GROUND

General features

The different levels of soil mineralisation you encounter when prospecting can sometimes affect the performance of your detector. For example, this may be due to natural magnetic mineralisation such as iron oxide, hot rocks and magnetite, or sporadic mineralisation from sites of former human settlement (also magnetic): hearths, pottery, hot rocks, slag, etc. At the seashore this may also involve mineralisation ranging from magnetic grade (black sand) to electrical conductor grade (salt water) depending on the beach or region.

If you are an experienced detectorist you may wish to optimise your searches to achieve better penetration in some of these mineralised soils.

In magnetic ground with relatively uniform mineralisation, a setting which is adjusted according to the ground effect will improve penetration by reducing the amplitude of the ground signals sent back by the receiver circuits. This 'adapted setting' involves adjusting your ground balance value to the average value of the ground being detected, while adding 1 so as not to hear the ground signals as much. The tracking and pumping modes do this automatically if the ground conditions allow it.



Attention: As the ground balance setting is the one requiring the most experience of the ground, we recommend that you read this chapter carefully and use the different ground balance modes carefully, while acquiring your own experience of the ground.

By default, remain in manual mode at level 90 on inland ground and on dry beach sand.

Note : If the ground is not mineralised (see below the bargraph : Mineralisation strength) there is no need to adjust your ground balance to a level other than 90: since the ground does not send back any significant spurious echo the performance will be optimal even at level 90 and you will reduce interference resulting from knocks to the coil.

On the main menu, two values are permanently displayed:

for information).



Mineralisation strength. More this value is high more the ground is mineralised. Pump the coil to the ground several times to evaluate the mineralisation strength.

The ground mineralisation index (phase measured constantly

If the level is low, it is less needed to adjust the ground phase.

The actual level of ground effect corrections (phase adjustment underway).

NONE MOTION

The none motion mode allows the user to operate the coil motionless above a target. It is useful to locate metal targets inside houses, cellars; also it is widely used to follow underground metal pipes.



Meter Accept/Reject

TUNE : allows to calibrate threshold to the ground.

SENS : in conjunction with **TUNE**, **SENS** allows to adjust the depth. If you alter **SENS** you need to adjust the **TUNE** again.

-- Used to access the **NON MOTION** mode and/or to update the threshold (re-**TUNE)**.

MODE : allow to choose between 4 modes :

1-Pinpoint: to locate metal targets

2-Non-motion Disc : discrimination with single tone.

3-Non-motion Audio Disc: audio tone upwards for good targets and down for ferrous.

4-Non-motion All Metal : All Metal + will also detect anomaly's in ground minerals plus some ceramics



Non-motion Audio Disc and **Non-motion All Metal** require an <u>adjustment of the ground balance</u>. Pump the coil to the ground (refer to explanation on page 17) and manually adjust the ground setting --on the value displayed at the top of the Ground Balance screen.

CALIBRATION OF THRESHOLD

Raise the coil in the air (>1 meter).



2 Press (ϕ)

B The audio threshold should disappear as you get close to the ground, if it does not raise the coil again and reduce the **TUNE**.

Be aware that as you increase the **TUNE** the more powerful the machine is but the more instable it becomes.

Regularly raise the coil in the air and press (\diamond) to re Tune the threshold. The **Tune** will drift if there are variations in temperature for example from sunny to shaded area, under these conditions you will need to re Tune more often until the coil temperature is stabilised.

Always adjust the **Tune, Sens, Ground, Disc** with coil in the air, each time you press a touchpad it will automatically re **Tune** the threshold.



- adjust DISC at 25/28 (mode Non-Motion Disc).
- adjust G.B. at 15/27 (mode Non-Motion Audio Disc).
- select the wet beach programme before using none motion mode.





BATTERY LIFE

HEADPHONES: 27 hours / REMOTE CONTROL: 27 hours / COIL : ± 15 hours

The search coil's battery life may vary depending on the modes used. The table below shows battery life according to frequency and power selected.

	Power at 1	Power at 2	Power at 3	May vary depending on the age of the battery.
Frequency 4 kHz			11 hours (Fixed power)	
Frequency 8 kHz	19 hours	13 hours	11 hours	
Frequency 12 kHz	19 hours	13 hours	11 hours	
Frequency 18 kHz	20 hours	14 hours	11 hours	

Note : Deus is regulated in such a way that avoids any deterioration in performance even when the battery level is lower!

CHARGING TIME

COIL: 2h15 / REMOTE CONTROL and HEADPHONES: 3h00.



LiPo batteries (Lithium polymer) do not suffer from the 'memory effect' so you can recharge them at any time without first having to wait for them to fully discharge.

The LED on the coil is on continually when charging is underway. When charging is complete, the LED reverts to flashing intermittently. --(**3 seconds ON, 3 seconds OFF**)

DELLE EXPERT
TX POWER
MENU ·
Scroll with and select SENS
3 Press EXPERT
Disc.
FREQ. 55.3 IRON VOL. D EXPERT
5 Press x 2 to return to the main menu.
By default the power is set to level 2, which offers a very dependable performance level that is largely sufficient in most cases.
The power only has a subtle effect on the device's pure performance with regard to sensitivity. However, it increases your detector's power consumption as well as alter its stability on difficult ground.
On iron-infested, mineralised ground, there is no need to use a high power setting, level 1 will be sufficient as in any case it is impossible to detect deeply in this kind of ground. It is therefore better to limit the saturation caused by iron and the ground by lowering the setting. In this way you will improve analysis and will ultimately find as many, if not more, targets since you will be better able to hear them.
Note : Power is set to maximum for the 4 kHz frequency. You do not therefore have access to the Expert menu when you are on this frequency.
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