

BONANZA
metal detector

User Manual



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General Description

The BONANZA is an Analogue Induction Balance (IB) metal detector that operates in the very low frequency (VLF) range and it is designed for use on all Inland Sites and Tidal Salt Water Beaches. It may be used in any of the three basic modes of operation - Auto, All-Metal or Discriminate.

The BONANZA is designed to be a general-purpose metal detector, capable of finding both small and large targets at extreme depths.

The standard coil supplied is the 10"DD and this is ideal for general searching operations.

There are 4 different DD search coils that can be used as accessory with the BONANZA.

DD shape search coil range.



- 13"DD at 6kHz

General search coil designed for higher detection ratio of small, medium and large targets in normal search conditions. It exhibits greater depth than any other DD search coil made by other competitive brands. It detects 18mm coin at 28 cm with very loud signal responses.

Due to large search area it will find more targets for shorter period of time compared to smaller search coils. Not suitable for mineralised conditions due to high probability of producing multiple signal responses.

Extend of detection dept not fully tested yet.

- 10"DD at 7kHz

It could be the best general search coil that you'll ever need. It exhibits excellent dept and discrimination in most conditions. Very efficient in detecting small targets at great dept. Very fast in isolating individual targets. It detects 18mm coin at 28cm with very good signal response.

Extend of detection dept not fully tested yet.

- 10"DD at 18kHz

Specially designed for gold nuggets and small targets at great dept.

Extend of detection dept not fully tested yet.

- 7"DD at 8kHz

General search coil designed for quick scan of new detecting fields and areas. Very good for searching narrow spaces, holes and ditches. Best suited for small and medium targets in contaminated areas.

Each coil is tuned to a slightly different frequency within the design range, to minimise interference from other Nexus detectors. Performance values for all Nexus detectors will be identical.

To obtain the best results with the BONANZA, as with all metal detectors, it is essential to understand the settings and operation of the detector.

The BONANZA will provide exceptional quality results in the hands of every user, regardless of their experience with metal detectors. With the BONANZA everyone can enjoy the benefits of the deep seeking Nexus technology, both novice and professional alike.

All sites and soils are different and settings that will give good results on one site may be less successful if used elsewhere. The BONANZA is designed to detect the very deepest of targets and operates near to the limits of what is achievable with induction balance.

Assembly & Preparation

The BONANZA is supplied boxed and ready for quick assembly by simply attaching the two lower stem poles to the top one, tightening the collars and attaching the coil to the lower stem section, using the plastic bolt and friction washers supplied and tightened by hand so that coil is held at the correct angle to the stem; the coil cable plug is inserted to the socket in the control box and then tighten the knurled ring, taking care when winding the cable around the stem that the cable is not strained.

The centre stem pole is of the same tube diameter as the top one and can be left off in circumstances where a short stem is needed; it is meant for use on steep sites, river banks, caves, ditches and similar conditions. This configuration is also useful if the BONANZA is to be used by children and makes it a good family metal detector that can be used by anyone in the family.

The BONANZA is supplied with a drop in battery holder that can be used for all types of AA size batteries, (alkaline or rechargeable); a charging socket is provided to the battery box for connecting a charger unit. To insert or change batteries remove any three of the thumb plastic screws from the base lid of the battery box (the battery box is below the arm cup at the top of the detector stem) and loosen the fourth screw. Turn the cover to the side. Insert the 10 batteries, in their correct alignments, into the plastic holder and make sure that all the terminals have a good electrical contact. Locate the battery holder into the compartment, ensuring the connecting terminals of the battery holder are in good contact with the two electric spring loaded terminals behind the recharge socket. Do not over-tighten the plastic thumb screws when refitting.

If you wish to use headphones (highly recommended) connect your available set to the 6 mm jack socket on the battery box. The BONANZA has an internal loudspeaker so headphones are not absolutely essential. For any headphones that have a volume control, ensure that this is set to MAXIMUM and use the BONANZA *Volume* knob on the control box to set the volume level.

Controls

The BONANZA has three rotary control knobs and two toggle switches located on the control box.



Discrimination

This knob sets the level of the discrimination. Rotating the *Discrimination* knob clockwise (from 0 to 10) will INCREASE the level so that Iron is increasingly not detected (but high settings will result in the loss of potentially good targets). Generally, the discrimination level should be set as low as is possible; to avoid masking the smallest and deepest desired targets.

Ground Minerals, Hot Rocks toggle switch

This switch is used to set the responses of the BONANZA to suit the soil conditions on any given site.

It is also used to reject any hot rocks if they are a nuisance during detecting.

Sensitivity

This knob controls the level of sensitivity of the responses. The sensitivity level setting chosen will depend on the soil conditions but, in general, the highest possible setting should be used. On contaminated or mineralised sites, it may be necessary to reduce the sensitivity to avoid some false signals.

Volume and Power On/Off switch.

This knob sets the volume of the tone and responses and it is used also to turn on/off the BONANZA. This knob should always be used for setting the volume. Any volume control on the headphones should be set to MAXIMUM.

Continuous battery test.

It is made by a circuit that constantly monitors the condition of the batteries while the detector is powered on. The test results are displayed on the front panel by a 3 colour LED, which changes the light colour as the batteries are used over time. When only red colour remains change the batteries or recharge if rechargeable ones are fitted for use.

General Operation and Setting Up

Having assembled the BONANZA, inserted batteries and connected the headphones, the metal detector is ready for use.

If you are a novice metal detector user.

A minimum Sensitivity level is recommended to minimise clicking or/and possible false signals.

If you have some metal detector experience.

We recommend the Auto function above for at least the first couple of days.

If you are a professional or have extensive experience with metal detectors.

We do not think is necessary to tell you what to do with a switch and go metal detector.

Search Method

With the BONANZA set up and ready, the coil should be swung smoothly from side to side, a little above the ground surface. It is not effective to 'scrub' the coil on the surface of the ground (this can also damage the coil and places strain on the stem assembly).

Suggested operating heights for the standard coils are:

13" DD coil: 2" (50 mm) minimum above ground surface
10" DD coil: 1½" (40 mm) minimum above ground surface
7" DD coil; Any distance.

Make sure that the coil is swung evenly over and parallel to the ground surface and that the coil does not rise at each end of the swing. Cover the ground in smooth, parallel swings to ensure maximum detection coverage.

In **All-Metal Mode**, both ferrous and non-ferrous targets will give the same audio response by a sudden increase in the intensity of the threshold tone. A strong response indicates a large or relatively shallow target and a weak response indicates a small or deep target. Audio signal in All-Metal Mode can not be analysed with BONANZA.

All-Metal Mode is achieved with BONANZA by turning the Discrimination control to 0.

In **Discrimination Mode** (when the Discrimination control is set on number greater than 0), good non-ferrous targets will give a clear, well-defined, two-way, repeatable audio signal. Ferrous targets will give a 'clicking' audio response or an indistinct and erratic response.

Pinpointing is by simply X-ing the coil across the signal. The position where the signals are strongest below the coil centre indicates the target position. As with all detectors, when targets are of complex shape or are located at an angle in the soil, pin-pointing may not be entirely accurate so it is suggested that, when digging, the user allow space to avoid possible damage to finds.

Special Modes of operation.

Discriminating Against Ground Minerals in severe mineral conditions.

If setting to Ground Minerals Low proves to be ineffective in dealing with the Ground Minerals then turn to Middle setting. If this setting is insufficient then turn to Hot Rocks setting.

Discriminating Against 'hot rocks' and metallic ore.

It is done by choosing the Hot Rocks setting on the front panel.

Discriminating Against Salt Water on wet sand or tidal beaches.

The procedure is very similar to that used for 'hot rocks' and minerals; After initial set-up, begin turning the Discrimination knob from position 0 to clockwise direction, very slowly until the salt water signals turn into small clicks.

Discriminating Against Small Targets and leaving only larger metal objects.

Many treasure hunters have been looking for the perfect metal detector. One of those aims is for a detector that is capable to ignore or not detect at all small metal objects such as coins, bottle caps even ring-pulls and detect only larger metal targets such as hoards, metal pots, helmets, shields etc.

To reject all small metal targets place on the ground surface samples of all small targets that you do not wish to be detected.

Start swinging the search coil closely over the unwanted targets. While doing so start turning slowly the Discrimination knob from position 0 towards position 10, clockwise. Keep doing so until all small targets are giving small clicks in the audio responses. Now the BONANZA is ready for hunting larger objects only.

Tips

The BONANZA may seem different in operation to some detectors presently available. Some practice and experimentation with the settings is necessary to get the best results on different sites.

Users should persist and regular use over a reasonable period is likely to be needed to become proficient, especially in successfully locating the very deepest and smallest of targets.

It must always be remembered that no detector can find what is not there – nor can any detector give a signal unless the coil is passed directly over that target!

There will always be sites on which any single detector does not work to peak efficiency. All detectors and sites are different and a particular combination of frequency and filtering might be best on a specific site, although the range of accessory coils available for the BONANZA will allow effective operation under almost all conditions and for all types of targets.

Site conditions will significantly affect depths and performance. Heavily furrowed, broken ground or thick stubble are all especially difficult ground types to search. Sites where the ground conditions vary to a considerable degree may require the Ground Balance to be adjusted from time to time for best results.

Care of the BONANZA

All metal detectors are precision instruments and require careful handling to ensure they remain in good working order.

Avoid dropping, impacts or violent shaking of the detector and protect it while transporting.

The detector should not be used in extremely wet weather conditions, without protecting the control box and the battery. The coil assembly is fully waterproofed.

If water penetrates any of the boxes, switch off the detector and remove the batteries. It is suggested that the detector be placed in a warm place to dry out slowly.

Mud and soil should be carefully removed, using a damp cloth or water only. Do not use detergents or abrasives and avoid getting water in the control boxes.

When storing the detector for long periods or when shipping, the batteries should be removed. Avoid storing the detector in areas where it will be exposed to extreme temperatures, dust, moisture or contaminants.

Do not attempt to modify or repair the detector or allow any unauthorised repair centre to do so.

Guarantee

The BONANZA metal detector is guaranteed for a period of 24 months from date of purchase against all manufacturing defects.

The Control Box is sealed and contains no user-serviceable parts Opening the Control Box will invalidate the Guarantee.

This Guarantee does not cover:

- Damage due to dropping, impact or accident
- Damage due to improper use or care of the detector
- Damage resulting from leakage of batteries
- Damage to the coil or coil cable

In the event of any problem, please contact us. Any detector returned under Guarantee must be properly packed, preferably in the box supplied and be sent by insured carrier. The sender is responsible for any loss or damage in transit.

A full repair and replacement parts service is available.

Technical Specifications:

Operating Frequency Range	6-18kHz kHz
Coil Design	DD
Coil Weights	13"DD - 650gr.10"DD - 540g;7"DD - 350gr.
Weight main unit only	950gr (without batteries)
Coil Case Construction	ABS plus Fibreglass
Audio Frequency	Custom tuned
Audio Output	6mm stereo headphone jack

Power Supply batteries.)	15v (10 AA alkaline or rechargeable
Battery Life	up to 40 hours
Operating Modes	All-Metal , Discriminate and Auto tune.
Optimum Temperature Range	-15° to +60° C
Optimum Humidity Range	0 to 85% RH

Troubleshooting

1. **The detector does not turn on.** Check the batteries. If they are old replace them with new. Make sure the batteries are properly inserted into the battery holder and have a good electrical contact.
2. **The detector is giving too many false signals.** If this happens first turn the Sensitivity to 0, minimum level. Check the Ground Balance if it is adjusted correctly according to the ground balance procedure. If the problem still persist check if the soil does not contain hot rocks or other contaminants. If this is the case then use Silent Motion and /or Iron Rejection to stop the interference. Auto mode will also assist in such conditions.
3. **The detector is picking up too much Iron.** Check the Discrimination level according to the recommended settings or use Auto mode.
4. **I only plug the search coil and detector does not work after that.** Make sure that it is the correct search coil for your Nexus model. The search coils for BONANZA are not interchangeable with the Nexus Standard MkII and vice versa.
5. **One or more control functions does not work.** Make sure that you know how to use those control functions according to this User Manual. In case that any of the control functions do not cause any change of response in the detector functions then return the detector to your dealer for check and possible repair.
6. **The detector is unstable.** Make sure **not to** use the detector with full Sensitivity while using fast Recovery speed setting. Fast Recovery setting and high Sensitivity together will result in considerable amount of chatter in the loudspeaker and/or headphones. If this is not the case check for sources of electronic interference.
7. **The detector stopped working during rain.** Nexus detectors are not water or weather proofed. Knowing that we strongly recommend that no Nexus metal detector model is used in rain. If this happens turn off the power of the detector from the Volume

knob. Take out the batteries and leave the detector near a warm place for a couple of days to dry out. After that if still not working return the detector to your dealer for maintenance and repair.