

INSTRUCTION MANUAL

Vista X



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CONGRATULATIONS ON YOUR VISTA X PURCHASE

Hello and welcome to the user manual for your brand new DeepTech Vista X metal detector. The DeepTech Vista X is unique in the Vista Range with its brand new smaller slimline control box design, new powerful extended range dual disc system and also a new adjustable threshold feature.

We've also designed a new waterproof octagon coil especially for the Vista X, we've also made the DeepTech telescopic shaft come standard with your Vista X purchase.

Now you have the option with the new DeepTech Vista X to discriminate far beyond just iron targets like no other Vista in our range, not only have we extended the discrimination range we also added an alternative discrimination system that allows you with the push of a toggle switch to alternate your discrimination options.

So thank you for choosing the DeepTech Vista X metal detector.

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DeepTech is always interested in customer opinions. If you have any questions or comments regarding your Vista X or any other DeepTech product, please feel free to contact us directly or through your local Authorized DeepTech dealer.

For further product information refer to:

www.deeptech-bg.com

DeepTech encourages all users to read through the entire instruction manual to ensure a complete understanding of all the features and functions that your Vista X offer

1. Assembly

Before assembling your Vista Gold Gain please check that the package includes the following parts:

- 11" /9" DD waterproof coil (octagon coil) with coil cover
- Lower shaft
- Middle shaft with cam-locks
- Upper shaft
- Fully assembled with:
 - Control box
 - Battery compartment with armrest and detector stand
 - Padded hand grip
- Coil hardware consisting of:
 - Rubber washers (2)
 - Plastic wing nuts (2)
 - Plastic bolt
 - Velcro tabs (1)
- Eight 1,5V AA Alkaline Batteries
- USB card with the manual and product videos
- Limited Warranty Information (in the instruction manual)

If any of the above listed items are missing, please contact us immediately.

1.1. Connecting the coil to the lower shaft

- 1) Place the two rubber washers into the holes on either side of the lower shaft.
- 2) Slide the bottom of the lower shaft into the bracket on top of the coil.
- 3) Insert the plastic bolt through the hole in the coil and the lower shaft.
- 4) Fasten the bolt with the plastic wing nut. Be careful not to damage the thread of the bolt by over-tightening. The plastic wing nut may need to be loosened to adjust the coil.

1.2. Shaft assembly

- 1) Make sure the levers and twist screw are loose on the middle shaft at both ends then push and twist the lower stem and upper (control box) section into the middle shaft, make sure the lower stem connects into the middle shaft at least 5-6 inches for now and the upper (control box) section all the way into the middle shaft.
- 2) Loosely tighten the twist the screw for now on the lower camlock that is at the lower stem end
- 3) Close the lever on the camlock, the lever should be easy close for now to allow enough movement for the lower stem to be altered for size you desire and direction of the coil.
- 4) Repeat process 2 and 3 with the upper camlock that is towards the upper (control box) section, but this time firmly tighten the twist screw and push the lever shut snug to the camlock so the middle shaft holds firmly against the upper (control box) section, if the camlock twists on the middle shaft tighten the Allen key screw shown in photo 3 in the red circle.
- 5) Open the lower camlocks lever and adjust lower stem to your desired length to detect comfortably then align the lower coil inline with the control box as shown in the photo, you can now firmly tighten the twist screw and close the lever snug to the camlock, if the camlock twists on the middle shaft then tighten the Allen key screw shown in photo 3 in the red circle, now wrap the coil lead around the shaft up towards the control box, you don't need this right to the shaft but you can't have the coil lead loose also especially near the coil as this can cause false signals, but allow enough length in the coil lead for there to be some movement of the coil at different angles.
- 6) Connect/push the female coil lead connection into the male control box socket shown in photo 7 but bare in mind you need to align the both parts correctly otherwise they will not connect, now carefully screw the female coil lead connection sleeve to the control box socket firmly but don't over tighten.
- 7) Control box male connection
- 8) Make sure the batteries are placed in the battery holder the correct way and touching all connections at both ends, slide the battery holder into the battery compartment with the connections towards the bottom of the battery compartment as shown in the photo.
- 9) Place and twist the battery compartment end cap back firm and secure.
- 10) Bare in mind when altering the length of your lower stem that you don't trap the coil lead under the lever as shown in the photo.

1.3. Coil cable

- 1) Wind the coil cable around the complete shaft assembly enough times to take up any slack.
- 2) Use the Velcro strap to keep the coil cable in place.
- 3) Carefully push the coil plug into the socket on the back of the control box. Firmly tighten the retaining ring by hand to hold it in place (do not over tighten).

WARNING! The cable coming from the coil **should not** be wrapped to tightly in the coil area. Leave enough slack in the cable so you can adjust the coil when you detect on uneven ground. Failing to do this may result in damage to the coil cable or the coil itself.

Controls on Front panel:



Rear fee of the control box:



2. Controls explained

2.1. Power switch and headphone jack



The power switch is located on the rear end of the battery box. This switch is used to turn the Vista X on or off.

WARNING! Never remove the coil cable from the control box while the Vista X is turned on. This may result in damage to the electronics.

2.2. Gain

The Gain control is the receive signal. An amplifier for the returned signal and can be tweaked for hot ground or more benign ground.

2.3. Threshold

The Threshold is the depth/target size control and decides how weak a signal you can hear. The lower you set it the more signal it takes to break through, the higher you set it up to a point of say 45 the less signal it takes to overcome it. Even in deep woods EMI free areas you will overdrive it into instability as a sizzling chatter.. For best depth and even smallest of targets you can run it right on edge of sizzle

2.4. Ground Balance

The Ground knob is used to adjust the Vista X to the soil conditions and correct ground effects encountered during detecting. Mineralization and "Hot Rocks" may cause false signals. Ground balancing the Vista X reduces false signals from ground mineralization more accurately rejects ferrous minerals or pottery containing iron oxides and enables targets to be heard correctly.

If there're hot rocks then these can be eliminated by turning the Ground knob to the right. Learning how to properly Ground Balance may give you an advantage over others especially if they are running their detectors in an auto ground balance mode.

2.5. Discrimination

The Disc knob is used to eliminate certain metallic objects from detection. The Discrimination has a very wide adjustability range far beyond just iron. The further the knob is turned to the

right when in Standard Disc Mode with either of the toggle switches under the control box in the middle position, the bigger the size and higher conductivity of target will be discriminated.

2.6. Alternative Discrimination

Your alternative discrimination has exactly the same operation as your main discrimination, but the alternative discrimination is activated with the forward push and hold of either toggles switches under the control box, this now gives you the option to quickly check targets with your desired amount of discrimination that you've preset on your alternative discrimination.

So at certain points of the alternative discrimination range you can gauge what the target maybe under the coil by the point the audio changes from a high tone to a low tone.

So if you're searching in a park and you establish at what point a certain coin turns from a high tone to a low tone then you can make the decision either to leave that target or dig. But you always must bare in mind that by using any amounts of discrimination you may lose many desirable items!

To maximize your chances of finding all desirable items then all metal mode with serve you best, but you will dig all metallic items ferrous and non-ferrous.

2.7. Iron Volume – Two functions in one knob, Iron Volume + Silent discrimination

This knob allows you to adjust the audio level of the low tone (the iron signal) in Two Tone Mode. Iron has a very special signature that can be recognized with ease. We have assigned it a low toned sound together with a volume setting so that you can make the tone more or less conspicuous to suit your personal preference.

When in Two Tone Mode, this knob allows for improved site analysis and understanding of the detected area in order to find areas of former human occupancy. It also facilitates recognition of large ferrous objects (such as old weapons).

Remember, certain types of moist ground paired with a low mineral content may also trigger low tone signals or chatter, by adjusting the IRON VOLUME setting you're able to reduce or entirely eliminate this phenomenon which is related to high frequency detectors. also very

large ferrous targets will still give a high tone but are easily identified by the strong signal along with a slight low iron tone at the end of the target when IRON VOLUME is set high. When your IRON VOLUME is in the far left position (REJ.) your Vista X works in silent discrimination mode, also classed as single tone mode, so when working in the Disc. Mode (Silent Discrimination Mode), targets will be discriminated by using the Disc. knob. You will hear a high tone if the target is outside your discriminated range. If the target is within your discriminated range there is no sound, depending on the size and shape and conductivity of the object the detector may emit short audio cracks. The size and conductivity level of the object that is to be discriminated is increased as you turn the Disc knob to the right

2.8. Volume

The Volume knob lets you adjust the audio level of the speaker and headphones.

2.9. Headphone Jack ¼"

DeepTech recommends the use of headphones. When headphones are plug in, the speaker is automatically deactivated.

There are many advantages to using headphones:

- Improves battery life.
- Prevents the sounds from annoying bystanders.
- Allows you to hear subtle changes in the sound and faint signals from deep targets more clearly.

WARNING! Set your headphone volume prior to placing them over your ears. Ensure that the headphone volume does not reach an extremely loud level. This may increase the risk of hearing damage.

2.10. LED Battery Control

There is an indicator "Low Bat" on the face plate of the control box. If the indicator lights up and stays on, the batteries are almost totally exhausted. At this stage, stop detecting and replace the batteries. If the indicator blinks when a target is detected, the batteries are low. In this case, it is best to replace the batteries at this time. The average battery life is about 20-25 hours. Extremely weak batteries may be the reason for false signals. DeepTech strongly recommends to use 8 x 1,5 V AA Alkaline batteries. When using rechargeable batteries, we strongly recommend using batteries with more than 2000mA/H.

(Low Battery Warning Indications)

On the Vista X you now have a different low battery power warning alert, sometimes in the bright daylight you may not always notice that the small LED light is flashing next to the Gain font on the control box when the batteries are low on power, so we now have added an audio alert to the Vista X, this will give you not only a visual indication that the batteries are low on power but an audio warning also. So on the Vista X when your batteries are low on power you'll now see the LED flashing first then a short time later you'll hear a constant audio beep, at this point you'll have to change the batteries on your DeepTech Vista X to keep within its optimal performance range and to be able to continue detecting without hearing and seeing the low battery alerts.

2.11. Toggle switches and modes

The Vista X has two toggle switches comfortably located on the bottom left and right side of the control box where it is easily accessible during detecting. The two toggle switches are identical in function and form, these two switches are positioned there to make it easier for left and right handed users to operate comfortably

All Metal Mode

Toggle switch in back position (towards you)

All ferrous and none ferrous targets under the coil will be detected with a single high tone no matter where your discrimination is set.

This will give you the best possible metal detection experience of all modes when it comes to finding items in the ground, but bare in mind that you may be digging many unwanted items in the process.



Two Tone Mode

Either toggle switch in middle or forward position (straight down or away from you)

This will allow you to leave discriminated items (items on the left of your discrimination point) in the ground by emitting a low tone when the detector encounters an object that is within your chosen discriminated range via the discrimination knob.

Any items outside your discrimination range will emit a high tone.

Remember, the Vista X must be properly ground balanced in the Two Tone Mode for optimum performance.

Single Tone Mode

*Zero Iron audio and either toggle switch in the middle or forward position.
(Straight down or away from you)*

When you have your iron audio set to zero in discrimination mode then you're running single tone or also called silent search.

This allows you only to hear items outside of your discrimination range to be heard with a high tone, discriminated items (items on the left of your discrimination point) will be silent but may emit pops and crackles via the audio depending of the size and shape and conductivity of the discriminated items.

Alternative Discrimination Mode

Either of the toggle switches held in the forward position (held away from you)

Your alternative discrimination has exactly the same operation as your main discrimination, but the alternative discrimination is activated with the forward push and hold of either toggles switches under the control box, this now gives you the option to quickly check targets with your desired amount of discrimination that you've preset on your alternative discrimination. So at certain points of the alternative discrimination range you can gauge what the target maybe under the coil by the point the audio changes from a high tone to a low tone.

So if your searching in a park and you establish at what point a certain coin turns from a high tone to a low tone then you can make the decision either to leave that target or dig.

But you always must bare in mind that by using any amounts of discrimination you may lose many desirable items!

3. How to Ground Balance

The following steps will explain how to Ground Balance the Vista X. This is a very simple process that allows you to balance the Vista X to all types of soil. This is very important in order to obtain maximum sensitivity to small targets and depth.

First off you need to find a clean patch of soil, free from metallic objects in the field or area you're going to detect. To help do this set your dials to the following points:

- Gain to the red dot.
- Threshold to 45.
- Ground balance dial all the way to the left.
- Either of the toggle switches pulled towards you (All Metal Mode).

At this point you're now in all metal mode and then very carefully and slowly sweep the coil across the soil around an inch off the ground.

You're listening out for and trying to find a patch of soil that gives no positive signs of a signal, in this process you may hear tiny signatures of ground mineralization due to the Vista X is not correctly ground balanced at this point or neither set up correctly yet for general detecting.

Providing you've found a patch of soil that has no positive signals we can now continue to ground balance your Vista X over that clean patch of ground.

Ground Balancing procedure:

- 1) Make sure you adjust your headphones to the point where you can have the detectors volume completely up without causing harm to your ears!
- 2) Now turn your detectors volume all the way up to maximum or to the point you can hear the chatter of the threshold when introduced.
- 3) Now turn your threshold dial up to the point you can just hear the threshold chatter slightly.
- 4) Keep your Vista X all metal mode (toggle switch under the control box towards you)

- 5) Over that clean patch of ground raise and lower your coil repeatedly in a steady motion from about 8" to 1" from the ground whilst listening to the audio, now whilst raising and lowering the coil to the ground start to turn the ground balance dial to the right slowly till you hear the quietest point in the audio, once you achieve that point in the audio your ground balance phase is complete.
- If you can't manage to make the Vista X fall silent at this point then reduce the threshold to the point it's easier to hear the silent point whilst raising and lowering the coil to the ground.
 - In some cases you may have to increase the gain and threshold further to hear audio feedback from the Vista X, but providing you can clearly hear a change audio when raising the coil up and down to the ground you're at the right point on the controls.
 - In highly mineralized soils it may be the case that you have to lower or even run your gain at its lowest point to achieve the optimal performance and stability in such highly mineralized soil conditions!!
- 6) Your Vista X is now Ground Balanced. If the soil conditions change significantly (by moving from a plowed field into a wooded area for instance), you must ground balance your Vista X again as described above.

You may Ground Balance in the Disc. Mode or All Metal Mode instead, but setting the Ground Balance in the Two Tone Mode is more precise. You can then switch to which ever mode you choose.

If you are receiving false signals from iron oxides in pottery or "Hot Rocks", you can then Ground Balance the Vista X directly over these objects to eliminate signals from these unwanted targets.

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4. Tips: How to set up your Vista X

These tips will help to shorten the "learning curve" of the Vista X

If searching in the DISC. Mode for coins and other non-ferrous targets on highly mineralized ground that also contain many iron patches:

- 1) Ground Balance the Vista X as described in Section 3 How to Ground Balance
- 2) Set the DISC. knob between 20-30
- 3) Set the gain between 0-30 and threshold knob between 30-40 (you may set these value higher if you are not receiving too much "chatter")

Remember, fair amounts of iron in the ground paired with a low Disc. setting will result in "chatter". This is avoided with the settings described above. If you feel the Vista X is still giving you too much "chatter", reduce the gain and threshold instead of raising the level of Discrimination. If the level of Discrimination is raised under these conditions, more time will be needed to process the signals therefore increasing the detection distance between the discriminated iron object and the desired non-ferrous target in order for the desired target to be detected. With a little practice you will master these difficult conditions with ease.

This may only happen in the DISC. Mode. Remember, the Vista X has a very fast recovery speed even with a high Discrimination setting and will outperform many other detectors.

If searching on ground with "normal" mineralization and very few ferrous targets:

- 1) Ground Balance the Vista X as described in Section 3 How to Ground Balance
- 2) Set the gain and threshold as high as possible
- 3) Set the Discrimination to your liking

The Two Tone Mode may be used in basically any situation. In this Mode, the Disc. knob has a different function. It is then used to allow you to adjust the audio level of the low tone for iron targets. For example, if the Discrimination is set to "0", some ferrous targets will still emit a high tone. The further you turn the Disc. knob to the right, the bigger and higher the conductivity the target must be in order to emit a high tone. If you are searching for non-ferrous targets, it is recommended that the Discrimination is set as low as possible for best performance. In the Two Tone Mode the Vista X is extremely fast and sensitive.

5. Troubleshooting

1) The Vista X will not power on:

- Insert Batteries
- Replace Batteries
- Batteries installed incorrectly
- Battery pack not connected

2) Excessive false signals:

- Gain and threshold too high
- Incorrect Ground Balance
- Coil cable loose or not connected

3) The Vista X is producing only long tones:

- Incorrect Ground Balance
- Very high ground mineralization (repeat Ground Balance process on objects producing these tones)

6. Technical Specifications

- Operating Frequency.....16,00 kHz +/-50Hz
- Detector type.....motion
- Gain control
- Threshold control
- Volume control
- Iron Volume – two functions in one knob: Iron Volume + Silent discrimination
- Manual Ground Balance
- Modes of operation:
 - DISC. Mode
 - Two Tone Mode (low tone for ferrous objects and high tone for non-ferrous objects)
 - All Metal Mode
 - Alternative Discrimination Mode
- Recovery speed.....Very fast
- Search coil Type2D

- Search coil Size.....11"/9"
- Cable Length (approx.).....51" (130 cm)
- Audio Frequency (approx.).....484/242 Hz
- Weight (with batteries)..... (approx.) 1500g.
- Battery Requirement – we strongly recommend to use 8x 1,5V AA Alkaline Batteries or rechargeable Batteries with more than 2000mA/h
- Battery Life (typical).....20-25 hours
- LED Low Battery alert
- Operation Temperature Range.....10-40C

7. General Advice

Metal Detecting is an activity, which like other leisure activities requires some guiding principles. The following recommendations will allow you to fully enjoy your hobby while respecting laws, environment and other people.

- ✓ Enquire about and abide by the laws in force of the country or the state before searching. It is your responsibility to know them and to abide by them.
- ✓ Always ask permission of the land owner where you want to search.
- ✓ Have respect for nature and the environment in which you are searching.
- ✓ Don't forget to fill all holes you dig and properly dispose of any trash.

WARNING! Avoid detecting in zones where battles took place during both World Wars. Report any suspect object you might discover to the authorities.

Joining a Metal Detecting Club in your area is an easy way of enjoying and sharing this wonderful hobby with others. This is also an easy start as how to properly abide to the ethics of Metal Detecting. Since this is only a guide, you are of course responsible for actions on any property you decide to detect. Always leave the area neat and clean.

We would like to thank you again for purchasing a DeepTech product.

Should you have further inquiries, feel free to contact us via E-mail, fax or phone. We appreciate any comments or suggestions.

Leaving feedback and suggestions will help to improve our products, if necessary, for everyone to enjoy.

8. Limited Warranty Information

- This detector is for outdoor use only. Many household appliances emit electromagnetic energy which can interfere with the detector.
- Use only Alkaline Batteries!
- Use only stereo Headphones!
- Do not store the unit in excessive heat or cold.
- Keep the electronic control box and battery box away from water!
- Be careful with search coil cable!

DeepTech warrants your consumer or industrial product against defects in material or workmanship for a period of **two years on the electronic box and one year for the search coils from the date of purchase.**

Any alternation of the red wax seal by an unauthorized person will void the warranty.

This warranty is not transferable and is owned by the original consumer purchaser.

Any alternation of the electronic circuit by an unauthorized person will lead to breach of warranty.

This warranty does not cover damage due to a fall, shock and accident; deteriorations due to an abnormal use; cable breakage of the search coils or of one of its conductors.

If warranty service is necessary, the detector must be returned complete with proof of purchase and a written explanation describing fault.

DeepTech reserves the right to change the design or specifications of its detectors without notice.

Please note: everyone unit or coil have stuck on them DeepTech's serial number. The coil serial number is stuck on the coil. Everyone standard package have unique serial numbers but same for electronic unit and for the coil, written on box too. Warranty will void if the labels on coil or on unit will be removed. The labels for serial numbers are made from very strong water resistant printed matter expressly designed with that end in view.

The warranty will void if some of the dealers dispatch the units or coils to his customers without DeepTech's boxes.

