

# NEXUS Metal Detectors

Telephone +44(0)7909895085



## User Manual

## **General**

Coronado Groundfix is a tuned in resonance Analogue Induction Balance (IB) metal detector that operates in the audio frequency range and it is designed for use on Inland Sites and Salt Water Beaches. Coronado Groundfix operates in permanent Discrimination mode and constant Sensitivity level. Coronado Groundfix 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 dual 6" Coronado Silver search coil tuned at 8.5 kHz +/-0.5 and it is ideal for general searching operations. There are number of accessory search coils available designed for optimum performance when searching for the tiniest targets in difficult conditions or larger objects and hoards.

To obtain the best results with the Coronado Groundfix there is no need of any metal detecting expertise. Experience in metal detecting is not essential when using the Coronado Groundfix and it is easy for beginners in the hobby to learn to use it. The Coronado Groundfix is designed to detect very deep targets and operates near to the limits of what is achievable with induction balance.

Each Nexus is hand-built so that there may be minor cosmetic differences between individual units. Each coil is tuned to a slightly different frequency within the design range, to minimize interference from other Nexus detectors. Performance values for all Nexus Coronado detectors will be identical when the same search coils are in use.

## **Assembly**

The Coronado Groundfix is supplied ready assembled, with the telescopic stem retracted. To prepare the Coronado Groundfix for use, simply extend the lower stem section and by using the locking pin underneath fix the two poles in working position. The locking pin is indicated underneath the stem with two small labels, one on the top pole and the other on the lower part. While pulling out the lower part of the stem look for the second label to show. The locking pin will come out in the designated hole when the two labels are in line.

Slacken the coil to stem joint bolt slightly and adjust the coil angle to the stem so that, when holding the Nexus Coronado for searching, the coil is parallel to the ground surface. Tighten the coil bolt by hand. Ensure that the coil cable is not strained at the joint between stem and coil. Check that the

coil connector plug is fully inserted into the socket on the back of the control box.

The Coronado Groundfix is supplied with 8 AA dry cell alkaline batteries. Remove the four cross-head screws from the base panel of the battery box (the battery box is below the arm cup at the top of the detector stem). Lift off the cover. Insert the batteries, in their correct alignments, into the plastic holder and **make sure that all of the terminals have a good electrical contact**. Locate the battery holder into the compartment, ensuring the connecting cable is not strained or pinched. Replace the cover and four screws. Do not over-tighten the screws.

Connect the headphones to the 6mm jack socket on the battery box. The Coronado Groundfix have an internal loudspeaker located in the control box so headphones are not essential, but using them will ensure better results during search. For any headphones that have a volume control, ensure that this is set to MAXIMUM and use the Coronado Groundfix Volume knob to set the volume level.



## Controls

The Coronado Groundfix has two primary rotary control knobs, located on the front of the control box and one toggle switch control located also on the front of the control box.

**Volume Control with On-Off Switch** It is located at the bottom left side on the front of the Control box and it combines the control of sound level and power on/off control. After turning on the switch the audio signal is quiet. Turning the Volume Control Knob to the greatest digit 10 on the scale will

allow stronger audio signals.

**Discrimination** This knob is located at the bottom right side on the front of the Control box. It sets the level of the discrimination. Rotating the Discrimination knob to the Accept position on the scale will result in accepting any kind of metal targets. Rotating to the Reject position on the scale will result in discriminating almost all metal targets with few exceptions relative to very large size or extreme electrical conductivity. Generally, the discrimination level should be set as low as is possible; to avoid masking the smallest and deepest desired targets.

Coronado Groundfix can also be used as a **BEACH DETECTOR**. This function is very easy to set by only adjusting the Discrimination level slightly higher to the Reject side until the salt water signals turn into clicking sounds.

**Ground balance** The ground balance of the Coronado Groundfix is fully automatic control function divided in three levels by a toggle switch. This switch is used to set the balance of the Coronado Groundfix to suit the soil conditions on any given site. For best search results always turn the toggle switch on Low position if the ground conditions allow. Otherwise use the next higher fixed level to avoid false signals from the ground minerals.

## **Operation**

No metal detector, however powerful, will operate at its best unless it is set up properly for the conditions in which it is to be used. To obtain the best results and maximum depth and sensitivity to desired targets, the Coronado Groundfix must be properly tuned to the site.

Having assembled the Coronado Groundfix, inserted batteries and connected the headphones (or just use the speaker), the detector is ready for use.

Turn the On-Off switch on Volume Control to turn the power of the Coronado Groundfix on. A tone will be heard, which will fade in a short period of time. Adjust the Volume knob to set a comfortable level.

**Ground balance** If the Ground Balance is set on incorrect level the detector will pick up false signal. To check the ground balance level move the search coil from 2" to 10" distance above the ground level. If a clear signal appear while lifting the coil up then set the fixed ground balance from Low

to Medium, or from Medium to High. While searching position the coil about 2" above and parallel to the ground surface. Raise suggested operating heights for the standard coils are:  
9" coil: 2" minimum above the ground surface  
6" coil: 1,5" minimum above ground surface  
4" coil: 1" minimum above ground surface

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 ground coverage. 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 carried by simply X-ing the coil across the signal. The position where the signals are strongest indicates where the target is buried. 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.

## **Tips**

Sweeping the coil too fast over the ground will result in signals being missed. 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.

If you are on a productive site and know how to properly adjust the detector using the Coronado Groundfix will guarantee good finds!

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.

Site conditions will significantly affect depths and performance. Heavily furrowed or broken ground or thick stubble are especially difficult. Sites where the ground conditions vary to a considerable degree may require the fixed Ground Balance level to be changed for best results.

## **Care**

All Nexus 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, such as heavy rain, without protecting the control box and the battery box. 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 Coronado Groundfix metal detector is covered for a period of 24 months from date of purchase against all manufacturing defects or loss of performance.

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 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 Specs

perating Frequency Range: 4.2 - 18 kHz. Depending on search coil model.

Coil Design: Twin Concentric Overlapping

Coil Weights:

Coronado Standard :650 gr.

Coronado Gold :400 gr.

Coronado Silver :420 gr.

Coronado Hoard :500 gr.

Nexus Gold :360 gr.

Weight (with 6" coil): 1.3 kg. (with batteries)

Coil Case Construction: ABS resin dipped

Audio Frequency: Custom tuned

Audio Output: Loudspeaker or 6 mm HP jack.

Power Supply: 12v (8 AA alkaline batteries)

Battery Life: up to 35 hours

Operating Modes -Discriminate

Optimum Temperature Range: -15° to +60°C

Optimum Humidity Range: 0 to 85% RH