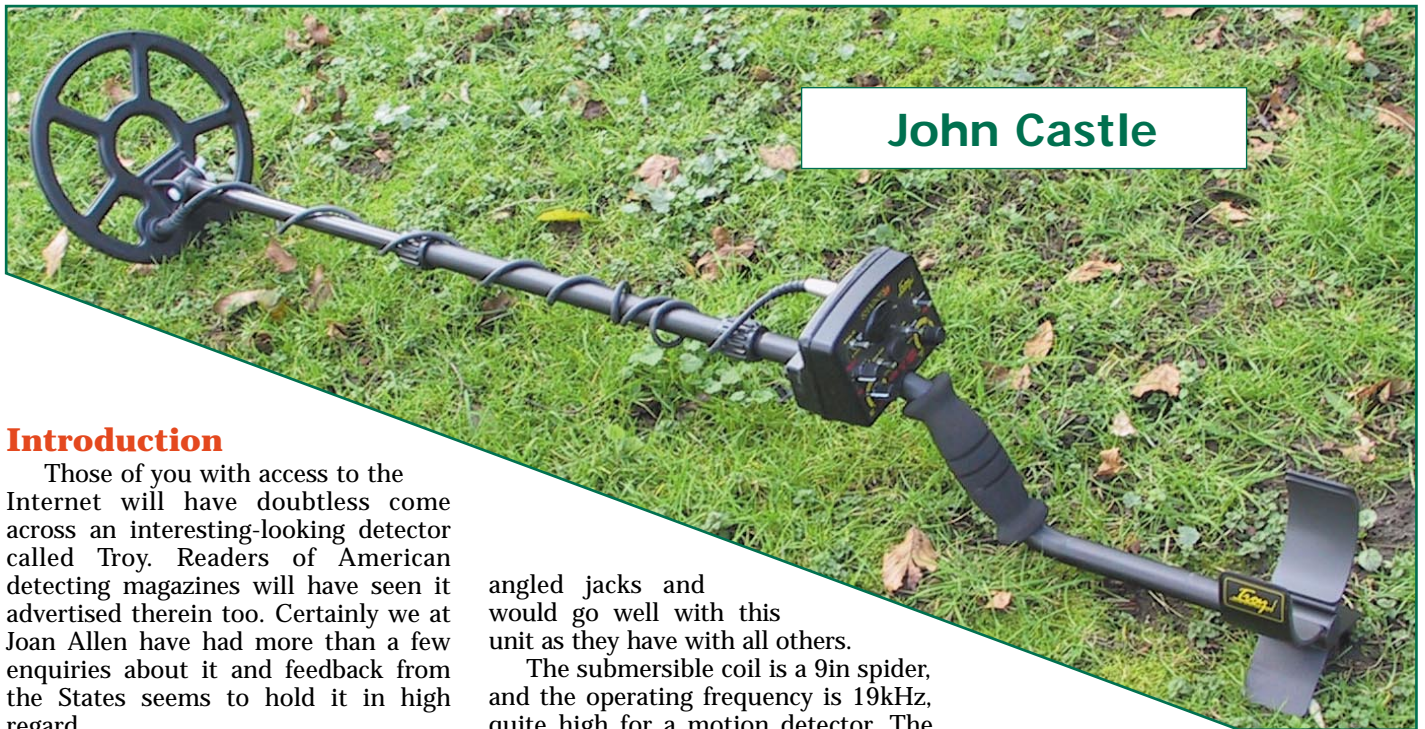


Detector Field Test

Troy Shadow X5



John Castle

Introduction

Those of you with access to the Internet will have doubtless come across an interesting-looking detector called Troy. Readers of American detecting magazines will have seen it advertised therein too. Certainly we at Joan Allen have had more than a few enquiries about it and feedback from the States seems to hold it in high regard.

"Troy" represents Troy Galloway, a very experienced detector user and designer who knows what we want because he is one of us. From this sprang the Shadow detector, the X5 being the latest version. Rather than set up his own manufactory, Troy cleverly reasoned that the experience and expertise of the world's oldest detector manufacturer, which we all know is Fisher, would ensure the best quality available.

A First Look

The Shadow X5 is certainly a very neat and attractive unit. Microelectronics, powered by just one alkaline or lithium PP3, makes for a very small and neat control box. The design incorporates drop-in battery, so no wires! The usual cranked stem with integral soft foam grip, armrest and stand breaks into three pieces for easy transportation. Overall colour scheme is black with nomenclature etc in red, yellow and white.

The controls consist of the traditional knobs and switches, the knobs being stiff enough to prevent accidental movement. There is a weatherproof speaker and a standard quarter inch headphone socket, which is to be found at the back of the control box (headphones would thus benefit from a right-angled jack). The excellent Detector Pro range of headphones mostly have

angled jacks and would go well with this unit as they have with all others.

The submersible coil is a 9in spider, and the operating frequency is 19kHz, quite high for a motion detector. The control box is weatherproof which means just that, not submersible!

At a mere 2.5lbs (1k) the unit is very light, rendering belt-mounts etc unnecessary. Overall, this detector sure looks the business, and is one to be seen with!

The Handbook

The handbook is really comprehensive. All the functions of the Shadow X5 are fully described and illustrated, and there is a great deal of other information aimed at beginners. The glossary at the back is useful and a small chart of initial settings is given to get you started. The guide consists of 48 pages of excellent information in the medium format. Study it carefully!

Controls

The Shadow X5 is designed to work well just about anywhere. The controls reflect that and, although there are nine of them, they are laid out in a logical fashion; many of them will be familiar to anyone who already owns a detector. For the rest, refer to the handbook.

On the left are:-

Top **SELECT** - a switch that selects one of three ground balancing modes (eg 1. Manual ground balancing that brings the rotary ground balance control into play; 2. Fixed, factory-set ground balance; and 3. Black Sand manual ground balance).

There are thus two manual ground balance options plus a fixed one. The fixed one will cope with most sites, but highly mineralised ones will need to be ground balanced manually. Whichever is used will depend on the site. Manual will cope with most conditions found inland, but Black Sand will be a better option on sites with very high concentrations of magnetic ferric oxides. The latter includes some wet sea beaches even though fixed ground balance will mostly work okay.

In the middle is **GB**, which is a standard 10-turn ground balancing knob. It functions in either of the manual GB modes but has no effect if fixed GB is selected.

Bottom comes **DISC**, which is a normal rotary reject discrimination with a marked pre-set at 3. Turning fully anti-clockwise engages the battery test; this gives a high tone for full battery power, medium for less, and low indicating that it is time for a new battery.

Along the centre from the left are: **MODE** is another three-position switch giving the choice of "Disc", "Beach Disc", or "All Metal".

"Disc" places the discrimination rotary control operable in the normal way. "Beach Disc" does too, but it also sets the unit for better electronic stability on wet sea beaches. A few bad inland sites might benefit from this

mode too, rather than normal "Disc". "All Metal" is just that, no discrimination and all-metals detected.

Some users prefer to search in this mode, or at least on some sites, checking each target in discrimination mode by a flip of the switch. This mode, together with threshold, must also be engaged and set before manual ground balancing is carried out.

All the above three modes are motion, the automatic re-tune on the all-metal mode being somewhat slower than that of the other two.

VCO PP is a push button that engages a non-motion all-metal mode with a rising tone response. It is useful for precise pinpointing and target depth/size estimation.

On the right is **TARGET CHECK**, a novel feature that I haven't seen before.

We all know that checking targets at different levels of discrimination is useful. This has been achieved in the past by simply turning the discrimination control up and down or having two discrimination controls set at different levels. On the Shadow a three-position switch allows one of two pre-set discrimination levels to be selected. At the centre is "norm" that allows the normal discrimination control to be used. Push down to "nickel" and a higher level of discrimination is selected. Push up to "zinc" and it sets discrimination even higher. Release either and the switch springs back to centre. So what's the idea?

Troy suggests that you set the discrimination control at 3. This is low enough to ensure nothing is missed while rejecting most small iron and foil. When a target is heard push **TARGET CHECK** to "zinc". If no sound is heard



it indicates a low to medium conductive target below ring pulls. If it still sounds the target is at or above ring pulls. Now press to "nickel" when a medium to high conductive target should null. If still heard then a high to very high conductive target has been located.

I think this is a very useful feature, depending on the site of course.

At top right is **FREQ**. The last of the four toggle switches, this will mostly be left in "Norm". Switching it to either "Hi" or "Lo" alters the operating frequency. This is used to eliminate "cross talk" from other detectors that are close by. Rallies are the obvious places where this might well happen. It could help in some other situations, such as pylons or electric fences even though this is not its designed function.

At the bottom comes **SENS**, a stan-

dard sensitivity control, which also switches the unit on and off. Even with the excellent ground balancing facilities on this unit, sensitivity may still have to be reduced on some very bad sites.

Last, but not least, is **THRESHOLD**. This rotary knob is located underneath the control box on the right hand side and is used to tune the Shadow to a very faint threshold tone. This should always be set thus as setting to too high will result in an overloud tone in the all-metal mode and instability in the discriminate one. Too low (silent) will result in faint all-metal targets being ignored and manual ground balancing will either be inaccurate or impossible.

Basic Settings

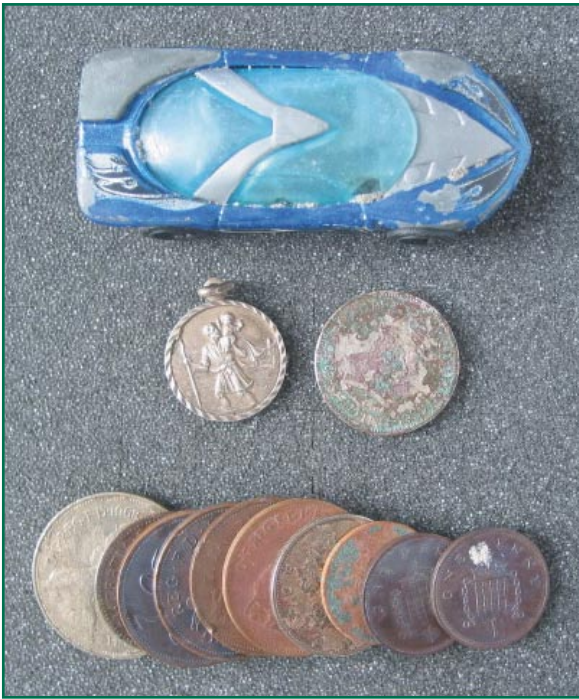
Switch on, set to all metal, and then tune to a very faint threshold. Decide if you require fixed or manual ground balancing and, if the latter, adjust after checking there is no metal in the ground at that point. Then flip to "Disc" (or stay in all metal) and away



Left: Battery compartment

Below: Threshold control (bottom of control box).





A selection of the items found during the field test.

you go! You will have to fine tune things, of course, as you get used to the unit on your existing sites or new ones, but I can't see anyone having any serious operating problems with this unit. The controls are very well thought out and you can see all their main settings at a glance.

Hunting With The Shadow X5

The beach was my first outing with the X5 as my tide table showed low tide to be at 8am and it was my next day off. This meant no lie-in, and I had to be up at 6.30! It was chilly but calm, and well out of season for visitors, of course. This meant there would be no recent losses, and any finds would be deep - and so it proved!

I set the X5 as the handbook recommended for such conditions, which was to tune it to a very faint tone in all metal. I then switched to fixed "GB" and "Beach Disc" and set "Sens" at 8 and "Disc" to 3. Discrimination could have been set a bit higher, but I normally choose to hear everything (except nails and some silver paper) and then maybe use a higher discrimination level setting to check finds. There was no "maybe" on the X5 as the "Target Check" feature proved very useful. To use this press the "Target Check" toggle down. If the signal has gone then the signal is below the ring-pull reject level. If it is still there then it is at or above ring-pulls. Next press the switch up. If the signal has gone, then it was probably a ring-pull. If the signal is still there, then it's a highly-conductive target above the ring-pulls level.

This system renders the X5 a very useful coinshooter, whether on the

beach or inland. You may not always want to use this facility, of course, but where ring-pulls are prolific and time is short, you will find it a boon. In any event, I like to get some idea of how good a target might be before digging it up and this system is ideal.

I found nothing shallow at all. All my finds were coins left from warmer times and the ubiquitous fishing weights. Every single signal required lots of digging, but this was an easy job in the fairly soft sand.

The X5 didn't give ambiguous signals on iron-cored 1p and 2p pieces either, and wet sand produced just the odd click that I could easily put up with; there was no need to reduce sensitivity.

One area I know from past visits contains higher than normal junk levels, so I tried the 7in coil here. This worked really well. The smaller coil provides less ground coverage, of course, but little depth was lost and I was able to get between the many junk items to good effect.

Maureen then had a go and she produced the deepest find of the day, a toy "Hot Wheels" type car at nearly a foot; and that was in sopping wet sand too!

I cannot claim that I went home with my usual good beach haul; it was too far out of season for that. But the 20 or so coin finds (plus the seven fishing weights) I did recover showed the Shadow X5 to be deep-seeking, sensitive and light enough to use for extended periods.

In fact, I took to the unit so much that another beach trip found me using it in preference to my own detector! This trip got me a silver St. Christopher together with the usual modern

coinage and fishing weights. The deepest find (apart from fishing weights) from the two trips was a very encrusted silver shilling dated 1932.

My next trial was on an old playing field. This has no marked games pitches or anything like that; it is just a flat grass oblong used for walking dogs, lying in the sun (when we get some!), and kicking a ball about. It has been heavily hunted in the past and I haven't seen another detector user on it for years. Was it worked out? Not for the deepest seeking detectors of which the X5 proved itself to be one. I recovered plenty of recent coins and junk of course, but they're no test for any unit. It is depth that is required here!

The ground is quite mineralised but not too bad, and I started off with the X5 set up the same as on the beach, except that I switched to normal "Disc" instead of "Beach Disc". There was just the occasional "spit" from the ground which I could easily have tolerated, but I manually ground balanced the unit, setting it slightly positive, which removed even this slight annoyance.

To manually ground balance switch to all-metal, check there is no metal near, then tune to a faint tone with the coil well above the ground. Now lower it to about an inch above the ground and if the tone vanishes lift the coil up again and rotate the "Ground Balance" control clockwise (anti clockwise if it goes loud). Repeat this until the very faint tone increases in volume very slightly as the coil is lowered. By this procedure the detector is set positive. Never set negative (silent) as sensitivity to small and/or deep finds will be



reduced. The automatic tuning in the all-metal mode (slower than when in "Disc") renders manual ground balancing an easy operation.

My first three finds were junk and consisted of the bottom of a battery, a small brass tube with a screw in it, and a segment of a flanged wheel (doubtless from a toy train). All of these targets were deep, which was very encouraging! Then came a small badge of the Royal Sussex Regiment, broken in three pieces unfortunately, and a farthing of Victoria.

The afternoon passed with finds and junk coming out at regular intervals. My best finds were two silver coins (a threepenny piece and a florin) and an enamelled medallion inscribed "Embassy Old Time Dance Club". The latter looks to be silver but is unmarked. The Shadow X5 was sharp, positive and deep seeking, and I liked it very much!

Arable fields are the favourite search areas for many detectorists, but as is my usual policy when carrying out

a field test, I had left these until last. I find that I can get the "feel" of a detector quicker on coinshooting sites where finds and junk (except iron nails) are invariably more prolific.

A couple of fields where I have permission were in stubble and a couple more ploughed. The latter were rough ploughed and contain quite a lot of clay. It was a wet day so it was not too long before my digger, the X5, and myself were coated in sticky mud.

The search method I used was to detect in the all-metal mode and then check each target in "Disc". This revealed lots of iron and it took me about 20 minutes of searching in fixed ground balance before I found a "dead" area where I could set it manually. Again, depths were good as was sensitivity to small finds. Among these were a small screwed-up brass thimble, a pierced heart, a stud, and some pieces of non-ferrous shrapnel. A larger find came out from a good 9in concealed within a lump of clay and turned out to be a nice crotal bell.

Getting fed up with slipping and sliding about I cleaned myself up as best I could, and moved on to a stubble field. The other ploughed field will just have to wait for a drier day!

The stubble was very short and quite soft, so not more than an inch or so of depth was lost. The fact that there was less junk here meant fewer finds. These included yet another piece of shrapnel, a corroded spur end, a broken piece of a belt fitting, a lead token, and a very worn mount in the form of an acorn. I was feeling pretty tired by now but when I found a hammered the day was made, and it was home for a hot bath followed by dinner.

By the way, the hammered turned out to be a slightly clipped groat of Edward IV.

Last Thoughts

The Troy Shadow X5 is an interesting and very capable combination of old and new technology. Traditional knobs and switches successfully married to the very latest micro-circuitry makes for a detector, which is light and easy to get to grips with. It offers enough controls to satisfy the advanced user without the complexity, which so often daunts the newcomer. It is deep and sensitive as proved with all the sites I used it on. I think it will fit into the British scene very well and I know the Internet has generated a lot of interest in it. The supplied 9in web coil is a great all-rounder, but some very bad and junky sites would benefit from the 7in one. There are very few detectors I would swap my own one for, but the X5 now heads the very short list!

The Troy Shadow X5 is available from the authorised importers Joan Allen Electronics (see their advert in the centre of **Treasure Hunting**), and other dealers will be stocking it too.

It costs £849.00, with the accessory 7in coil coming in at £149.00. **TH**